Z-03-03

COMPREHENSIVE LAND USE PLAN

for

TORRANCE COUNTY, NEW MEXICO

Adopted by the County Commission
July 29, 2003

This document was prepared by the Mid-Region Council of Governments staff through the New Mexico Community Development Block Grant Program, and funded in part by the Local Government Division of the New Mexico Department of Finance and Administration in cooperation with the U.S. Department of Housing and Urban Development.

MID-REGION COUNCIL OF GOVERNMENTS OF NEW MEXICO
317 COMMERCIAL NE, SUITE 104, ALBUQUERQUE, NEW MEXICO 87102

TABLE OF CONTENTS

PART		PAGE
I	INTRODUCTION	1
	Purpose	1
	Background	1
	Summary of Report	2
II	COUNTY PROFILE	3
	Character of Development	3
	Regional Setting	3
	Development History	5
	Current Land Use Patterns	11
	Demographic and Socioeconomic Information	11
	Population Data	13
	Housing Data	17
	Employment Data	21
	Other Demographic/Socioeconomic Data	23
	County Facilities and Services	25
	County Government Operations	25
	Tax Collection	25
	Road Maintenance	28
	Law Enforcement	29
	Land Use Management	29
	Transportation Systems	30
	Solid Waste Disposal	33
	Water Resource Management	33
	Health Care	35
III	TRENDS AND PROJECTIONS	37
	Population, Housing, and Employment Projections	37
	Population	37
	Housing and Households	39
	Employment and Employed Persons	41
	Economic Trends	43
	Future Development Patterns	44
IV	GOALS AND OBJECTIVES	46
	Citizen Participation Process	46
	Overview of Goals and Objectives	47
	Goals and Objectives	47
	Land Use: Distribution and Intensity	48

Transportation and Circulation 50
Regional Infrastructure 51
Economic Development 52
County Government Operations 53
Discussion of Major Development Issues 54
Governmental Role and Responsibilities 55
Land Development and Land Use Management 56
Water and Natural Resource Limitations 56
Roads and Transportation Services 58
County Economy and Economic Development 60
Housing Opportunities 60

V ACTION PLAN RECOMMENDATIONS 62
Land Use Planning and Management 62
Transportation and Circulation 66
Regional Infrastructure and Natural Resources 68
Economic Development 70
County Government Operations 72

VI IMPLEMENTATION OF THE PLAN 76

APPENDIX A – Population and Employment by DASZ

APPENDIX B – Resolution 2002 – 36

APPENDIX C – Resolution 2003 – 20

FIGURES

FIGURE		PAGE
1.	Regional Map	4
2.	Land Status Map with Land Grant Communities	6
3.	2000 Land Use	12
4.	1990 and 2000 Household and Family Composition for Torrance County	15
5.	2000 Nativity and Migration: Torrance County Residents	17
6.	1990 and 2000 Housing Tenure: Torrance County	18
7.	1990 and 2000 Housing Type: Torrance County	20
8.	2000 Housing Heating Fuel for Occupied Units: Torrance County	21
9.	Transportation Facilities and Related Information	32
10.	Surface and Groundwater Geography	34
11.	Elevation Map	57
12.	Land Cover	59
13.	Scenic Byways, Cultural and Recreational Attractions	61
14.	County Subcommunities	63
15.	Potential Economic Development Zones	71

TABLES

TABLE		PAGE
1.	1960-2000 Torrance County Population, Housing, and Households	13
2.	1990 and 2000 Trends and Comparisons Torrance County, New Mexico, and U.S.: Age and Sex Distributions	14
3.	Education Level for Persons Age 25 and Over in 2000 for Torrance County, New Mexico, and U.S.	16
4.	2000 Race and Hispanic Origin Distribution for Torrance County	16
5.	2000 Age of Occupied Housing: Torrance County	18
6.	1990 and 2000 Housing Type: Torrance County	20
7.	Year Householder Moved into Unit: Torrance County	21
8.	2000 Labor Force and Employment: Torrance County, New Mexico, and U.S.	22
9.	2000 Civilian Occupations for Employed Residents Torrance County, New Mexico, and U.S.	22
10.	2000 Industries for Residents of Torrance County	23
11.	2000 Commuting to Work for Residents of Torrance County	24
12.	1999 Household Income: Torrance County, New Mexico, and U.S.	24
13.	1999-2001: Torrance County Receipts	27
14.	1999-2001: Torrance County Disbursements	28
15.	Torrance County Population, History, and Forecast	38

16. 2000-2025 Forecast Torrance County Age Distribution 39
17. 1960-2025 Population in Households, Household Size, and Households: Torrance County 40
18. 1970-2025 Housing Units by Type and Percent Occupied: Torrance County 41
19. 2000-2025 Forecast Employment by Sector for Torrance County 42
20. 1990-2025 Forecast of Employed Residents 43
21. Strategic Action Priorities 74

PART I

INTRODUCTION

This Comprehensive Land Use Plan for Torrance County, New Mexico, is a general policy document designed as a framework plan for making decisions about public programs and projects affecting the future development of the County. Although a typical comprehensive plan contains many components and serves numerous functions, the emphasis in this Plan is on regional land use activities as an indicator of the character, areawide economy, and governmental functions of the County. The preparation of this Comprehensive Plan included a significant public involvement process which involved meetings, workshops, opinion surveys, and advertised hearings to gather public input and to determine general citizen expectations concerning the future direction of the County. There were many opportunities for public review and comment throughout the plan development process to ensure broad consensus for goals, objectives, and recommendations that are presented in this Comprehensive Plan document.

Purpose

Planning is a process that bridges the gap between where we are today and where we would like to go in the future. This Comprehensive Land Use Plan serves as an official policy document for the Board of County Commissioners to provide guidance in making decisions about the physical development of the County. This Plan document identifies and analyzes growth and development issues and indicates how the local residents and their elected officials want the regional community to develop in the next 20 to 25 years.

An approved Comprehensive Plan is a legally binding document of the County that establishes a basis for regulations and programs necessary to manage current and future land development within the jurisdiction of the County. Of importance is the State law requirement that the zoning regulations of the County must be in accordance with a comprehensive plan. It is also important to note that a comprehensive plan promotes consistency and continuity in making decisions to carry out the programs, projects, and operations of the County.

Background

In June of 1988, the Torrance County Commission adopted a County Comprehensive Plan Development Policy. That was essentially the first Comprehensive Plan for the County. The Development Policy contained four categories of policy statements and strategies: 1) Land Use and Natural Resources, 2) County Infrastructure, 3) Services to the Public, and 4) Economic Development. Although that policy plan served its purpose, there have been considerable changes in the 15 years since then regarding growth and development in the County and its constituent municipalities.

In late 2001, the Board of County Commissioners appointed a special working committee to begin the process of revising the County's Comprehensive Plan. Subsequently, the Comprehensive Plan Steering Committee evolved from that working committee and technical planning assistance was requested and received from the Mid-Region Council of Governments (MRCOG). An application for funding assistance to develop a comprehensive plan was submitted to the Local Government Division of the New Mexico Department of Finance and Administration, for which a planning grant was approved in June of 2002. Funding was provided through the Community Development Block Grant (CDBG) program of the U.S. Department of Housing and Urban Development. This Comprehensive Land Use Plan document was then prepared under a Planning Services Agreement between the County and the MRCOG, and is a product of the CDBG grant award.

Summary of Report

This Comprehensive Land Use Plan for Torrance County contains the basic elements for anyone to become familiar with the County as a geographic region in New Mexico, as a governmental operation, and as a living and growing community that is continually evolving. A county profile describes the general character of the County with information and statistical data concerning historical background, population and housing, local economy, transportation and other infrastructure systems, and various county-wide services and facilities available to residents. Trends and projections of population, housing, and employment provide a basis for envisioning future development patterns in terms of the land use activities that comprise the County. Also, significant development issues are discussed and evaluated as a basis for Plan recommendations.

There are two key components that comprise the essence of this Comprehensive Plan: goals and objectives for future development of the County, and action plan recommendations. Goals and objectives seek to describe a desirable future for the County. These goals and their subordinate objectives are presented in five categories: 1) Land Use: Distribution and Intensity, 2) Transportation and Circulation, 3) Regional Infrastructure, 4) Economic Development, and 5) County Government Operations.

The goals and objectives also provide a foundation for proposed recommendations that identify strategic actions that are intended to define and implement the Plan within various time frames. These recommendations are organized into categories similar to the goals and objectives: 1) Land Use Planning and Management, 2) Transportation and Circulation, 3) Regional Infrastructure and Natural Resources, 4) Economic Development, and 5) County Government Operations. Actual implementation of this Comprehensive Plan is subject to the policy directives and actions of the Board of County Commissioners as deemed appropriate for the conditions, capabilities, and opportunities that unfold with the future.

PART II

COUNTY PROFILE

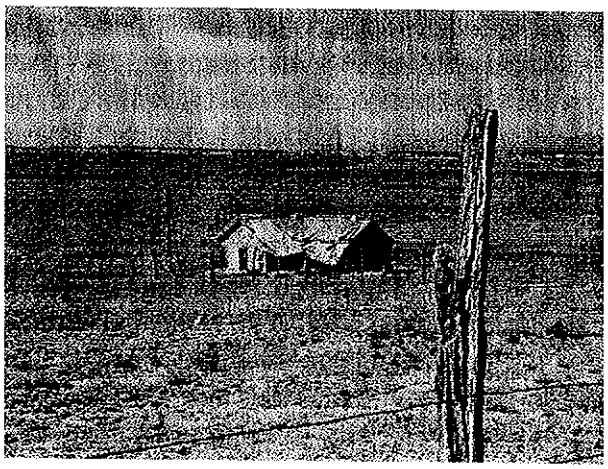
In order to rationally plan for the future of the County, it is necessary to understand the context and conditions that influence the communities that make up Torrance County. This county profile is intended to describe the County in terms of its physical attributes, development history, demographic and socioeconomic characteristics, and a brief inventory of public facilities and services currently available to the residents of the County.

Character of Development

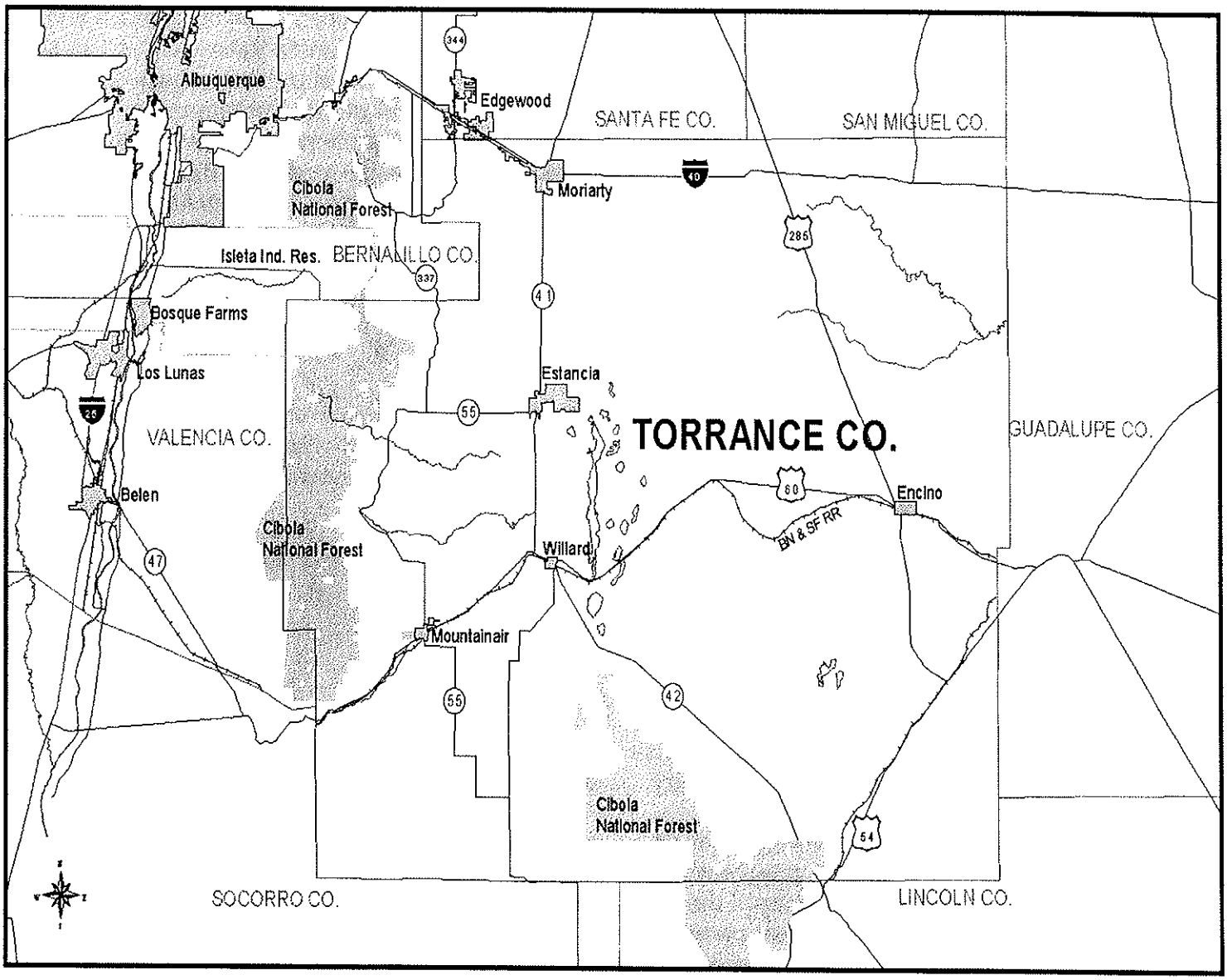
Torrance County can be characterized geographically, historically, and developmentally. The County is a product of historical evolution and its future is generally expected to be an extension of present day development activities. A comprehensive plan however may influence the direction and intensity of future development through regulatory controls, development restrictions or incentives, and the installation of County facilities and services. Radical changes also may occur as a result of unpredictable events or conditions such as extended drought, economic disruption, or technological advancement. The current character of development is described in the following sections to establish a general sense of the County as a unique and special place in the State of New Mexico.

Regional Setting

Torrance County comprises a large land area some 3400 square miles in size with an overall population density of about 5 persons per square mile. Over 95 percent of the population however resides in the western half of the County. Torrance County encompasses most of the Estancia Valley as well as about 20 miles of prairie land east of the Pedernal Hills sloping into the Pecos River Basin. The Estancia Valley lies in the geographic center of New Mexico, bordered on the west by the Manzano and Sandia Mountains, on the east by the Pedernal Hills, on the south by large mesas, and on the north by the low profile edge of the basin divide. A general location map of the region is shown on Figure 1.



Homestead in Torrance County



4 0 4 8 Miles

Mid-Region
Council of Governments
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

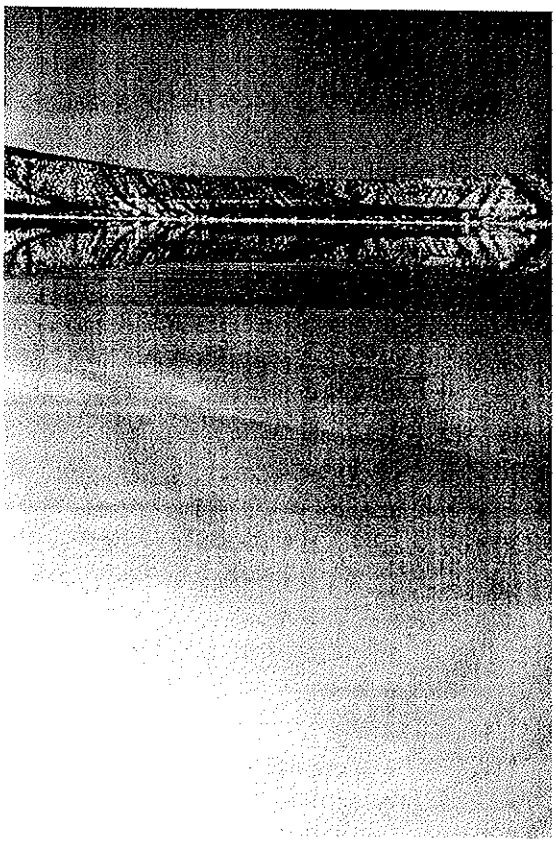
Torrance County Comprehensive Plan

Figure 1
Regional Map

Farming and ranching have been the traditional economic activities of the County but are diminishing as the population grows in the Estancia Valley. Today, there are growing sectors of non-agricultural commerce and business. Much of the County is situated within the "commuter shed" of the Albuquerque metropolitan region and is therefore growing in scattered residential subdivisions and housing developments. Various jurisdictions and special territories that are within the County boundaries include five incorporated municipalities, significant lands held in State and Federal ownership, and a small area within the Isleta Indian Reservation. Also, there are all or portions of four Mexican Land Grants in the County. Figure 2 presents a map of the land ownership status in Torrance County.

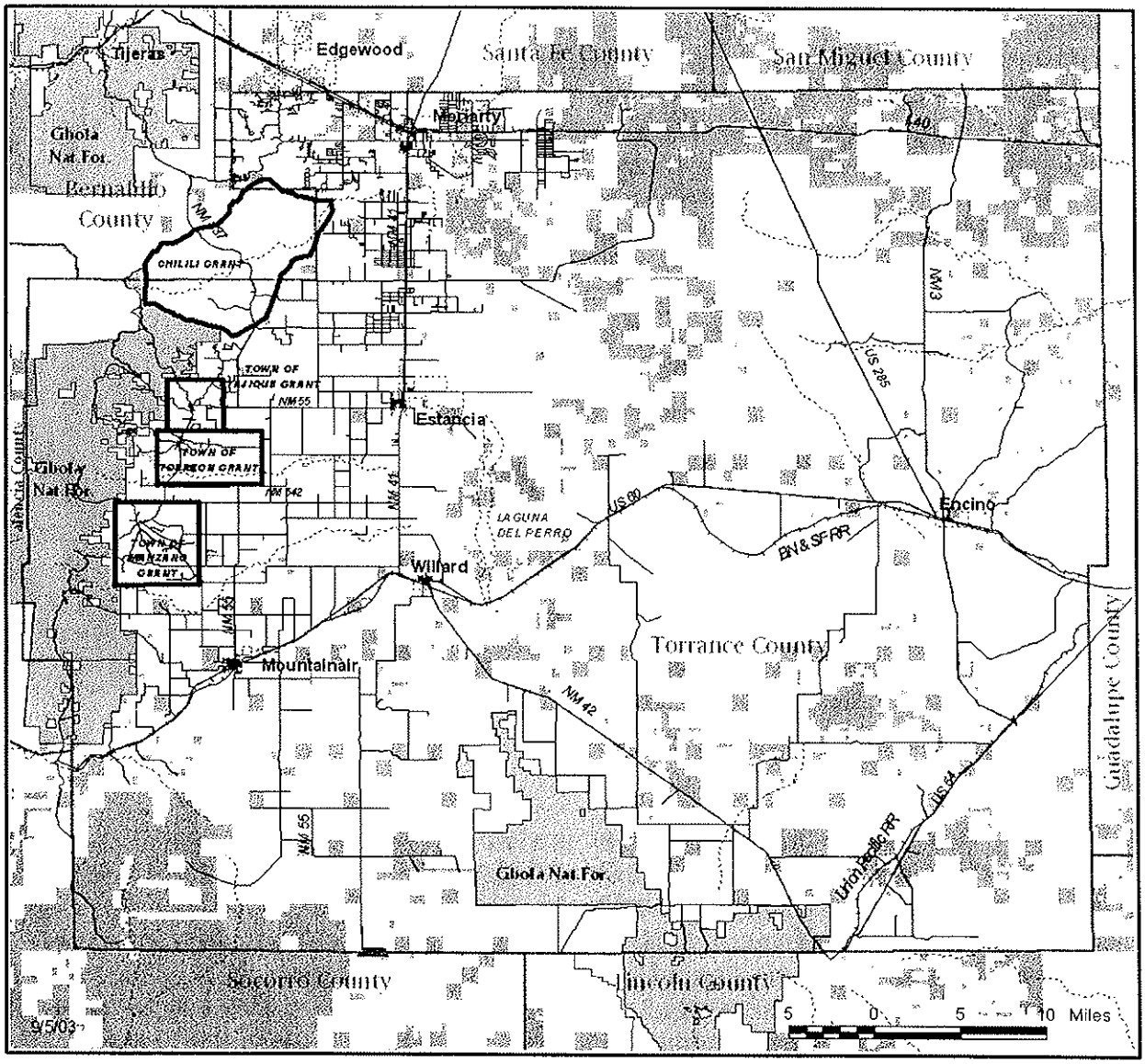
Development History

During the last Ice Age, approximately 300 square miles of what we now know as the Estancia Valley was covered by a lake up to 40 miles in diameter and 150 feet deep. Campsites of Paleolithic hunters of the Clovis, Folsom and Llano cultures (some 23,000 B.C.) can be found in the dunes along the edge of the ancient lake bed. Unlike most bodies of water, Lake Estancia had no natural outlet. As the sun beat on this immense lake, the evaporating waters left deposits of sand, gravel, silt and clay from 30 to 80 feet thick in the center of the lake area. These smaller basins now contain only a few inches of highly brackish water. Today, there is a chain of sizable salt lakes located in the center of the Estancia Valley, running north and south. Laguna de Perro (Dog Lake) is the largest and runs about 12 miles long, a mile wide but seldom over a few inches deep. The lake basins have long been a source of salt for the New Mexico Pueblos and early Hispanics, hence the region was known as the Salinas Province.



Salt Lakes in Torrance County

Some time between the first and 12th centuries, Early Puebloan cultures began to appear in the Estancia Valley. Their early dwellings were pit houses,



Land Managment Status

- Bureau of Land Management
- US Forest Service
- Indian Lands
- National Park Service
- Private
- State, State Park, State G&F

CHILILI GRANT Land Grant Boundary and Name

Torrance County Comprehensive Plan

Figure 2
Land Status Map with Land Grant Communities

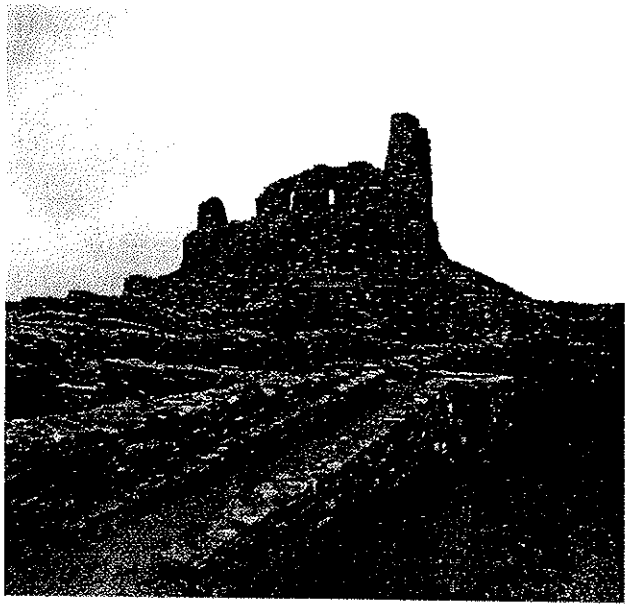
Map prepared by:

Mid-Region Council of Governments
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

Source: BLM, NM State Office.

built partially above and partially underground, constructed of cobblestone and primitive masonry. By the 14th century these people integrated with neighboring pueblo cultures from the west side of the Manzano Mountains, developing into the Late Puebloan cultures who built the large villages found by the Spanish.

Several stone-constructed villages were established in the Estancia Basin at this time. The ruins of the three southernmost villages remain today at Quarai, Abo and Gran Quivira (or Las Humanas as it was named by the Spanish). They create points of a triangle around what is today Mountainair. Water was scarce even back then. Quarai and Abo had springs flowing from the nearby mountains. The people at Gran Quivira compensated as best they could, building surface water catchment systems, cisterns and wells. The pueblo residents were mostly dryland farmers, growing several varieties of corn, squash, beans and cotton. Amaranth seed was used as grain. The Indians augmented their diet with hunted game and gathered wild seeds and plants.



Abo ruins

Indian pueblos dotted the area when the Spanish explorers first made their expeditions seeking the Cities of Gold. Coronado's expedition in 1580 apparently missed this pueblo area. It was the expedition of Don Juan de Oñate, Spanish colonial governor of New Mexico, in 1598 which first recorded visiting the pueblos of Quarai, Abo and Gran Quivira. Oñate's expedition is said to have been one of colonization rather than exploration. He brought 400 men, many with families. They reported the pueblo inhabitants living in "many storied houses." There may have been as many as 600 residents in Quarai at that time.

Between 1622 and 1629, the Franciscans sent friars to oversee the Indians in constructing mission churches at Abo, Quarai and Gran Quivira. The Missions contained kivas, the historic religious centers of the Indians. By combining traditional and Christian elements in the churches, the priests had an easier time making converts and keeping order. The church at Quarai was considered one of the most impressive mission buildings in New Mexico. It was a massive edifice of red sandstone towering over the pueblo.

As Spanish citizens colonized areas surrounding the pueblos, civilian authority and church authority rarely saw eye to eye. Those who suffered were the Indians. Unfortunately, the Indians of the pueblos were living at a mere

subsistence level when the Spanish arrived. The Indians were often treated like slaves by both church and civilian authorities. They tended livestock in the fields and mined gold, silver and copper for the Spanish in the mines in the mountains.

But it was the shortage of water that brought final demise to the Pueblos. In the late 1660s drought and famine hit the area, which didn't daunt the priest at Gran Quivira who ordered the weakened Indians to build a new, larger church. Disease followed drought and famine and both Indians and Spaniards died.

Gran Quivira was abandoned first in 1671. By 1673 the storerooms at Abo were empty and either Apaches or the Pueblos themselves burned the *convento*. Quarai, with its nearby springs, lasted the longest, but was finally abandoned in 1677. Survivors ran north to neighboring pueblos and west to the Rio Grande Valley. It would be over 150 years before communities would again emerge in the region.

On September 12, 1819, the Estancia Valley, from the Manzano Mountains to the Pedernal Hills, some 1,280,000 acres, was granted by the government of Spain to Col. Bartolome Baca, a respected soldier and public servant to develop a ranch for his horses, sheep and cattle. In 1874, Don Manuel Antonio Otero, a descendent of an aristocratic Spanish family which had large holdings in the Rio Grande Valley, purchased land which encompassed the Estancia Valley from Bartolome Baca.

Meanwhile, Mexico had declared independence from Spain and laid claim to the provinces of New Mexico. The land transaction was never validated by the new government of Mexico. Otero felt the land was his and he built a ranch house at Estancia Springs which he used in his vast sheep ranching operations.

On December 7, 1845, Governor Armijo, acting in behalf of the Republic of Mexico, granted 300,000 acres of the heart of the Baca grant to Antonio Sandoval. When the Mexican-American War erupted, Sandoval deeded his New Mexico land to Gervasio Nolan who sold it to Boston millionaire Joel P. Whitney.

By this time a younger Antonio Otero was head of the Otero family. He was using land in the Estancia Valley for his flocks, confident in his right to the land through the grant from the King of Spain. Whitney was just as certain that the United States would uphold his right to the extensive property. James Whitney, Joel's brother, and young Otero met at the ranch house at the Estancia Springs on August 17, 1893. A gun battle followed which left Otero dead and Whitney critically wounded. Whitney's trial was originally scheduled to be held in Los Lunas, but his attorney obtained a change of venue and the trial was finally held in Clayton, NM. The jury brought in a verdict of "not guilty."

Otero's heirs then brought suit for their claim to the Baca grant. In 1899, after several years of bickering, the Court of Private Land Claims ruled that

neither the Oteros nor the Whitneys had legal claim to the coveted Estancia Valley and it was thrown open to homesteaders.

Meanwhile, in the early 1800s, settlers of Spanish descent settled in villages along the east side of the Manzano Mountains. These villages—Chilili, Tajique, Torreon and Manzano—applied for land grant status from Mexico and with the blessings of Colonel Bartholome Baca were granted perpetual use of these lands by the residents and their descendants. Manzano, the largest of these land grants grew to be a major community in New Mexico at the end of the 18th century. Manzano Land Grant included several small villages, such as Punta de Agua, near the site of the Quarai Pueblo.

The Homestead Act of 1862 opened the West, offering free land to settlers agreeing to farm and populate the land. By the turn of the century, settlers were looking to the New Mexico territory that was being aggressively promoted. People were attracted by the warmer, dryer climate, especially people with tuberculosis and other ailments. Early homesteaders (such as the Sedricks and the Moriartys in what is now Moriarty, and the Kaysers and Spencers, north of what is now Mountainair) moved into the area during the end of the 19th century.

The Southern Pacific was the first railroad to arrive as it ran through the southeast corner of what was to become Torrance County. In 1902, the New Mexico Central (later the Santa Fe Central) was built south from the Santa Fe Railroad terminal in Lamy through what became the towns of Moriarty, Estancia, Willard, Progresso and Torrance to connect with the Southern Pacific. In 1908, the Belen Cutoff of the Atchison Topeka and Santa Fe Railroad was completed through the Abo Pass south of the Manzano Mountains, through Scholle, Abo, Mountainair, Willard, Encino and points east to Texas.

Willard, "the hub city," was established in 1902 at the juncture of two railroads. It was the first to thrive, but a few relative drought years and disappointing traffic on the New Mexico Central turned it into a relative ghost town by the mid-1920s. Mountainair was incorporated in 1903, in anticipation of the Belen Cutoff. It was located on the summit of Abo pass, where the railroad would need to put a terminal. Sawmills appeared along the south and east face of the Manzano Mountains, providing lumber for the new towns and ties for the railroads. Upon the decline of Willard, commerce moved to Mountainair, which became the shopping area and warehousing center for bean farmers as much as 30 miles to the west, south and east.

Torrance County was carved from portions of Valencia, Lincoln, Socorro, and Bernalillo counties in 1903, by action of the territorial legislature, and was one of the last counties to be created in the Territory of New Mexico. Original county officials were appointed by the Governor of the Territory. The county seat was located at Progresso, a train stop south of Willard and the sheep ranch of Col. J. Francisco Chavez, a state legislator. The offices were a passenger car

supplied by the New Mexico Central Railroad. The county was named after the prime financial backer of the railroad, Francis J. Torrance of Pennsylvania.

On January 1, 1905, the first elected county officials took their oath. The new legislature, meeting a few days later, made a number of changes and relocated the county seat to Estancia. Estancia was incorporated in 1909 and thrived in the early years because of the county government business and the railroad.

By the 1920s, thousands of homesteaders had migrated to Torrance County by train, covered wagon and by horseback. While there was some ranching and gardening, the major industry was the dryland farming of pinto beans. And the bean farmers mostly did very well through the 1920s.

While bean farmers had a great year in 1929, the Depression did hit Torrance County and times were hard, as in most of the country. The WPA and CCC had locations here and many significant public buildings were built in the county at that time. Okies from the dust bowl traveled through Mountainair on Route 60 (the major east-west highway) on their way to California.

Dryland bean farming had its ups and downs but held up pretty well until World War II when a stretch of dry years turned Torrance County into another dust bowl. The beans wouldn't grow and the top soil blew away with the wind. In the drought years between 1943 and 1955, thousands of families left Torrance County seeking a new life elsewhere. Much of the land was bought up by the government land bank and later sold to ranchers. Through the following years, the County became mostly ranch land and the towns tended to lose population as high school graduates emigrated to Albuquerque and other areas where they could find work. The Santa Fe Central Railroad did not prove to be profitable. By 1974, the Santa Fe Central had completely ceased operation and the entire 116 miles of track had been pulled up.

When U.S. Route 66 was built from Tijeras Canyon east to Texas, it ran through the Village of Buford, north of Moriarty, which grew to become a major service area to travelers on the highway. Buford eventually merged with and became part of Moriarty. Interstate Highway 40, paralleling and for the most part replacing Route 66, brought Moriarty into easy commuting distance to Albuquerque. By the year 2000, commuters from Albuquerque and growing commerce along the interstate corridor have brought significant new population and development to the northwestern portion of the County.

The trains run through but don't stop in Mountainair anymore. In the past ten years, Mountainair has developed an art community and retirees have been attracted by the pleasant weather and low cost of living. Tourists are attracted to the pueblo ruins, now designated as the Salinas Pueblo Missions National Monument. Open land has also been broken up for large-acreage residential

tracts that has brought some higher-income residents into picturesque areas north of Mountainair and along the foothills east of the mountains.

Current-day residents of the land grant towns are struggling to maintain their cultural identity as are the descendents of homesteaders who work in subsistence ranching and farming or those who are presently commuting daily to Albuquerque, Santa Fe, or Belen.

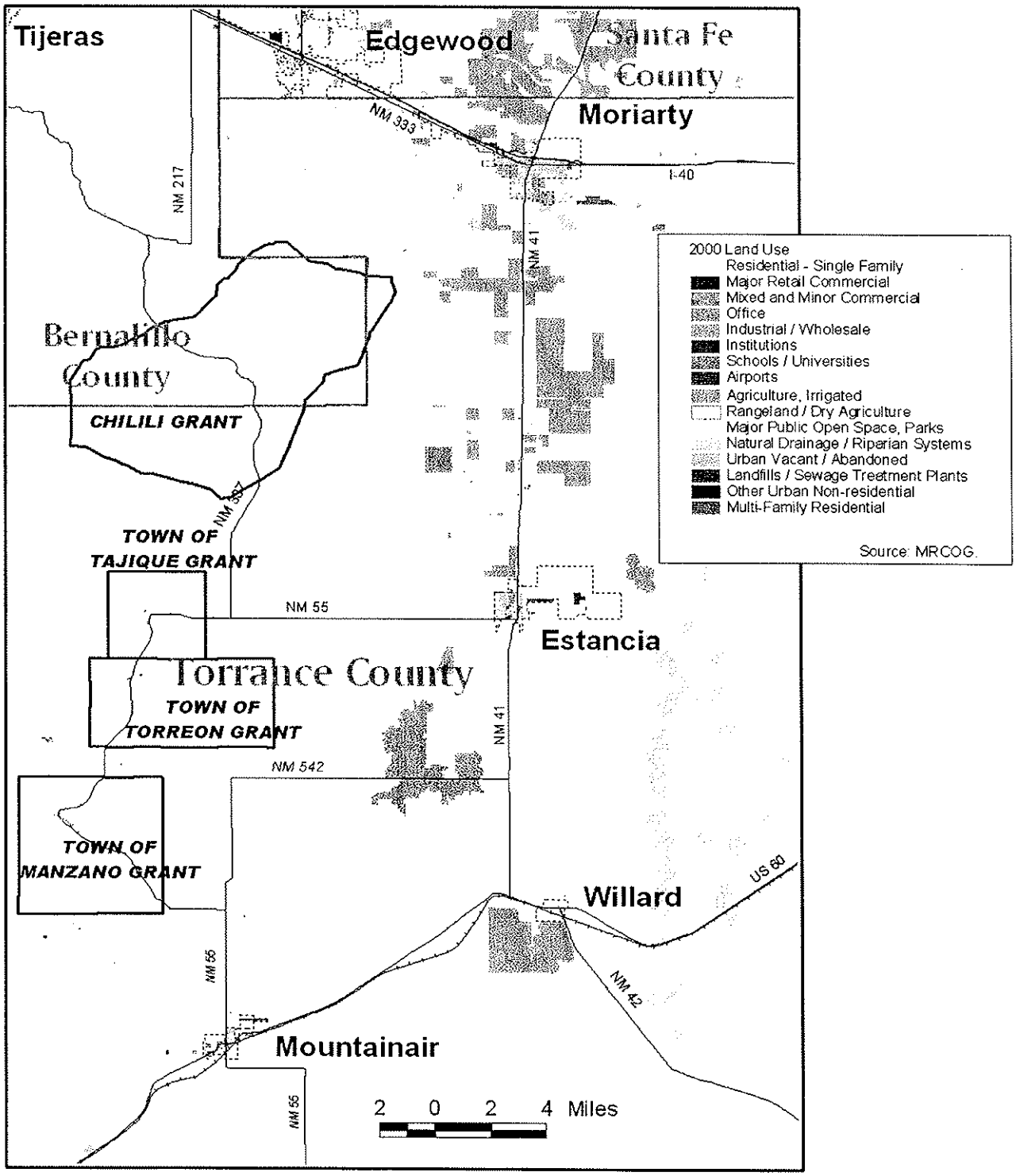
Current Land Use Patterns

A variety of factors have all played a part in the historical development and use of land in Torrance County. Settlement patterns have influenced the form and distribution of communities throughout the County in four significant ways. First of all, the ancient Indian and Spanish settlements occurred primarily along the eastern foothills of the Manzano Mountains. These village clusters were typically independent, self-sustaining, and relatively isolated communities. The Chilili, Tajique, Torreon, and Manzano land grant communities are examples of those historic communities. Secondly, railroads and highways crossing the County have induced development along major corridors and at intersections of these corridors. All of the incorporated municipalities and most of the commercial and industrial activities in the County are situated on major travel corridors. Thirdly, large-scale irrigated agriculture has become a major feature in the central portion of the Estancia Valley. Although these agricultural croplands rely solely on groundwater pumping, there is a reluctance to eliminate such land uses any time soon. And lastly, the expansive, but semi-arid rangelands throughout the County have attracted a ranching livelihood for a small but dispersed segment of the population.

The relatively recent emergence of land subdivision and suburban residential development has spread across the western portion of the County and overlays all of the historical development patterns. Nevertheless, current development patterns are basically an expansion and infill of the historical settlement patterns. Torrance County continues to maintain its character as a rural and small town county located on the fringe of the Albuquerque metropolitan area. The current land use (for the year 2000) of the County is portrayed on a map shown on Figure 3. Outside of the five incorporated municipalities and the land grant communities, there are relatively few development clusters and none that might have a density and concentration of commercial and business activities to justify municipal incorporation.

Demographic and Socioeconomic Information

Torrance County is a large and rather sparsely-populated county located in central New Mexico, southeast of the City of Albuquerque. The year 2000 Census population of Torrance County was 16,911. Table 1 displays Torrance County's population and housing data from U.S. Census information since 1960.



Map prepared by:

Mid-Region Council of Governments
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

Torrance County Comprehensive Plan

Figure 3

2000 Land Use

Although Torrance County lost population during the 1960s, the County has been increasing in population since 1970. The average annual growth rates for Torrance County were 3.54 percent during the 1970s, 3.22 percent during the 1980s, and 5.10 percent during the 1990s. In terms of percentage growth during the last decade (from April 1990 to April 2000), Torrance County had the highest growth rate of any county in New Mexico at 64.4 percent, followed by the New Mexico Counties of Lincoln (58.9 percent), Valencia (46.2 percent), and Sandoval (42.0 percent).

Table 1
Torrance County
Population, Housing, and Households
1960-2000

Year	Population	Housing Units*	Households	Torrance County Average Household Size**	National Average Household Size
1960	6,497	2,098	1,710	3.80	3.33
1970	5,290	1,621	1,579	3.35	3.14
1980	7,491	3,180	2,645	2.83	2.76
1990	10,285	4,878	3,670	2.80	2.63
2000	16,911	7,257	6,024	2.72	2.59

Source: U.S. Bureau of the Census and MRGCOG
* Includes vacant units
**A portion of the population does not live in households, but in group quarters, dormitories, etc.

Another trend indicated in Table 1 is the decreasing ratio of persons per household. National housing trends for decades have been toward smaller families, more childless couples, and more singles. Torrance County appears to be following these national trends, and coming close to the national average household size.

Population Data The age/sex characteristics of the County have changed to some extent over the past decade; the population is slightly older in 2000 than in 1990. The median age of Torrance County residents increased from 32.8 years in 1990 to 34.8 years in 2000. In 1990, 32.1 percent of the population was under 18 years of age; in 2000, the percent of the population under 18 had decreased to 30.4 percent. Also, the proportion of the population between ages 45 and 64 increased from 19.0 percent in 1990 to 23.2 percent in 2000. The actual number of Torrance County residents age 65 or over increased from 1,171 persons in 1990 to 1,647 person in 2000. However, the proportion of the population age 65 or over actually decreased from 11.4 percent in 1990 to 9.7 percent in 2000. The reason for this decrease is most likely because of Torrance County's tremendous growth over the last decade and the ages of the persons migrating into the County. Compared to persons in other age brackets, a lower proportion of persons age 65 and over would have migrated into Torrance County for two main reasons: 1) persons age 65 and over generally do

not migrate as much as younger persons, and 2) Torrance County is not generally known as a retirement area.

Despite an aging population, County residents are slightly younger than residents of New Mexico and the United States. The County has a lower percentage of retirees (9.7 percent) than both New Mexico (11.7 percent) and the United States (12.4 percent). The County's percentage of children (30.3 percent) is higher than that of New Mexico (28.0 percent) and the United States (25.7 percent). Trends and comparisons of the age and sex characteristics with those of New Mexico and the United States are shown in Table 2.

Table 2
Trends and Comparisons
Torrance County, New Mexico, and U.S.:
Age and Sex Distributions 2000 and 1990 (by percentage)

2000

Age Group	Torrance County		New Mexico		United States	
	Male	Female	Male	Female	Male	Female
< 18	30.1	30.6	29.0	27.0	26.9	24.6
18-24	8.2	6.7	10.1	9.5	10.1	9.2
25-44	29.7	28.8	28.6	28.1	30.8	29.6
45-64	23.0	23.4	21.9	22.5	21.8	22.2
65-over	9.0	10.5	10.4	12.9	10.4	14.4
Total %	100.0	100.0	100.0	100.0	100.0	100.0
Total Persons	8,681	8,230	894,317	924,729	138,053,563	143,368,343

1990

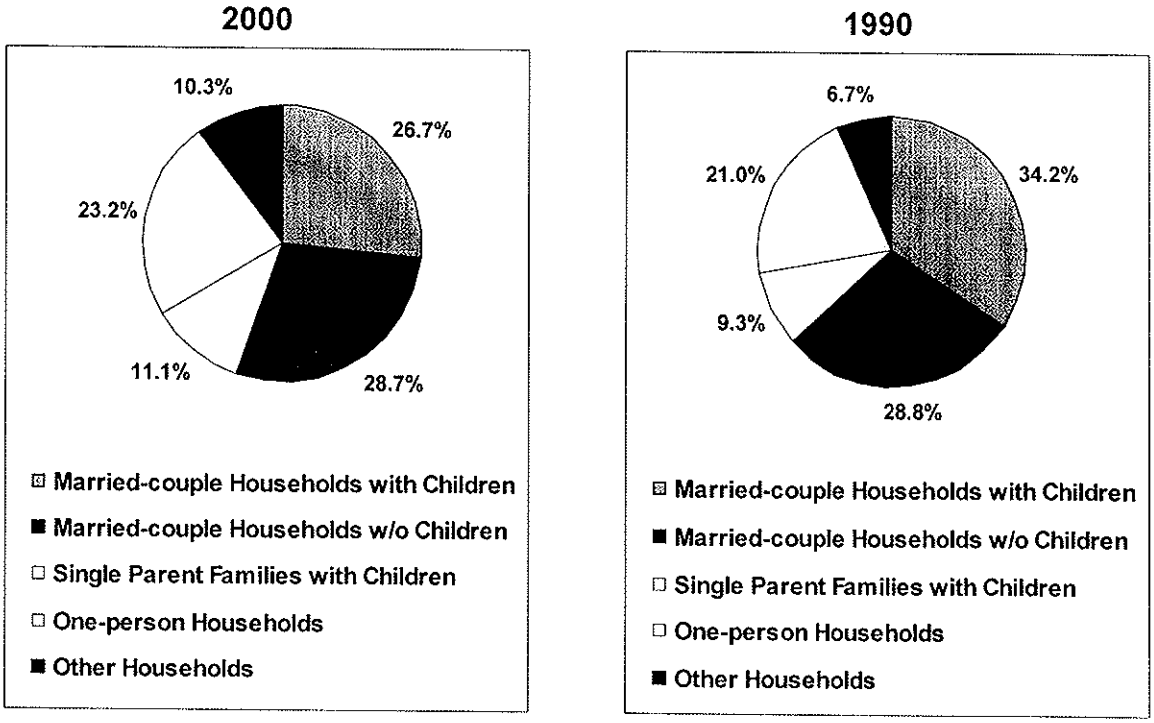
Age Group	Torrance County		New Mexico		United States	
	Male	Female	Male	Female	Male	Female
< 18	33.0	31.3	30.6	28.4	26.9	24.3
18-24	6.7	6.6	10.3	9.8	11.2	10.3
25-44	30.5	31.3	32.2	31.7	33.1	31.8
45-64	19.3	18.6	17.4	18.1	18.4	18.9
65-over	10.5	12.2	9.5	12.0	10.4	14.7
Total %	100.0	100.0	100.0	100.0	100.0	100.0
Total Persons	5,164	5,121	745,253	769,816	121,239,418	127,470,455

Source: 1990 Census and 2000 Census

The composition of households and families in 1990 and 2000 are provided in Figure 4. In 1990, 63.0 percent of the households were headed by a married couple; the percentage of married couple households decreased considerably, to 55.4 in 2000. The percentage of single parent families with children increased from 9.3 percent in 1990 to 11.1 percent in 2000. The

percentage of one-person households also increased, from 21.0 percent in 1990 to 23.2 percent in 2000. The percentage of non-traditional households increased as well, from 6.7 percent to 10.3 percent during the decade.

Figure 4
1990 and 2000 Household and Family Composition for Torrance County



Source: 2000 Census

Source: 1990 Census

In general, the educational attainment of Torrance County residents is somewhat lower than the residents of New Mexico as a whole. Among Torrance County residents, 77.1 percent had at least graduated from high school and 14.5 percent had graduated from college. The corresponding percentages for the State of New Mexico were 78.8 percent and 23.4 percent. Among residents of the United States, 80.3 percent had graduated from high school and 24.4 percent had also graduated from college. Compared to the State and the nation, a smaller percentage of persons had graduated from high school and a smaller percentage had finished college.

Table 3
Education Level for Persons
Age 25 and Over in 2000
for Torrance County, New Mexico, and U.S.
(in percentages)

	Torrance County	New Mexico	U.S.
Less than 9th Grade	8.4	9.3	7.6
9th-12th Grade, No Diploma	14.5	11.9	12.1
High School Graduate	33.0	26.6	28.6
Some College, No Degree	24.7	22.9	21.0
Associate Degree	4.9	5.9	6.3
Bachelor Degree	10.3	13.6	15.5
Graduate or Professional Degree	4.2	9.8	8.9
Total Percent	100.0	100.0	100.0
Total Persons	10,556	1,134,801	182,211,639

Source: 2000 Census

The responses to the race and Hispanic origin questions have been cross-tabulated in Table 4, and indicate how individuals categorize themselves. A little more than a third (37.1 percent) of Torrance County residents identified themselves as Hispanic. Also, nearly half of the persons who considered themselves to be of Hispanic ancestry selected "other" as the best description of their race. By contrast, 42 percent of the residents of the State of New Mexico considered themselves to be Hispanic.

Table 4
2000 Race and Hispanic Origin Distribution
for Torrance County

Race	Hispanic	Non-Hispanic	Total
Total Population:	6,283	10,628	16,911
White	2,818	9,677	12,495
Black	25	255	280
American Indian	88	266	354
Asian or Pacific Islander	3	51	54
Other	2,968	89	3,057
Bi-racial	361	288	649
Multi-racial	20	2	22

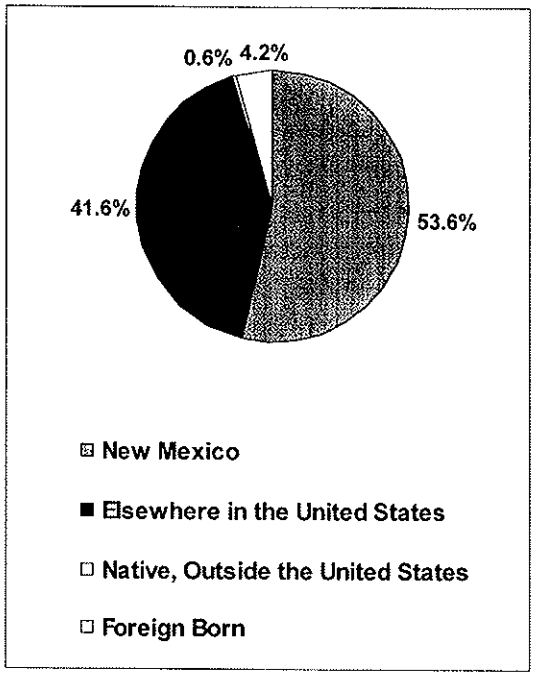
Source: 2000 Census

More than half of the residents of the County (53.6 percent) were born in New Mexico (see Figure 5), which is comparable to the statewide average of 51.5 percent. There were few foreign born persons in the County (4.2 percent); this is less than a third of the statewide average of 14.4 percent.

Over half of the residents of the population age 5 and over (53.6 percent) lived in the same house for at least 5 years prior to the 2000 Census (see Figure 5). This is very similar to the statewide average of 54.4 percent. In fact, 84.9 percent had lived in New Mexico 5 years prior. This is slightly lower than the statewide average of 85.6 percent living in New Mexico 5 years prior, meaning that a slightly higher proportion of people migrated to Torrance County from out-of-state.

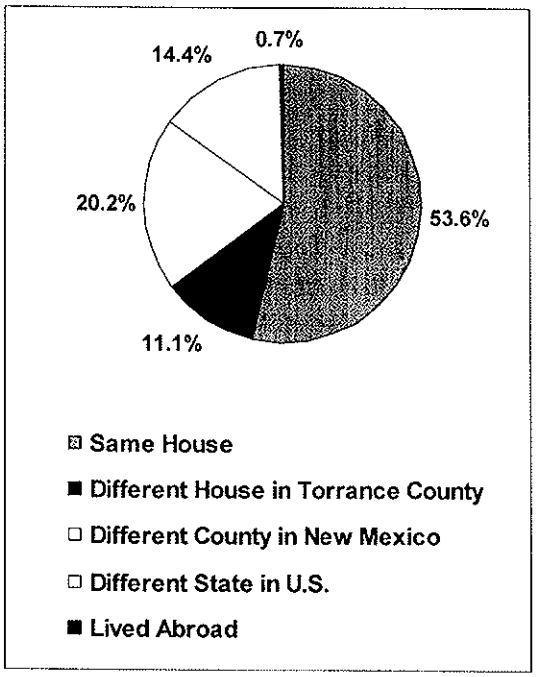
Figure 5
2000 Nativity and Migration:
Torrance County Residents

Place of Birth
(16,911 persons)



Source: 2000 Census

Residence in 1995
(15,725 persons age 5 and over)

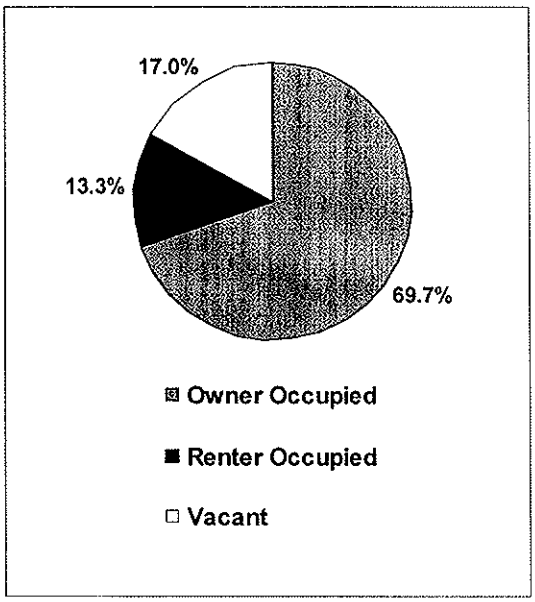


Source: 2000 Census

Housing Data The housing in Torrance County is designed primarily for single family occupancy, with a high percentage of vacant units, mobile homes, and manufactured housing. The 2000 vacancy rate was 17 percent, which is a significant improvement over the 1990 vacancy rate of 24.8 percent. However, 17 percent is a relatively high vacancy rate, especially since only 2.9 percent of the vacant units were used for seasonal, recreational, or occasional purposes. In comparison, the vacancy rate for New Mexico was 13.1 percent, including 4.1 percent that were used for seasonal, recreational, or occasional purposes. The vacancy rate for Bernalillo, Sandoval, and Valencia Counties, respectively, were 7.6 percent (with 0.5 percent seasonal), 9.9 percent (with 3.6 percent seasonal), and 8.0 percent (with 0.6 percent seasonal). What is not known however is the physical condition of the vacant housing units in the County.

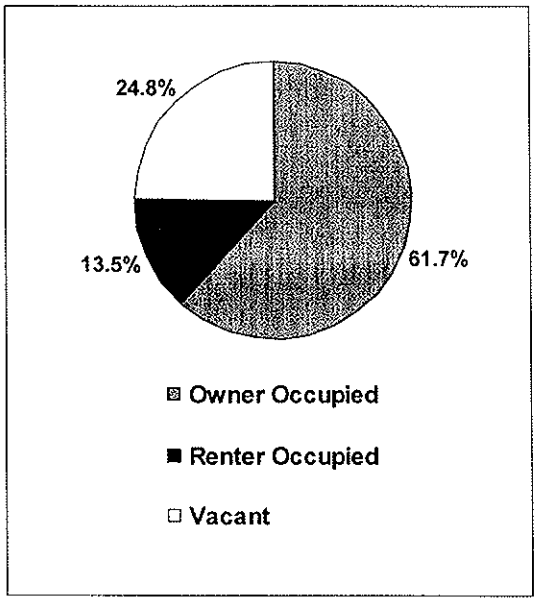
Figure 6
1990 and 2000 Housing Tenure:
Torrance County

2000



Source: 2000 Census

1990



Source: 1990 Census

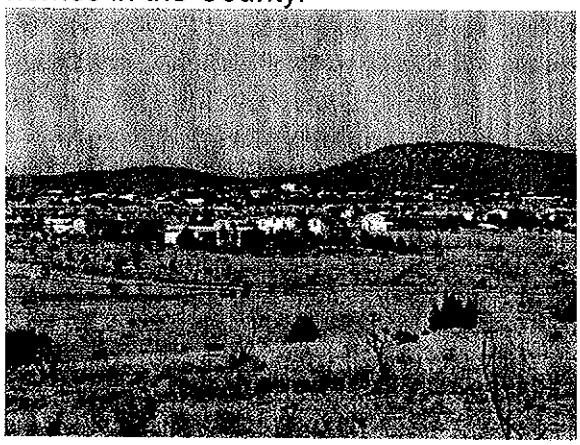
The age of occupied housing is provided in Table 5. More than a third (37.4 percent) of the occupied housing units were constructed during the rapid growth period of the 1990s. Table 5 also shows that more than three fourths (76.5 percent) of the housing units, including mobile homes and manufactured housing, were built or installed within the past 30 years.

Table 5
Age of Occupied Housing in 2000
Torrance County
(Vacant units excluded)

Year Structure Built	Number of Units
1999 – March 2000	341
1995 – 1998	1,517
1990 – 1994	853
1980 – 1989	1,453
1970 – 1979	1,388
1960 – 1969	476
1940 – 1959	701
1939 or Earlier	528

Source: 2000 Census

As previously mentioned, the majority of the housing stock in the County is designed primarily for single family occupancy (see Table 6 and Figure 7). According to the 2000 Census, single family homes and mobile homes accounted for 97.1 percent of the housing, while 1.5 percent of total housing were multifamily housing units. The percentage of mobile homes increased by more than ten percent from 1990 to 2000, from 42.1 to 52.7 percent of the County's housing units. By comparison, the mobile homes in the State of New Mexico increased by two percent, from 16.3 percent of the state's housing units in 1990 to 18.6 percent in 2000. Nearly three out of every four additional housing units in Torrance County during the last decade were mobile homes. Currently, there are more mobile homes than conventional, site-built single family homes in the County.



Residential housing in east mountain area

It should be noted, however, that there is a distinction between mobile homes and manufactured housing. Manufactured housing units are often referred to as double-wide mobile homes. The Census long form questionnaire did not offer manufactured housing as a choice for a householder's type of housing. Householders who lived in manufactured housing could have selected either "a mobile home" or "a one-family house detached from any other house" to describe their home. Therefore, the percentage of mobile homes and manufactured housing combined is greater than what the Census statistics show for mobile homes. The County Assessor reported 4,145 mobile homes on the tax rolls in 2000. These do not include mobile homes less than 40 feet long, which do not have to be reported to the County. While mobile homes and manufactured housing provide a legitimate and acceptable alternative to traditional site-build housing, they tend to deteriorate more rapidly than site-build housing, thus lowering the assessed valuation of property and may detract from the appearance of the County. Therefore, the County should maintain an appropriate planning process to ensure proper siting and installation of mobile homes and manufactured housing.

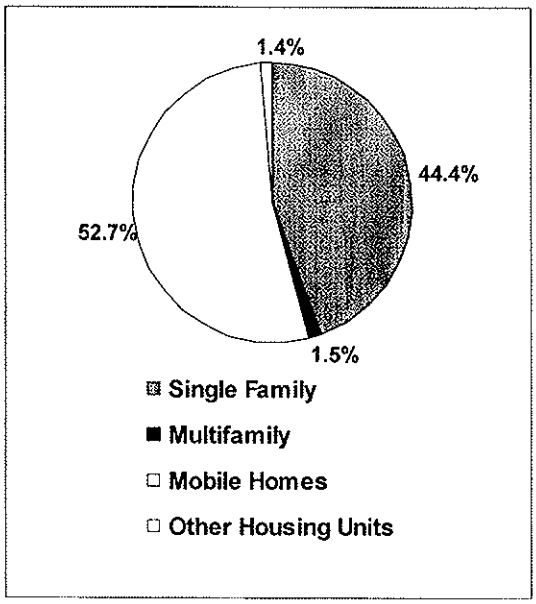
Table 6
1990 and 2000 Housing Type
Torrance County
(all housing units including vacant)

Type	2000 Number of Units	2000 Percent	1990 Number of Units	1990 Percent
Single Family	3,224	44.4	2,691	55.2
Multifamily	110	1.5	79	1.6
Mobile Homes	3,823	52.7	2,056	42.1
Other Housing Units	100	1.4	52	1.1
Total	7,257	100.0	4,878	100.0

Source: 2000 Census and 1990 Census

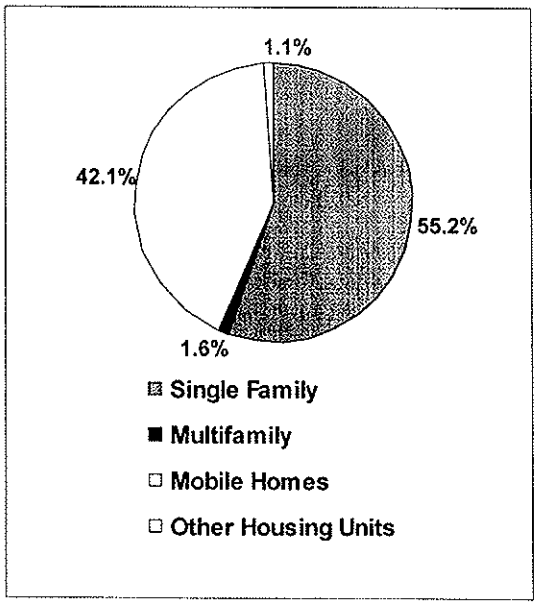
Figure 7
1990 and 2000 Housing Type:
Torrance County
(all housing units including vacant)

2000



Source: 2000 Census

1990



Source: 1990 Census

During the 15 months prior to the 2000 Census, 341 new housing units were reported (Table 5) but 1,183 new householders were reported (Table 7). Both these data items were from sample data so they should be considered approximations rather than exact numbers. The difference between the householders moving into units and the new housing units is the number of householders that moved into existing units, which are 842 householders.

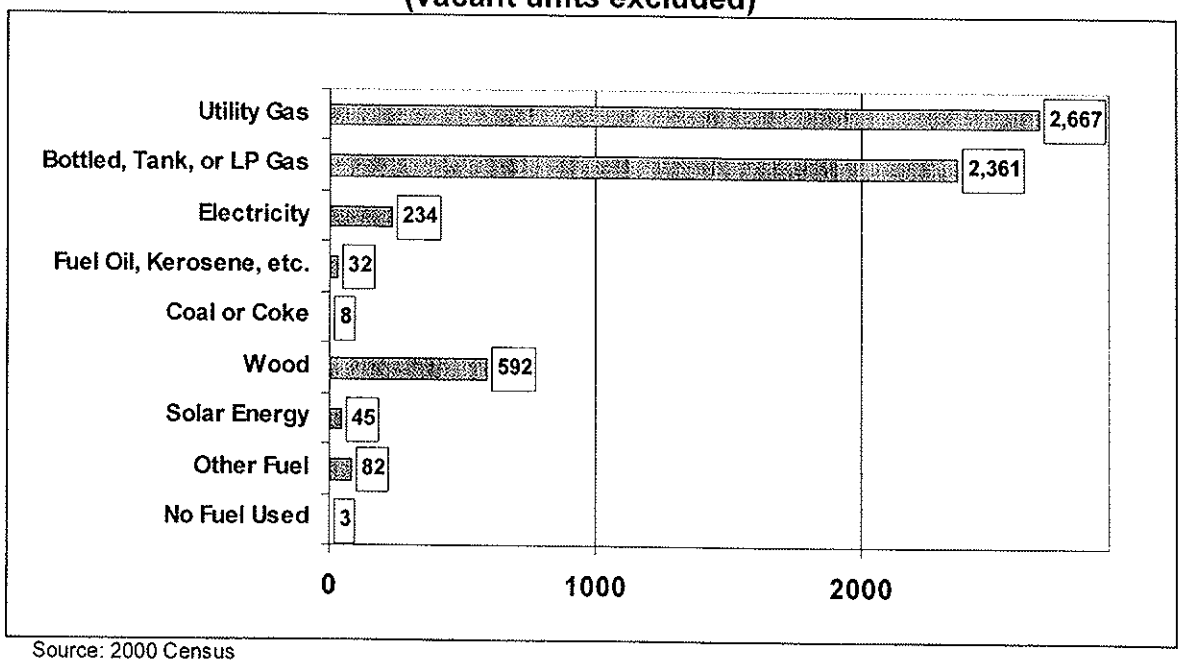
Table 7
Year Householder Moved Into Unit:
Torrance County

Year	Number of Units	Percent
1999 to March 2000	1,183	19.6
1995 to 1998	1,978	32.8
1990 to 1994	1,180	19.6
1980 to 1989	931	15.5
1970 to 1979	434	7.2
1969 or earlier	318	5.3
Total	6,024	100.0

Source: 2000 Census

There is a wide range of housing heating fuel being used in Torrance County, although the majority of housing units are heated with natural gas or propane (see Figure 8). The relatively high usage of propane is due to the lack of infrastructure and the low population density in the rural areas of the County.

Figure 8
2000 Housing Heating Fuel for Occupied Units:
Torrance County
(vacant units excluded)



Source: 2000 Census

Employment Data The economic characteristics of Torrance County provide insight into the basic conditions of the County. A healthy local economy provides both employment opportunities for residents and a strong tax base for the County. Slightly more than fifty-eight percent of the persons age 16 and over were included in the County's labor force, 94 percent of whom were employed. The year 2000 labor force and employment for Torrance County is presented in

Table 8 with comparisons to the State of New Mexico and the United States. The percentage of the population in the labor force is lower in Torrance County than either New Mexico, as a whole, or the nation. The gap between Torrance County and the United States is greater for the males than the females.

Table 8
2000 Labor Force and Employment:
Torrance County, New Mexico, and U.S.

	Torrance County		New Mexico	U.S.
Classification	**Number**	**Percentage**	**Percentage**	**Percentage**
Total Persons Age 16 and Over:	12,351	100.0	100.0	100.0
In Civilian Labor Force	7,221	58.5	60.2	63.4
In Armed Forces	8	0.0	0.8	0.5
Not in Labor Force	5,122	41.5	39.0	36.1
Civilian Labor Force:	7,221	100.0	100.0	100.0
Employed	6,786	94.0	92.7	94.2
Unemployed	435	6.0	7.3	5.8
Males Age 16 and Over:	6,356	100.0	100.0	100.0
In Civilian Labor Force	4,037	63.5	66.2	69.8
In Armed Forces	2	0.0	1.4	0.9
Not in Labor Force	2,317	36.5	32.4	29.3
Females Age 16 and Over:	5,995	100.0	100.0	100.0
In Civilian Labor Force	3,184	53.1	54.4	57.4
In Armed Forces	6	0.1	0.3	0.1
Not in Labor Force	2,805	46.8	45.3	42.5

Source: 2000 Census

Table 9
2000 Civilian Occupations for Employed Residents:
Torrance County, New Mexico, and U.S.

	Torrance County		New Mexico	U.S.
Occupation	**Number**	**Percent**	**Percent**	**Percent**
Total Employed Persons Age 16 and Over:	6,786	100.0	100.0	100.0
Management, Professional, and Related Occupations	2,056	30.3	34.0	33.7
Service	1,172	17.3	17.0	14.9
Sales/Office	1,463	21.6	25.9	26.7
Farming/Forestry/Fishing	113	1.7	1.0	0.7
Construction/Extraction/ Maintenance	1,015	14.9	11.4	9.4
Production/Transportation/ Material Moving	967	14.2	10.7	14.6

Source: 2000 Census

A categorical listing of occupations for the employed residents of Torrance County is displayed in Table 9. Clearly there is a wide cross section of workers living in the County, with the categories not very much different than the State and the nation. Compared to the State, there were fewer persons in the management/professional and sales/office occupations, and more persons in the construction/extraction/maintenance and production/transportation/material moving occupations.

Table 10 shows the jobs of Torrance County residents according to industry categories. These jobs are not necessarily in Torrance County as nearly half of the County residents travel outside of the County to work. The largest number of jobs was in education/health/social services, followed by retail trade and construction. Education and public administration jobs were accountable to the Torrance County government; Estancia, Moriarty, and Mountainair municipal governments; and Estancia, Moriarty, and Mountainair public schools. The largest private employers in the County include grocery stores, restaurants, truck servicing centers, an electric cooperative, detention facility, school transportation service, a heavy construction contractor, an auto dealer, and a dairy.

Table 10
2000 Industries for Residents of Torrance County

Industry Categories	Number	Percent
Agriculture/Forestry/Fishing/Hunting/Mining	391	5.8
Construction	783	11.5
Manufacturing	425	6.3
Wholesale Trade	191	2.8
Retail Trade	945	13.9
Transportation/Warehousing/Utilities	538	7.9
Information	141	2.1
Finance/Insurance/Real Estate/Rental/Leasing	233	3.4
Professional/Scientific/Management/ Administrative/Waste Management Services	552	8.1
Education/Health/Social Services	1,224	18.0
Arts/Entertainment/Recreation/Accommodation/ Food Services	486	7.2
Other Services (except public administration)	343	5.1
Public Administration	534	7.9
Total jobs	6,786	100.0

Source: 2000 Census

Other Demographic/Socioeconomic Data Workers were defined as those persons who went to work during the week prior to the Census date. This is a slightly different amount than the total employed residents. The place of work was determined to be the primary work location during the week prior to the Census date. There were almost as many workers traveling to jobs outside of

Torrance County (48.3 percent) as there were who found work in Torrance County (51.3 percent). Seven out of every ten workers drove to work alone, while another two out of ten used carpools as a means to get to work (see Table 11). The average travel time to work was 36.3 minutes.

Table 11
2000 Commuting to Work for Residents of Torrance County

Mode of Transportation	Number	Percent
Total workers 16 years and over:	6,652	100.0
Drove Alone (car, truck, or van)	4,648	69.9
Carpool (car, truck, or van)	1,351	20.3
Public Transportation (including taxicab)	20	0.3
Walked	243	3.6
Other Means	58	0.9
Worked at Home	332	5.0

Source: 2000 Census

A distribution of 1999 household income is provided in Table 12. The 1999 median household income for Torrance County was $30,446, well below the median for New Mexico ($34,133) and the United States ($41,994). Likewise, the per capita income for Torrance County ($14,134) is well below that of New Mexico ($17,261) and the United States ($21,587). As would be expected, Torrance County residents have supplemented their incomes with the following assistance programs: Social Security income (28.4%); retirement income (17.1%) percent; Supplemental Security income (5.9%); and public assistance income (6.2%) percent.

Table 12
1999 Household Income:
Torrance County, New Mexico, and U.S.

	Torrance County		New Mexico	U.S.
Category	Number	Percent	Percent	Percent
Less than $10,000	835	13.7	12.5	5.8
$10,000 to $14,999	557	9.2	8.4	4.3
$15,000 to $24,999	1,074	17.7	15.8	10.7
$25,000 to $34,999	981	16.2	14.4	12.0
$35,000 to $49,999	1,160	19.1	17.0	17.1
$50,000 to $74,999	914	15.1	16.5	22.3
$75,000 to $99,999	300	4.9	7.8	12.5
$100,000 to $149,999	163	2.7	5.0	9.6
$150,000 to $199,999	36	0.6	1.3	2.8
$200,000 or more	47	0.8	1.3	2.9
Total Households	6,067	100.0	100.0	100.0

Source: 2000 Census

Torrance County has a relatively high percentage of low-income persons compared to the State and the Nation. In Torrance County, 19.0 percent of the population was determined to be below the poverty level. This is a slightly higher percentage of persons living in poverty than New Mexico (18.4 percent) and the United States (12.4 percent). Poverty is greater for the children in Torrance County; about one out of every four children under the age of 18 is living in poverty. Economic development strategies that bring higher wage jobs to the County, and the region, are desperately needed to raise the median household income in Torrance County.

County Facilities and Services

One of the primary objectives in any planning process is to determine the type and extent of public services necessary to provide for the residents' needs. This portion of the community profile examines those facilities and services currently being provided to Torrance County residents.

County Government Operations Torrance County has a three-member Board of County Commissioners. There are eight elective positions: the three County Commissioners, County Assessor, County Clerk, County Sheriff, County Treasurer, and the Probate Judge. All of these elected officials serve four-year terms.

Torrance County Administrative Offices

The County's administrative department heads include the County Manager, County Assessor, County Clerk, County Sheriff, County Treasurer, 911 Dispatch Director, DWI Coordinator, Emergency Services Coordinator, County Maternal Child Healthcare (MCH) Project Office Coordinator, County Zoning Officer, Probate Judge, North Roads Superintendent, South Roads Superintendent, Rural Addressing, County Agent, and the Domestic Violence Coordinator. There are also several appointed committees and advisory bodies: Torrance County Health Council, DWI Planning Council, Planning and Zoning Commission, Estancia Basin Water Planning Commission, Regional Animal Shelter Commission, Estancia Valley Solid Waste Authority, and the 911 Board.

Tax Collection New Mexico relies heavily on gross-receipts and selective-excise taxes, such as gasoline taxes, cigarette taxes, and motor vehicle fees, to fund local government operations. Compared to other states, New Mexico relies more heavily on the gross-receipts tax, ranking the third highest in the country for this tax as a percentage of personal income (Hain, 1994).

Furthermore, New Mexico's reliance on this tax has increased through the 1980s and 1990s.

Counties are authorized to impose a gross-receipts tax by ordinance of a maximum of 0.375% of gross receipts in the county area. Torrance County has imposed the maximum gross receipts tax allowed. In addition, the County has imposed three local option gross receipts taxes for Health/Medicaid (0.0625 percent), Environmental (0.125 percent), and Fire Protection (0.25 percent).

Use of the property tax in New Mexico is low compared to the national average. New Mexico ranks forty-ninth among the states in property taxes as a percentage of income (Hain, 1994). However, the property tax in New Mexico is a major source of revenue for county governments. Eighteen of New Mexico's 33 counties, including Torrance County, have imposed the maximum tax rates allowed by State law (11.850 percent).

The major sources of Torrance County's revenues (excluding capital and enterprise fund revenues) are shown in Table 13. In the past three years, property taxes have accounted for between 65.1 and 69.3 percent of Torrance County's general revenues, and they have accounted for between 33.0 and 43.8 of the County's total revenues, excluding capital and enterprise fund revenues. Since property taxes are essential for financing the County's operations, it will be necessary for the County to take steps to ensure that property is valued and assessed correctly, and that delinquent property taxes are paid.

Torrance County's primary expenses (excluding capital expenditures and enterprise funds) are shown in Table 14. The table clearly shows that the County's greatest expense is public safety, which includes the County Sheriff, corrections, emergency medical services, enhanced 911, fire protection, and law enforcement protection. Expenses on public safety accounted for 36 percent of the County's expenses during 2001. Records show that Torrance County has experienced a general trend of increasing funds spent on public safety throughout the last decade. In fact, spending on public safety in Torrance County almost tripled during the 1990's, from $658,594 in FY 1991 to $1,840,089 in FY 2001. A major reason for the increased costs of public safety is the cost of corrections. The disbursements for corrections increased seven and a half times over the past decade, from $116,515 in 1991 to $880,270 in 2001.

Table 13
1999-2001
Torrance County Receipts
(Excluding Capital, Enterprise, and Agency Fund Revenues)

Year	2001	2000	1999
General Fund			
Cigarette Tax	$ 545	$ 630	$ 444
County Equalization Gross Receipts	44,906	64,315	60,368
Liquor Licenses	1,025	500	1,300
Other Licenses and Permits	20,814	28,602	40,618
Administrative Fees	27,954		
Federal Payment in Lieu of Taxes	121,981	104,772	124,403
County Gross Receipts Tax	192,711	203,831	164,973
Current Property Tax	2,290,495	2,100,084	1,858,009
Gasoline Tax – Regular	--	--	44,956
Other	602,656	525,884	557,358
General Fund Subtotal:	$3,303,087	$3,028,618	$2,852,429
Correction	232,442	157,289	567,951
County Property Valuation	--	21,253	24,589
Environmental Gross Receipts Tax	67,168	--	--
County Road Funds	832,011	715,601	1,001,791
Emergency Medical Services	17,240	23,497	20,394
Enhanced 911	--	--	11,227
Farm & Range Improvement	1,427	1,906	968
Fire Protection	229,381	359,422	273,193
Law Enforcement Protection	29,600	20,000	19,400
Lodgers' Tax	6,932	1,867	2,014
Recreation	272	315	222
Senior Citizen	267,120	359,729	349,396
Indigent	224,947	215,910	119,832
Community DWI	--	240,644	--
Clerk Recording & Filing	21,328	19,671	15,684
Other	770	1,207,339	--
Total:	$5,233,725	$6,373,061	$5,259,090

Source: N.M. Department of Finance and Administration, Local Government Division

Table 14
1999-2001
Torrance County Disbursements
(Excluding Capital, Enterprise, and Trust Fund Expenditures)

Year	2001	2000	1999
General Fund:			
County Commission	$ 614,999	$ 559,068	$ 441,544
Probate Judge	13,541	8,900	7,621
Treasurer	170,694	161,384	152,010
Assessor's	--	177,964	185,544
Sheriff	635,566	483,247	434,495
Clerk	152,589	161,185	164,777
County Manager	181,253	175,915	159,963
Planning & Zoning	61,712	54,170	45,917
Other	489,447	417,229	362,381
General Fund Subtotal:	$2,319,801	$2,199,062	$1,954,252
Corrections	880,270	852,568	948,375
Environmental Gross Receipts	67,168	--	--
County Property Valuation	36,117	39,883	25,729
County Roads	977,180	934,074	1,050,700
Emergency Medical Services	10,474	18,145	13,531
Enhanced 911	2,755	2,038	13,531
Farm and Range Improvement	19,124	19,000	17,000
Fire Protection	250,274	305,560	287,675
Law Enforcement Protection	29,600	20,000	19,400
Lodgers' Tax	--	5,572	--
Recreation (1 cent)	250	250	1,050
Senior Citizens	245,776	374,926	218,866
Indigent	161,729	217,378	189,930
County Fire Protection	31,150	--	5,987
Community DWI Program	--	201,913	--
Clerk's Recording and Filing	11,255	16,843	16,661
Other	69,633	1,240,110	117,836
Total:	$5,112,556	$6,447,322	$4,880,523

Source: N.M. Department of Finance and Administration, Local Government Division

Road Maintenance As in all counties in New Mexico, road maintenance is an important responsibility, and county governments are obligated to help provide for safe and efficient public roads within the unincorporated areas of the county. The Torrance County Road Department maintains a county road network of approximately 972 road miles throughout an area some 3400 square miles in size. The majority of the roads maintained by County work crews are unpaved rural roads requiring continuous surface treatment and drainage management.

The types of vehicles available for maintenance include the following: 15 pickups, six trailers, five 6-yard "belly dumps" (tractor trailers), four 20-yard belly dumps (tractor trailers), three loaders, two compactors, two water trucks, two 6x6's (for snow removal), a backhoe, chip spreader, sweeper, salt spreader, and a car for official use.

Law Enforcement Maintaining law and order in Torrance County is a daunting responsibility. The large land area of the County is sparsely settled in a predominantly rural environment. Emergency response is hampered by long distances, often by way of unpaved roads serving as connections to many isolated, but inhabited, areas. Currently the most problematic law enforcement issues in the County are domestic violence and drug trafficking. County resources have historically been insufficient to adequately fund the County Sheriff's Office because of the lack of revenue generating capability allowed most counties in New Mexico.

As of the year end, 2002, the Torrance County Sheriff's Department had 22 officers (one sheriff and 21 deputies), 22 vehicles, and one jail for detention of County prisoners (CCA Prison, which is privately owned). The Sheriff's Office has also provided "on call" services to municipalities because of their insufficient law enforcement capabilities.

Land Use Management As early as 1976, there was evidence of a County Planning Commission, which eventually prepared a draft Development Statement and a zoning ordinance, neither of which were ever adopted. The County had no control over development at that time and there was a growing concern that the Board of County Commissioners should impose minimal regulations over developers to protect the public safety and health of the residents. Conversely, the farmers and ranchers of the Estancia Valley wanted little or no governmental interference to their livelihood.

During early 1987, the County appointed a Land Use and Development Board to put together a Comprehensive Land Use Plan and to draft a new zoning ordinance to implement the plan. On June 29, 1988, the Board of County Commissioners adopted the Torrance County Comprehensive Plan Development Policy. That policy plan provided the basis for the adoption of the County's first zoning ordinance in March of 1990. The Land Use and Development Board eventually evolved into the present day Planning and Zoning Commission.

In 1982, Land Subdivision Regulations were adopted for the first time by the Board of County Commissioners. However, due to a change in State law (New Mexico Subdivision Act of 1995), all counties had to adopt new and more stringent regulations to comply with the law. Thus, Torrance County adopted the current Subdivision Regulations in 1996, using a model ordinance provided by the New Mexico Association of Counties. The new subdivision regulations applied to virtually all divisions of land in the County and set up an elaborate

multi-agency review process that included various state agencies.

The County presently administers a comprehensive land use management program supported by regulatory ordinances and enforcement powers. However, it is important to understand that these ordinances need to be continually reviewed and adjusted to the development conditions of the County. Also, the level of enforcement must be maintained to properly and fairly carry out the intent and objectives of regulatory control of lands throughout the County.

Transportation Systems The principal transportation structure in Torrance County is comprised of roads and highways. The County is traversed by an interstate highway (I-40) and several State and Federal highways forming the base road network for the County. There are relatively good east-west and north-south corridors in the County, although they are widely spaced. Figure 9 shows County transportation facilities and other related information.

Functional classification of highways is presented on Figure 9 to define how specific corridors are used to serve the travel demands of the community. Functional classification also implies road design and right-of-way standards necessary to provide adequate traffic-carrying capacity on a particular road. Functional classification is divided into three categories: 1) arterials, which consist of continuous, long-distance travel routes providing regional connections among urban and rural communities, and emphasize a high level of mobility for movement through the region; 2) collectors, which provide a linkage between local roads and the arterials; and 3) locals, which provide direct access to land use activities, and carry traffic to the higher capacity collectors and arterials.

The designated State and Federal Highways crisscrossing the County are essential to internal County circulation and provide the routes for commuter traffic as well. The County does not have maintenance responsibility for these roads, but can recommend improvement priorities on these roads and highways to the appropriate agencies.

Other transportation-related information is displayed on Figure 9. In addition to the functional classification of the major roads, there is an inventory of traffic flow counts expressed as average weekday traffic (AWDT). The AWDT statistics are for the year 2001, representing the number of vehicles passing over a specific point on a highway during a 24-hour period. Based on volume-to-capacity criteria, there are no roads or highways in the County where the amount of traffic currently exceeds the highway design capacity.

Related to the traffic flow are locations of "worst intersections" determined by documented reports of traffic accidents. Figure 9 shows the top ten intersections in the County with the most accidents. Due to map scale, it is not readily apparent, but most of the recorded accidents occurred in the Moriarty area. Figure 9 also shows the locations of the worst bridge structures as

evaluated by the State Department of Transportation. These are bridges with a "sufficiency rating" of less than 60, meaning they are in need of repair.

Location of airports and scheduled stops for intercity bus services are shown on Figure 9. Torrance County has three publicly-owned airports which are all designated as "Key Airports" by the New Mexico Airport Systems Plan. Key airports are general aviation, basic utility airports designed to accommodate small aircraft. Key airports provide access to areas that do not have sufficient activity to justify a "Gateway Airport" which would serve to provide business access to a major activity center. Only Moriarty Municipal Airport has paved runways, but all are eligible to receive State and Federal funding assistance.

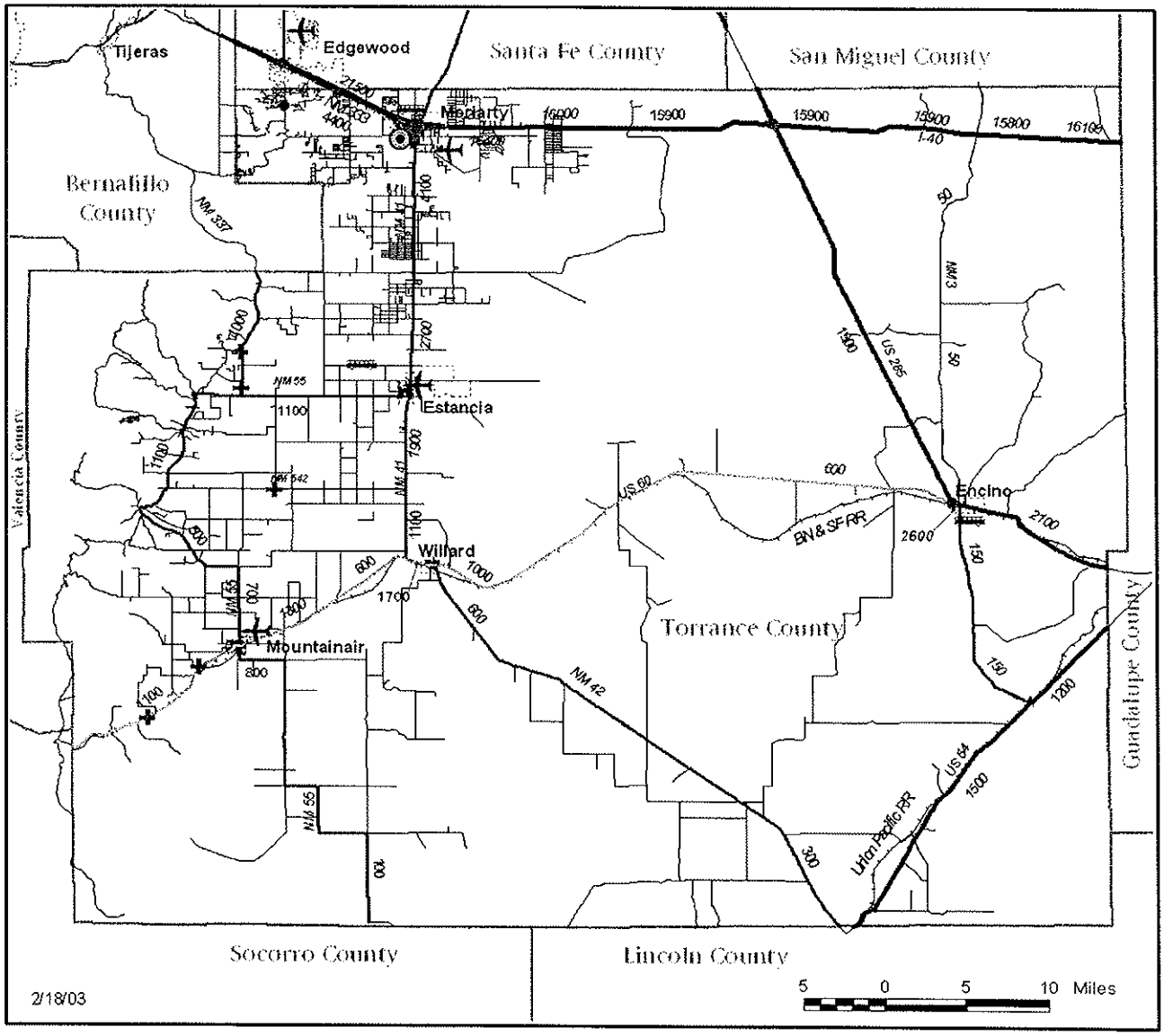
Although railroads played a major role in the past, there are only two railroad corridors remaining in the County. One is situated along U.S. Highway 60 utilized by the Burlington Northern & Santa Fe Railroad and the other is located along U.S. Highway 54 utilized by the Union Pacific Railroad, both carrying cross-country through trips with no scheduled stops in the County.

Torrance County has several different types of public transportation services. GO FORS, INC. /City of Moriarty and Torrance County receive Section 3037 funding (Job Access and Reverse Commute) for three vans (two 15-passenger vans and one 12-passenger van) to provide demand response service to Moriarty, Estancia, Mountainair, and Edgewood. The majority of the riders are transported to the job training center in Moriarty, but the service will transport to other locations, including Albuquerque. There is no charge for those receiving Temporary Assistance for Need Families (TANF) benefits, while others (including the general public) pay a reduced fee.

Presbyterian Medical Services provides transportation services for Torrance County senior citizens. Presbyterian has eight 6-passenger vans (including one van that is handicapped accessible) that are used to home deliver meals, transfer seniors to medical appointments, the grocery store, the bank, and to senior centers in Estancia, Moriarty, and Mountainair.

Maternal Child Health (MCH), which is based in Moriarty, provides transportation services for citizens in Torrance, Bernalillo, Santa Fe, and Valencia Counties that are uninsured or underinsured. MCH has one 12-14 passenger van that transfers citizens to health and social services. There is no fee to use the service. This program is funded through a rural outreach federal grant though the Health Resource Services Administration (HRSA).

TNM&O provides scheduled intercity bus service in Encino, Estancia, and Moriarty. TNM&O travels throughout the U.S. southwest, serving numerous communities in New Mexico, Texas, Oklahoma, Colorado, and Kansas, providing connections to Greyhound and many other carriers.



Roadway Functional Class
- Interstate
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Railroad
- Proposed Multi-modal Transportation Hub

- Key Airport
- Scheduled Intercity Bus Service
- Bridge with Sufficiency Rating Less Than 60
- Worst Intersections in County Ranked by Number of Accidents

16000 2001 Average Weekday Traffic (Standard)
16000 2001 Average Weekday Traffic (Non-Standard)

Torrance County Comprehensive Plan

Figure 9
Transportation Facilities and Related Information

Map prepared by:

Mid-Region Council of Governments
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

Source: NMDOT and MRCOG

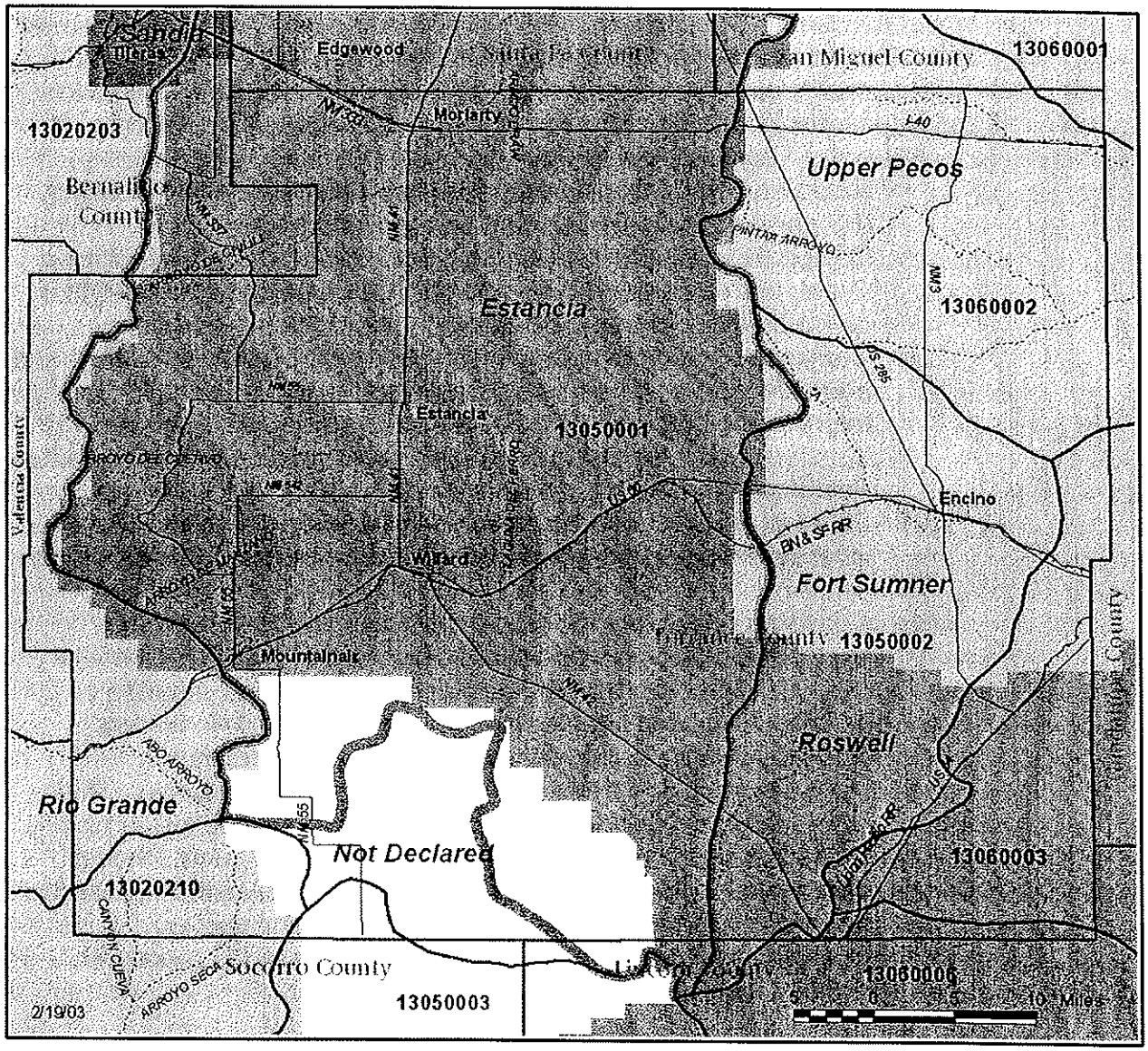
Solid Waste Disposal The Estancia Valley Solid Waste Authority was created in 1993 (then called the Torrance County Solid Waste Authority) for the purpose of providing solid waste collection and disposal services to residents of Torrance County. Currently, services are provided to surrounding counties and Torrance County now owns and operates a regional landfill. The current (2003) fee for residential service is $9.75 per month. Torrance County residents (not located in an incorporated municipality) can take their solid waste to any one of eight convenience stations located throughout the County. The Solid Waste Authority then transfers the solid waste to the regional landfill located seven miles east of Moriarty. The Estancia Valley Solid Waste Authority performs the billing for all solid waste disposals in Torrance County. The communities of Moriarty, Estancia, Mountainair, and Willard provide for curbside pickup services within their own jurisdictions. Moriarty, Estancia, and Mountainair have contracts with Waste Management of New Mexico, while Willard contracts with another private company.

There is also a permitted asbestos landfill in operation within the County, located approximately 14 miles southeast of Mountainair off N.M. Highway 55. This is a restricted landfill that is closely monitored by the N.M. Environment Department permitted under RCRA Subtitle D (Federal Resource Conservation and Recovery Act). This landfill receives asbestos materials from a large regional (out of county) area.

Water Resource Management Decisions regarding water resource management in Torrance County are not made in a unified or coordinated manner. Other than State agencies such as the New Mexico Office of the State Engineer which administers water rights in declared basins and the New Mexico Environment Department which regulates the disposal of wastewater, there is no regional authority to manage the consumptive use of water resources in the County. Many decisions affecting water resources in the County are made by individual local governments and by private sector water providers.

The surface and groundwater geography in Torrance County is displayed on Figure 10. The Estancia Basin is one of many declared basins in the State of New Mexico. Although the most significant water resources lie in the Estancia Basin, there are other declared basins within the County that are administered by the Office of the State Engineer. They are the Rio Grande Basin and other basins of the Pecos River system (i.e., Upper Pecos, Fort Sumner, and Roswell). The Estancia Basin is a hydrologically closed basin, meaning that all drainage moves toward the center of the basin. The Estancia Basin water planning region covers the hydrologic basin and lies within portions of Torrance, Santa Fe, Bernalillo, and San Miguel Counties.

The Estancia Basin Water Planning Committee was created by a Memorandum of Understanding in 1995 which was signed by the counties of



Declared Administrative Groundwater Basins

- Estancia
- Fort Sumner
- Rio Grande
- Roswell
- Sandia
- Upper Pecos
- Not Declared

- Estancia Water Planning Region
- Hydrologic Units and Code
- Major Hydrology
- County Boundary

Torrance County Comprehensive Plan

Figure 10
Surface and Groundwater Geography

Map prepared by:

Mid-Region Council of Governments
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

Source: WRRI, USGS, MRCOG

Torrance, Santa Fe, and Bernalillo. One of the primary responsibilities of this committee was to develop a Regional Water Plan in accordance with the requirements of the N.M. Interstate Stream Commission (ISC). With funding from the ISC, a regional water plan for the Estancia Basin was finally completed and approved in 1999. The Estancia Basin Regional Water Plan contains recommendations that are intended to preserve the water resources of the County for future use. There are five critical priorities presented in the Regional Water Plan:

- Establish a single focus management authority with jurisdiction in the Basin and with an adequate source of funding;
- Designate the Basin as a special groundwater management area (Note: this recommendation has been accomplished by the Office of the State Engineer as of 2002);
- Carry out aggressive conservation, water resource information, and education programs aimed at the residents of the Basin;
- Improve the administration of water rights appropriations and transfers within the Basin to ensure long term preservation of water resources; and
- Develop and conduct comprehensive monitoring, metering, and investigation programs to protect the water resources of the Basin.

All local governments, including the County, can use their regulatory powers through codes and ordinances to control land use activities that affect water resources. The Torrance County Subdivision Regulations, adopted in 1996 contain extensive requirements to ensure water availability in all new subdivisions as a condition for approval. Major land subdividers must demonstrate a 70-year supply of water based on geohydrologic studies. This requirement, however, does not apply to the thousands of existing lots of record that were subdivided prior to the 1996 regulations. Also, the County Zoning Ordinance was amended in 1997 to include water usage regulations intended to protect existing water resources, both in terms of quantity and quality. Development review permits now must consider the effects of the proposed development on local water resources.

Management of the watersheds within the Estancia Basin is also an important strategy to preserve, protect, and improve water resources, particularly in a closed basin. There are three Soil and Water Conservation Districts in Torrance County whose missions are focused on watershed management. The accomplishments of these Districts often go unnoticed, but can be crucial to long term stability of the water resources of the County.

Health Care Torrance County has a variety of health care services, all of which are located in municipalities throughout the County. Torrance County Public Health provides public health services and has three locations in the County: Estancia, Moriarty, and Mountainair. The Torrance County Public Health center in Moriarty provides the following services: immunizations, family

planning, STD testing, anonymous HIV, and pregnancy testing. The Moriarty center has one nurse practitioner. The Estancia center provides the following services: pre-natal care, breast and cervical cancer referrals, immunizations, family planning, STD, and pregnancy testing. The Estancia center also provides health education and DWI prevention at the local schools, and has one part time nurse practitioner. Every other Tuesday, the Estancia center sends one nurse to Mountainair to provide immunizations, family planning, pregnancy testing, STD testing, and sports physicals. A nurse practitioner is also available if needed. All of these services are provided out of a motor home.

Primary care services are found at the McLeod Medical Center in Moriarty, CliniMed in Moriarty, Hope Medical Center in Estancia, and the Mountainair Family Health Center in Mountainair. McLeod Medical Center, which opened its doors as Moriarty Family Health Clinic in 1987, has one general practice physician who is at the Center four days a week. The Center offers full family practice coverage from infants to the elderly. The Center has radiology and cardiopulmonary equipment; and is equipped for minor surgery. Emergency care is available through inpatient teams at Lovelace, Presbyterian and Sandia Hospitals in Albuquerque, with follow-up visits at McLeod Medical Center. In addition, a nurse practitioner, a women's health specialist, a podiatrist, and a chiropractor, although not located at the Center, are available at the Center by appointment. CliniMed, a rural family health clinic at the Valley Medical Plaza in Moriarty provides physical exams and pregnancy screenings, and has one nurse practitioner. Hope Medical Center in Estancia provides full time family practice care to the general population. The Medical Center has one general practice physician, a full time dentist, and a part time behavioral health therapist. Mountainair Family Health Center has one general practice physician and one behavioral health therapist. The Health Center is equipped to handle minor surgeries and emergencies.

Although not in Torrance County, the Town of Edgewood, (which is about 10 miles from Moriarty) has two pediatric clinics, one eye clinic, one physical therapy center, and a primary care provider called First Choice that is open six days a week. First Choice provides comprehensive primary care, (including both medical and dental care) as well as education, prevention and outreach programs.

PART III

TRENDS AND PROJECTIONS

Population, Housing, and Employment Projections

Population, housing, and employment are forecast to the year 2025 for Torrance County for purposes of developing this Comprehensive Plan. The population forecasts have been provided by the University of New Mexico Bureau of Business and Economic Research (BBER). The housing forecasts were derived from the population forecasts by MRCOG staff. Employment forecasts were produced by MRCOG staff using data from the New Mexico Department of Labor (NMDOL) as well as BBER and the Regional Economic Models, Inc (REMI) Policy Insight Model.

Forecasts presented in this document are based on the U.S. Bureau of Census 2000 and NMDOL employment data. Historical data is provided as appropriate to provide a context for the forecasts. The forecasts presented in this document have been extracted from a larger forecasting project by MRCOG to project to 2025 for the MRCOG Region.

Population The population for Torrance County was forecast by BBER after the 2000 Census. BBER graciously provided their forecasts to MRCOG for planning purposes. These forecasts are established as control totals. Table 15 presents the historical and forecast population of Torrance County along with the average annual rate of change. Table 16 displays the age distribution in percentages for 2000 and each of the forecast years.

Torrance County declined in population from 1950 through 1970. During this period the County primarily depended on agriculture. In the 1970s, the highway link to the major employment center in the Albuquerque area was improved which made northwest Torrance County a viable residential location for Albuquerque area workers. Since the 1970s, the County's population has been growing. The increase in population in the past decade has been especially rapid. However, a footnote needs to be applied to the growth for the 1990 to 2000 period; approximately 500 persons out of the approximate 6,600 increase in population were inmates at the correctional center in the Town of Estancia. While part of the County has experienced growth in recent years, population in many of the eastern parts of the County has continued to decline. An exception to the declining population in areas that depend on agriculture has been the Willard area which has attracted new employment and residents associated with the dairy industry. The southeastern region of Torrance County is also seeing some activity as a result of ranches being subdivided. This could stop future population declines in that part of the County.

Table 15
Torrance County Population, History and Forecast

Year	Population	Average Annual Change
1950	8,012	
1960	6,497	-2.074
1970	5,290	-2.034
1980	7,491	3.540
1990	10,285	3.221
2000	16,911	5.098
2005	19,523	2.774
2010	21,690	2.127
2015	23,475	1.594
2020	24,979	1.250
2025	26,318	1.050

Source: BBER

BBER projects a slowing of the rate of growth. The five percent average annual growth in the past decade was probably due to the combination of several events. Among these events was the location of a private prison near Estancia, the development of a dairy industry near Willard, the expansion of businesses in the Moriarty area, and the continued migration of Albuquerque area workers to northwest Torrance County. A similar combination of events is not expected in any one forecast period; therefore, the forecast is for continued growth but at a slower rate. While the rate of growth is projected to be slower, the amount of growth is expected to be considerable. The lower percentage produces a considerable amount of population when applied to a larger base. The anticipated growth for this decade (2000 to 2010) is nearly 5,000 persons.

A percentage distribution for age cohorts is presented in Table 16. The median age for each forecast year is also calculated. In general, the population is expected to grow older over the next 25 years. In 2000, the median age for the County was 34.8 years, slightly higher than the N.M. statewide median of 34.6 years. By 2025, the median is expected to rise to 38.9 years. More dramatic, however, is the percentage of the population age 65 and over. In 2000, 9.7 percent of the County's population was age 65 or over. By 2025, 19.5 percent of the population is expected to be age 65 or over. The actual number of persons age 65 and over is projected to more than triple from 1,647 in 2000 to 5,136 in 2025. This increase in the percentage of the population at the upper age cohorts could put considerable pressure on the County for services to senior citizens. By contrast, the portion of the population age 19 and under is expected to decrease from 32.8 percent in 2000 to 25.5 percent in 2025. Due to the large increase in population, the actual number of persons age 19 and under is still expected to have a moderate increase from 5,548 in 2000 to 6,715 in 2025.

Table 16
2000-2025 Forecast Torrance County Age Distribution

Age Cohort/Year	2000	2005	2010	2015	2020	2025
Under 5	6.93	5.52	6.33	6.83	6.74	6.18
5-9	8.60	6.77	5.43	6.14	6.62	6.59
10-14	9.71	8.80	6.98	5.55	6.15	6.65
15 – 19	7.56	9.44	8.58	6.86	5.49	6.10
20 – 24	5.02	6.77	8.61	7.98	6.48	5.23
25 – 29	5.55	4.38	6.07	7.93	7.49	6.14
30 – 34	6.96	5.57	4.43	5.87	7.63	7.28
35 – 39	8.32	7.30	5.84	4.59	5.85	7.55
40 – 44	8.40	8.33	7.28	5.80	4.59	5.80
45 – 49	7.68	8.13	8.01	7.00	5.64	4.54
50 – 54	6.45	7.25	7.64	7.57	6.66	5.45
55 – 59	5.18	6.08	6.76	7.13	7.11	6.33
60 – 64	3.90	4.83	5.59	6.22	6.59	6.65
65 – 69	3.28	3.51	4.32	5.01	5.62	6.01
70 – 74	2.47	2.80	3.01	3.72	4.37	4.98
75 – 79	1.90	1.97	2.26	2.47	3.10	3.68
80 & over	2.08	2.55	2.85	3.32	3.88	4.84
Total	100.00	100.00	100.00	100.00	100.00	100.00
Median Age	34.8	36.9	38.1	38.1	37.9	38.9

Source: BBER

Housing and Households The population in households was estimated by MRCOG staff from the forecast population. Population in households excludes persons who are residents of nursing homes, prisons, other institutions, as well as persons in non-institutional settings such as dormitories, group homes, or shelters. To estimate the population in households, a forecast of persons in various institutional and non-institutional settings was calculated and subtracted from the total population.

In forecasting the institutional population, MRCOG assumed that there would not be a new prison or major expansion of the existing facilities; therefore, the projected prison population grew as a function of the growth of the total population. In 2000, there was no institutional nursing home population in Torrance County. Given the aging of the population, it is reasonable to expect the development of nursing homes in the future. MRCOG projected a nursing home population as a function of the population age 75 and over. Since the current nursing home population was zero, the function had to be developed from elsewhere; MRCOG used historical data from Valencia County to derive a projection for Torrance. MRCOG projected 102 nursing home residents by 2025. No other institutional population is expected in Torrance County. Currently, there are no dormitories or group homes in the County and none were projected for 2025 so the forecast institutional population was the total population not in households. The forecast population in households was calculated as the total

population minus the forecast population not in households.

The number of households was calculated by dividing the population in households by the forecast average household size. Household size was forecast from Census Bureau projections of household size. MRCOG found that the change in household size in Torrance County has been reasonably related to the change in the national average household size. Therefore, MRCOG projected that the future change in the average household size for the County would be related to the projected change in the national average. Table 17 displays the historical and forecast population in households, average household size, and number of households. It is noted that the number of households by definition is equal to the number of occupied housing units.

Table 17
1960-2025 Population in Households, Household Size, and Households
Torrance County

Year	Population in Households	Average Household Size	Households (Occupied Housing Units)
1960	6,489	3.74	1,735
1970	5,261	3.25	1,621
1980	7,491	2.83	2,645
1990	10,272	2.80	3,670
2000	16,387	2.72	6,024
2005	18,960	2.69	7,049
2010	21,017	2.64	7,955
2015	22,734	2.61	8,708
2020	24,175	2.58	9,369
2025	25,469	2.55	9,986

Source: U.S. Census Bureau and MRCOG

Given the expected decline in household size, the number of households or occupied housing units will increase more than the population. MRCOG is projecting a 65.8 percent increase in occupied housing units by 2025.

Total housing units were forecast from occupied housing units by estimating the percentage of occupied housing. MRCOG used the historical average for occupancy rates to project future occupancy. It is noted that the County has an inordinate proportion of vacant units. Rural counties tend to have higher vacancy rates so this may be largely due to the rural nature of the County. Housing units were forecast as single family and multifamily units. Mobile homes and manufactured homes were included as single family units. Multifamily units were projected from an analysis of historical data and recent building permit data. Table 18 displays the forecast housing units by type and reports the percentage that is occupied.

Table 18
1970-2025 Housing Units by Type and Percent Occupied
Torrance County

Year	Total Housing Units	Single Family Units	Multifamily Units	Percent of Units Occupied
1970	1,907	1,835	72	85.00
1980	3,180	2,959	221	83.18
1990	4,878	4,799	79	75.24
2000	7,257	7,147	110	83.01
2005	8,728	8,593	135	80.76
2010	9,844	9,694	150	80.81
2015	10,770	10,603	167	80.85
2020	11,582	11,397	185	80.89
2025	12,340	12,136	204	80.92

Source: U.S. Census Bureau and MRCOG

Employment and Employed Persons There are two measures of employment. One which will be referred to as employment is a count of jobs by work site. The second measure which will be referred to as employed persons is a count of persons who are employed either by a company or person or are self-employed. It should be apparent that these two measures can produce vastly different numbers, especially in a county such as Torrance. For a region, the number for employment is likely to be higher than the number of employed persons since an individual can hold two or more jobs. However, in a portion of a region such as Torrance County, the number of employed persons can be larger than the employment since many of the employed persons are commuting out of the County for work.

To calculate employment, MRCOG obtained the March 2000 "tax" file from NMDOL which reported all workers covered by Unemployment Insurance by their work location. In practice, work location often means the company headquarters. MRCOG corrected this file by having staff contact employers where one or more indicators suggested that the actual work site may not be the reported work site. MRCOG supplemented this file by adding employers not covered by Unemployment Insurance such as the railroad, the military, tribal governments, and certain non-profit organizations. Finally, MRCOG added estimates of agricultural employment, self-employment, and unpaid family workers; MRCOG relied on Census data to calculate and locate these jobs. Given the data sources, a person with multiple self-employment jobs was counted only once, in other words, self-employment was considered to be the job. The Census survey asked a person to report their primary job, therefore, self-employment or unpaid family jobs that were secondary were probably not reported and not included in the MRCOG estimate. MRCOG is comfortable with excluding these secondary self-employment and unpaid family jobs as many of these jobs are probably hobbies, seasonal jobs, or occasional jobs such as a person selling products to

their co-workers on a lunch break or someone occasionally growing a few acres of alfalfa for extra income. Table 19 reports the employment by sector for Torrance County. Given the manner in which employment was calculated, it would be difficult to compute historical data; therefore no historical data is provided for employment. It is also noted that public school employees are counted as government workers, making that sector the largest.

Table 19
2000-2025 Forecast Employment by Sector for Torrance County

Sector/Year	2000	2005	2010	2015	2020	2025
Agriculture	343	316	309	313	312	313
Construction & Mining	405	471	518	557	610	673
Manufacturing	144	144	131	111	91	70
Transportation, Communications, Utilities	424	424	430	437	395	325
Wholesale	115	133	171	205	247	285
Retail	753	839	841	847	853	860
Finance, Insurance, and Real Estate	42	95	121	140	156	169
Services	586	905	1,137	1,327	1,509	1,699
Government	1,143	1,529	1,667	1,752	1,802	1,847
Total	3,955	4,856	5,325	5,689	5,975	6,241

Source: NMDOL, BBER, U.S. Census Bureau, REMI, and MRCOG

The forecast by sectors was primarily derived from the REMI Model. The decline in manufacturing is based on expectations for future levels of manufacturing. The stability in retail has to do with expected efficiencies and other changes in retailing. Clearly, the location of a particular employer in Torrance County could change the sector distribution. For example, if a major discount retailer built a "super-store" in Moriarty the retail sector would be greatly increased. Although, the data for the sectors could vary, MRCOG is confident in the employment totals. The total employment was calculated independently; it was not the sum of the sectors. Therefore, variability in the sector totals does not imply a change to the total for employment. Total employment was forecast from a variety of measures, both historical and projected relative to national and regional trends.

The number of employed residents was obtained from the 2000 Census data. MRCOG forecast employed residents as a function of the working age population defined as persons age 16 and over. The percentage of persons employed depended on the projected age specific labor force participation rates and the projected unemployment rates. In general, the expected older

population in the future resulted in a lower percentage of the 16 and over population expected to be employed. Table 20 displays the projected employed residents along with projections for the 16 and over cohort and the 16 to 64 cohort. Most of the employed residents would be expected to be part of the 16 to 64 cohort group.

Table 20
1990-2025 Forecast of Employed Residents

Year	Population Age 16 and Over	Population Age 16 to 65	Employed Residents	Percent of the Population 16 and Over that is Employed
1990	7,340	6,169	3,943	53.72
2000	12,386	10,739	6,794	54.85
2005	15,037	12,922	8,655	57.56
2010	17,253	14,555	9,996	57.93
2015	18,806	15,396	10,606	56.40
2020	19,833	15,593	10,846	54.69
2025	20,887	15,751	11,144	53.36

Sources: U.S. Census Bureau and MRCOG

The proportion of the 16 and over population that has been employed has been increasing. This trend is expected to continue until about 2010, after that the percentage of the 16 and over population that is employed will begin decreasing. The primary reason for the reduction is the increase in persons over age 65; this cohort has traditionally participated in the labor force at a very low rate.

Since there are far more workers in Torrance County than jobs, many residents commute out of the County for work. It is noted that the number of commuters cannot be calculated by subtracting employment from employed residents given that some workers hold multiple jobs and some Torrance County jobs are held by persons that live in other counties. In 1990, the Census reported that 41.2 percent of the employed residents in the County worked outside of the County. In 2000, the Census reported that 48.7 percent of the Torrance County workers commuted out of the County for work. In 1990, 81.8 percent of the workers that commuted out of the County commuted to a work site in Bernalillo County. The second most popular county of destination for the commute trip was Santa Fe County at 5.8 percent. Data on site locations is not yet available from the 2000 Census but it is likely that the commuting patterns are still similar to the 1990 patterns.

Economic Trends

Although the history of Torrance County is characterized by farming and ranching economies, agricultural sector employment is a small proportion of

the current labor force and is expected to continue to diminish in the future. In terms of occupations, the labor force will reflect more service, government, and retail jobs which are not necessarily available in the County. Today, half of the workers in the County travel to jobs in other counties. This condition in which the County serves as the commuter shed for the Albuquerque job market will continue unless the economic base (i.e., export product industries) can be strengthened. Thus, the standard economic development strategy for the County will continue to be focused on attracting new industries and local business expansion.

A dramatic change could result by action of a single large-scale employer locating in the County. Nevertheless, the anticipated trend in economic development is projected to be incremental growth toward a more service-based and business-related economy, probably located in the northwest quadrant of the County due to its proximity to the City of Albuquerque. The sustainability of the agricultural sector of the County's economy is questionable if water resources continue to be depleted. One of the potential assets of the County yet to develop might be the tourist industry, if the County can capitalize on its natural attractions.

Future Development Patterns

Projections of changes in population and other such statistics can be made based on specified assumptions, and by using acceptable scientific techniques in calculating those projections. As indicated in Table 17, the population for Torrance County has been projected to increase by almost 10,000 people or about 56 percent by the year 2025. Assuming that this projection is acceptable, the question is where will these new individuals reside and how many new jobs might be attracted or generated by this influx of population?

By disaggregating the County statistics and distributing the population and employment to subareas within the County, a general picture of anticipated growth areas in the County emerges. To conduct such an analysis, the MRCOG has divided the County into 30 small areas (called Data Analysis Subzones, or DASZs) in which the demographic data has been assigned and validated by current Census information. A map of the DASZs in Torrance County is provided in Appendix A, along with a table showing population and employment for each DASZ for the years 2000 and 2025. An examination of the table in Appendix A shows that the greatest population growth is in areas around the City of Moriarty, and to a lesser degree in and around the other four municipalities of the County. A similar distribution of new employment is indicated on the table as well. Assumptions regarding the assignment of population and employment growth generally are based on proximity to developed infrastructure and services, marketability of land (e.g., platted lands), and documented indicators of imminent development such as proposed master plans.

Obviously, the northwestern portion of Torrance County has the highest probability for urbanizing growth and population-based development. But there are other conditions that will induce growth in the County. For example, the major travel corridors throughout the County provide essential access and connections for new and expanded growth areas, which may or may not be highway-related business. Also, agricultural production areas have the potential to evolve into other uses, perhaps other forms of agricultural activities. To a great extent, the patterns of future development in the County have already been set by the existing infrastructure and current form of development. There is a high possibility that the future pattern of development will be essentially an expansion or extension of the existing pattern. Entirely new and separate communities, as well as new travel corridors, are not likely to occur within the next 20 years or so without a significant change in the character or economy of the County.

PART IV

GOALS AND OBJECTIVES

Goals are broad, visionary statements describing the direction that a community wants to go; while objectives are related statements that describe how goals can be achieved. The combination of goals and objectives provide a framework for the policy direction and strategic action recommendations necessary to implement the Plan. Goals and objectives are not mandatory; however, they do establish the basis for current and future programs, projects, and local regulations.

Citizen Participation Process

The involvement of the public in the Torrance County Comprehensive Plan played a key role in establishing the goals and objectives. The participation of Torrance County citizens in the comprehensive planning process also helped to provide broad-based support for the recommendations submitted in the final Plan. Many opportunities were provided to the local residents to voice their opinions and concerns about the future direction of the County.

The Comprehensive Plan process began with the creation of a Steering Committee. The purpose of a Comprehensive Plan Steering Committee is to establish a local group of individuals who represent the varied interests and opinions of the community. The Torrance County Comprehensive Plan Steering Committee helped to supervise the development of the Plan and to assure adequate public participation and involvement. The Steering Committee reviewed and commented on draft elements of the planning documents including surveys, maps, and reports. The Committee also helped to craft the Goals and Objectives and Strategic Action Recommendations, assisted with the Key Person Interview Questionnaire and Community Survey, and provided priority ratings for the Objectives. Committee members were appointed by the Board of County Commissioners, initially as a special work group to revise the previous Comprehensive Plan and then to play a role in the development of this Plan document.

Community surveys and key person interviews provided some of the most significant public input. The survey results helped to measure attitudes, expectations, and opinions concerning the future development of Torrance County. The methodology, analysis, and results of these surveys and key person interviews are documented in a report entitled Torrance County Community Survey (MRCOG, 2002).

Torrance County citizens also had the opportunity to comment on the Comprehensive Plan through public meetings and workshops. Two public workshops were held to review and comment on draft components of the

Torrance County Comprehensive Plan. The first public workshop presented and discussed the proposed draft goals and objectives. Comment Sheets were also made available to solicit individual suggestions, opinions, and views regarding the comprehensive planning process and the draft goals and objectives. Following the first public workshop, there was a Torrance County Planning and Zoning Commission public hearing and a Torrance County Board of County Commissioners meeting. A resolution adopting the goals and objectives was adopted by the Torrance County Board of County Commissioners on December 4, 2002 (see Appendix B).

The second public workshop presented the draft Strategic Action Recommendations and gathered suggestions and ideas that improved and enhanced the recommendations. After the second public workshop, there were two more public meetings; a Torrance County Planning and Zoning Commission hearing and a Torrance County Board of County Commissioners meeting. A resolution adopting the strategic action recommendations was adopted by the Torrance County Board of Commissioners on July 29, 2003 (see Appendix C). The accumulation of these public participation activities helped to develop consensus and broad public support for the final Torrance County Comprehensive Plan.

Overview of Goals and Objectives

The formulation of goals and objectives is an outgrowth of the public comments, viewpoints, and suggestions about the future direction of Torrance County. The goals and objectives which follow are composed as positive statements and potential actions that reflect the concerns expressed through the public input process, but also respond to basic community needs identified through planning research and interviews. An assortment of action alternatives are implied by these goals and objectives statements. In addition, these goals and objectives may be used to guide future County programs and projects.

These goals and objectives are not a mandate of the County and are not legally binding. However, as part of an adopted Comprehensive Plan, goals and objectives do provide a foundation for specific actions which may be taken in regard to the future management and development of Torrance County.

Goals and Objectives

There are a total of 21 goals and 67 objectives which, in essence, provide policy guidance as the nucleus of the Torrance County Comprehensive Plan. Goals, with their subordinate objectives, have been grouped into the following five categories: land use: distribution and intensity, transportation and circulation, regional infrastructure, economic development, and county government operations. In many cases, these goals and objectives can be traced back to the community issues established through the public involvement process. In other cases, they are specifically designed to improve the public health, safety, and welfare of County residents.

Land Use: Distribution and Intensity

Goal A: Balance the needs of a growing population while retaining the rural residential character and culture of the County, and ensuring a sustainable water supply.

Objective 1: Protect the character of traditional residential neighborhoods.

Objective 2: Preserve and protect land for farming and ranching.

Objective 3: Control the density and distribution of development through zoning and other regulatory ordinances.

Objective 4: Coordinate with municipalities to steer urbanizing development to areas where adequate infrastructure, utilities, and public services are currently located or can easily be made available.

Goal B: Plan and guide development in the County in a manner which encourages optimum efficiency and cost-effectiveness in the delivery of infrastructure and County services.

Objective 1: Create an accurate inventory of existing infrastructure, and review and revise on a regular basis.

Goal C: Improve or maintain community appearance and character.

Objective 1: Adopt and strictly enforce County regulations and ordinances to address problems with domestic animals, abandoned structures, hazardous waste, and nonconforming junk yards.

Objective 2: Encourage scheduled clean-up days and a County-wide beautification effort that removes weeds and litter to improve scenic and visual impressions along highways.

Objective 3: Implement an "Adopt-a-Highway" program in the County.

Goal D: Establish positive long-range planning guidelines for a diversity of growth and development that does not jeopardize the environment.

Objective 1: Identify commercial/industrial growth within areas of the County where there is adequate highway access, an available labor force and where the environment will not be jeopardized.

Objective 2: Define the range of allowable housing types and densities within the County to meet the needs of residents while preserving the quality of life.

Objective 3: In order to improve the durability and lasting quality of housing stock in the County, standards or codes should be investigated for the installation and maintenance of manufactured housing and mobile homes.

Objective 4: Evaluate and update the County's Comprehensive Plan every five years.

Objective 5: Maintain a current land use inventory to measure and evaluate the type of development that has taken place.

Goal E: Protect parks, open space, and recreational areas for public enjoyment.

Objective 1: Promote the development of recreational facilities for citizens of the County.

Objective 2: Work with municipalities, local citizen groups, and MRCOG on a regional open space initiative that protects major natural resources and identifies types of open space that the County would like to preserve.

Goal F: Protect those areas of the County that are historically, culturally, geographically or environmentally unique and/or fragile.

Objective 1: Promote the Estancia Basin as the prime location for new, but low water consumptive agriculture and agri-business.

Objective 2: Preserve and protect grazing and ranching lands from development that is detrimental to existing land use.

Objective 3: Work with residents of the "land grant" communities in the Manzano Mountains to protect the historic villages, local scenic values, rural road systems, and local water supplies that are vulnerable to depletion and pollution.

Transportation and Circulation

Goal G: Maintain and improve the existing road network in the County.

Objective 1: Establish a County road monitoring process to identify system deficiencies.

Objective 2: Identify priorities for road maintenance and improvements from high to low priority over the next 20 years.

Goal H: Establish a comprehensive, safe, and efficient road network of sufficient capacity to meet regional circulation needs.

Objective 1: Identify potential study corridors within the County, both existing and future, for intensive evaluation.

Objective 2: Adopt an annual capital improvement program of transportation priorities.

Objective 3: Identify unsafe road situations (including school bus routes) and rank from high to low priority.

Objective 4: Support a regional system of emergency response to accidents involving hazardous materials spills.

Objective 5: Promote interagency coordination/cooperation among agencies such as the Forest Service to develop an emergency evacuation plan for the mountain areas, particularly in relation to wildfire hazards.

Goal I: Promote a variety of transportation systems throughout the County, including rail and road transit services, bicycles, pedestrians, equestrians, ride share services, and aviation.

Objective 1: Provide regional transit service to the transit dependent (e.g. elderly and disabled, low-income individuals, students).

Objective 2: Encourage rideshare services such as carpooling and vanpooling that allow commuters alternative means to travel to and from work. Develop park and ride lots or multi-modal regional transportation centers where appropriate.

Objective 3: Identify a regional system of bicycle and multi-use trails that improves access and circulation, provides alternatives to the road network, and connects to other regional systems where possible.

Objective 4: Promote the reactivation of passenger rail transportation services on existing rail lines through the County.

Objective 5: Support the development of an aviation transportation system in the County to provide greater options for transportation and economic development.

Regional Infrastructure

Goal J: Ensure an adequate supply of quality water for current and future needs of the County.

Objective 1: Support the administration of water rights in the Estancia Basin as a Special Groundwater Management Area.

Objective 2: Educate water users about the necessity of water conservation, and offer specific water conservation education programs and water resource information about techniques such as rainwater harvesting, wastewater reclamation, and groundwater recharge.

Objective 3: Protect groundwater by preventing land uses that pollute the groundwater, particularly in such areas as floodplains, groundwater recharge areas, and wellhead protection zones.

Objective 4: Support a Basin-wide program of comprehensive monitoring, metering, and ongoing investigation of water resources in the Estancia Basin.

Objective 5: Promote the efficient use of centralized water and wastewater systems in the urbanizing areas of the County.

Goal K: Maintain safe, efficient, and economical methods of solid waste collection, transportation, and disposal throughout the County.

Objective 1: All solid waste disposal activities should be subject to the review and approval of the County and formalized by legal agreements if applicable.

Objective 2: Restrict or prohibit the storage or disposal of hazardous wastes within the County.

Objective 3: Promote and support businesses that recycle or reuse recycled materials.

Goal L: Protect the County from damaging effects of storm water runoff.

Objective 1: Develop and implement a watershed plan for the Estancia Basin.

Objective 2: Develop and implement a storm water pollution control plan and program.

Goal M: Improve and expand County-wide infrastructure to enhance the quality of life and support economic development.

Objective 1: Identify existing regional infrastructure in the County on Geographic Information System (GIS) maps.

Objective 2: Provide power services to meet the future needs of the County.

Objective 3: Investigate the potential for wind and solar generated power in the County.

Objective 4: Identify existing telecommunication infrastructure and availability of internet service in the County.

Objective 5: Work with existing telecommunication companies and schools to provide a suitable network and hardware necessary to achieve cost effective, high-speed telecommunication capabilities.

Objective 6: Expand transportation alternatives to provide transit-dependent workers with access to jobs.

Economic Development

Goal N: Encourage the attraction, retention, and expansion of businesses in order to provide quality jobs for County residents.

Objective 1: Identify key industry clusters and target markets suitable for the County.

Objective 2: Develop a marketing plan which includes an advertising campaign that focuses on the strengths of the County.

Objective 3: Develop a database of all buildings and land available through realtors and developers.

Objective 4: Provide incentives for business and industrial development.

Objective 5: Promote and support business recruitment activities that would benefit the County.

Goal O: Promote the exploration and utilization of natural resources within the County.

Objective 1: Investigate the potential for extraction of minerals, timber, natural gas, and other such natural resources available in the County, with minimal disruption to the environment.

Goal P: Improve education and training programs for County residents and businesses to expand the capacity of businesses and the workforce.

Objective 1: Conduct a survey of employers in the County to identify their training needs.

Objective 2: Coordinate with the partners providing services through the State's Workforce Investment Act (WIA) One-Stop Delivery System to ensure that the education and training for the County's youth and adult workers meets the needs of the targeted industries for the County.

Goal Q: Create and sustain an adequate revenue base to support necessary infrastructure and services to meet current and future needs of the citizens of Torrance County.

Objective 1: Promote the location of business and industry in areas that will provide long-term tax benefits to the County.

Objective 2: Develop inter-local agreements and revenue sharing programs between the County and municipalities to provide for regional services and facilities.

County Government Operations

Goal R: Promote intergovernmental cooperation, so that the County and municipalities will be able to share the costs and benefits of development.

Objective 1: Explore methods to improve representation of diverse communities throughout Torrance County. Consider a five member Board of County Commissioners.

Goal S: Provide public facilities and services in response to public need.

Objective 1: Conduct periodic public opinion surveys to identify level of satisfaction, willingness to pay, and potential need for publicly provided services and facilities.

Objective 2: Investigate funding for hiring part and full time staff.

Goal T: Improve fire protection, law enforcement, and emergency services.

Objective 1: Encourage joint or multiple use facilities for law enforcement, fire fighters, and rescue services.

Objective 2: Promote "neighborhood" watch programs throughout the County.

Objective 3: Adopt and implement a wildfire management plan for all areas throughout the County.

Goal U: Maintain a major role in providing for the health, education, and welfare of the residents of the County.

Objective 1: Promote and pursue the development of urgent care facilities within the County.

Objective 2: A County-wide consolidated medical program should be sustained in conjunction with the Torrance Health Council and any other medical programs located within or outside the County.

Objective 3: Promote a full spectrum of educational opportunities and facilities in the County.

Objective 4: Improve and expand senior services and programs for the elderly.

Objective 5: Support child care programs, pre-school institutions, and related youth programs available to County residents.

Discussion of Major Development Issues

Throughout the Comprehensive Plan development process, there were many discussions about relevant issues concerning the existing situation and possibilities for the future of Torrance County. Workshops, meetings, and public survey input all contributed a rich source of information that provided a basis for the Goals and Objectives presented in this Plan document. The subsequent

action recommendations are also based on the information gathering process ranging from documented public opinion to statistical data research and informal reports by County officials and staff.

The following paragraphs present a generalized overview of some of the significant discussion issues brought out during the planning process. These issues are placed into categories for obvious reasons. Furthermore, these issues are not discussed in great depth but are intended to be thought-provoking leads into an ongoing dialogue that can motivate and assist in the implementation of this Comprehensive Plan for Torrance County.

Government Role and Responsibilities The traditional functions of county government have included law enforcement, levying and collection of property taxes, conducting of elections, judicial administration, highway construction and maintenance, recording of legal documents, and protection of public health and welfare. More recent responsibilities include construction and operation of medical facilities, libraries, airports, parks and recreational areas, fire protection, public utilities, housing services, and solid waste management. It has also become a standard role of counties to conduct planning and management of land use and development. The Torrance County government has taken on many of these types of responsibilities in spite of its small population and limited financial resources. It is imperative that a balance of responsibilities emerge to cover the necessary county-wide services. Those services may be provided by means of the County government itself; through a joint powers agreement with other governmental entities; under the establishment of a special authority; or through a private sector (non-profit or for profit) organization. The County should focus on the responsibilities that it can conduct efficiently and effectively and that are within the budget.

One of the issues raised several times during the planning process was whether or not the Board of County Commissioners should increase from three to five members. Under New Mexico law, a County may chose to elect either three or five county commissioners to the board. At present, about half of the counties in New Mexico still have a three-member board. As counties become larger in population, the tendency has been to expand to a five-member board theoretically to ensure better representation from a larger and more diverse population. There is no population "trigger" indicating when, or if, the increase to a five-member board should be made.

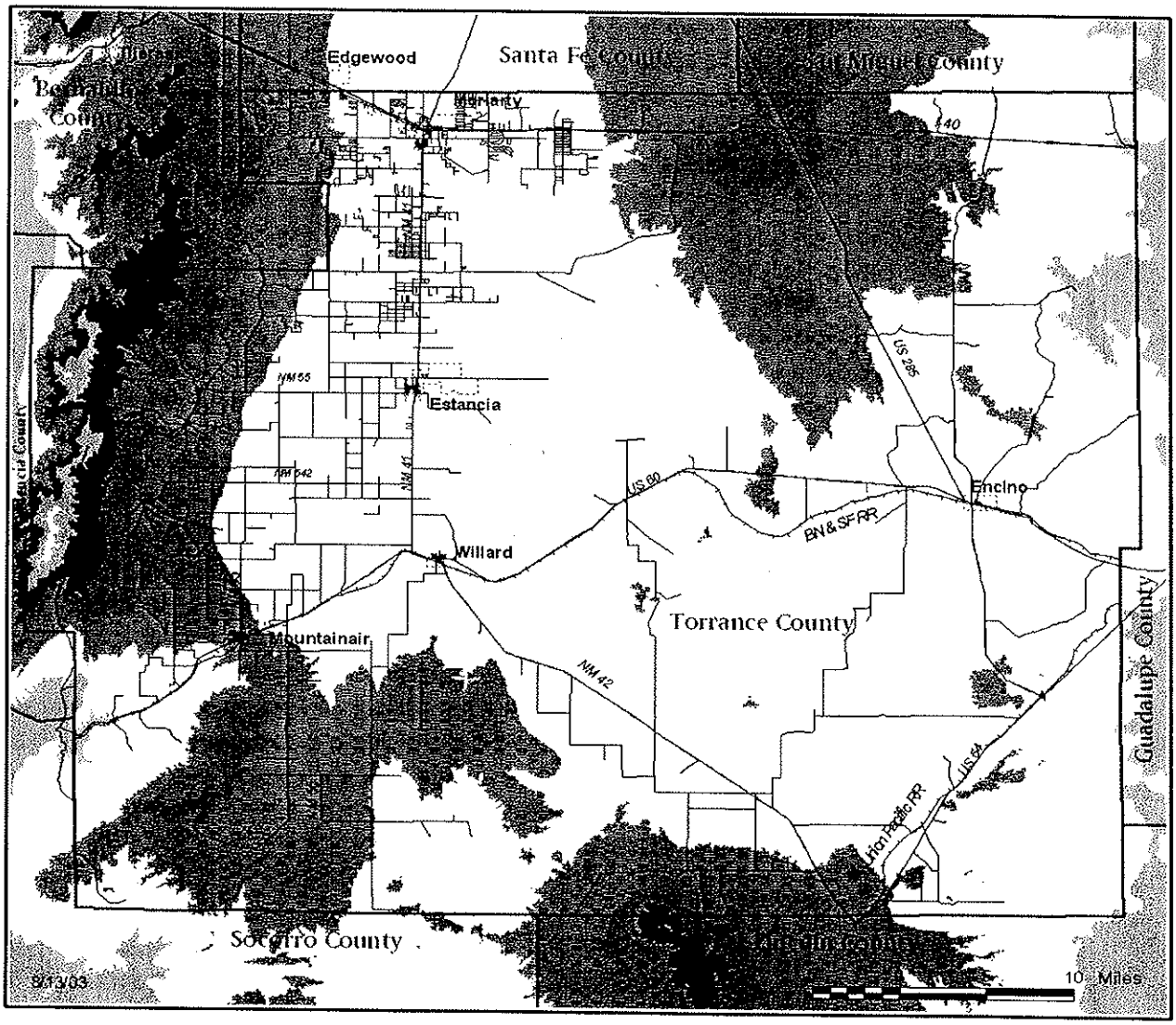
This Comprehensive Plan document provides a major opportunity for the Board of County Commissioners to set a course of action, clarify its responsibilities, and establish priorities for guiding the County into the future. The Strategic Action Recommendations in this Plan provide a wealth of ideas to be explored and implemented by the County. The recommendations are well grounded and supported by the planning process. It is left up to the County government to determine its role and responsibilities in achieving the goals and objectives contained herein.

Land Development and Land Use Management All local governments in New Mexico are granted the power to control various aspects of land use and development. Regulating the development of land is a fairly recent activity of the Torrance County government. Zoning restrictions, subdivision review and approval, and other regulatory ordinances have been in effect since the 1980s. A significant amount of land platting and development occurred prior to any regulation by the County. Currently, the zoning and subdivision ordinances are extensive and quite detailed in some of the regulatory language. For any governmental jurisdiction, the key to effective land use management is through proper administration and enforcement of what is already "on the books." It is advisable to follow the adoption of this Comprehensive Plan with a thorough and periodic review of the County's regulatory ordinances, and to revise as necessary to implement these Plan recommendations.

The geography of the County has some effect on the nature and distribution of development. An elevation map shown in Figure 11 reveals a broad valley bordered and protected to some extent by mountains to the east and west. The relatively flat lands of the Estancia Basin present few limitations to development. The Manzano Mountains along the western border of the County provide a massive barrier or buffer to the Rio Grande valley and the intensive development of the Albuquerque urban area. Part of the attraction of the County is its location as a rural and somewhat isolated retreat from urbanization. However, Torrance County is also recognized as a place to escape the governmental regulations and restrictions of the Rio Grande communities. Consequently, land use and development controls will not be easy to impose in this County as the residents expect to be left alone to live a more easy-going lifestyle.

The role of the Land Grants in the County presents a unique and contentious issue regarding land development in the County. Although Land Grants are authorized with some powers by State law, the County has a more general jurisdiction and police powers in those lands. Also, the Land Grants are not organized or active at the same level as counties and municipalities, which make it difficult to standardize any approach to managing development within the Land Grant boundaries. This issue will require legal assistance and guidance.

Water and Natural Resource Limitations Water is easily the most serious issue affecting Torrance County. Most of the population of the County resides within the Estancia Basin, a closed topographic basin containing no major streams or rivers, making it critical to protect and preserve the water resources of this valley. Nearly all of the sources of drinking water in the Basin come from wells extracting water out of the Valley Fill Aquifer which is located in the central portion of the Basin. Moriarty, Estancia, Willard, and Mountainair are Torrance County municipalities which draw their water supplies from the Valley Fill Aquifer. Essentially all of the agricultural crop land in Torrance County overlies and pumps water directly from the Valley Fill Aquifer. Currently, irrigated



Elevation in Feet
above Mean Sea Level

- 5500 - 5999
- 6000 - 6499
- 6500 - 6999
- 7000 - 7499
- 7500 - 8499
- 8500 - 9499
- 9500 - 10499

Torrance County Comprehensive Plan

Figure 11
Elevation Map

Map prepared by:

Mid-Region Council of Governments
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

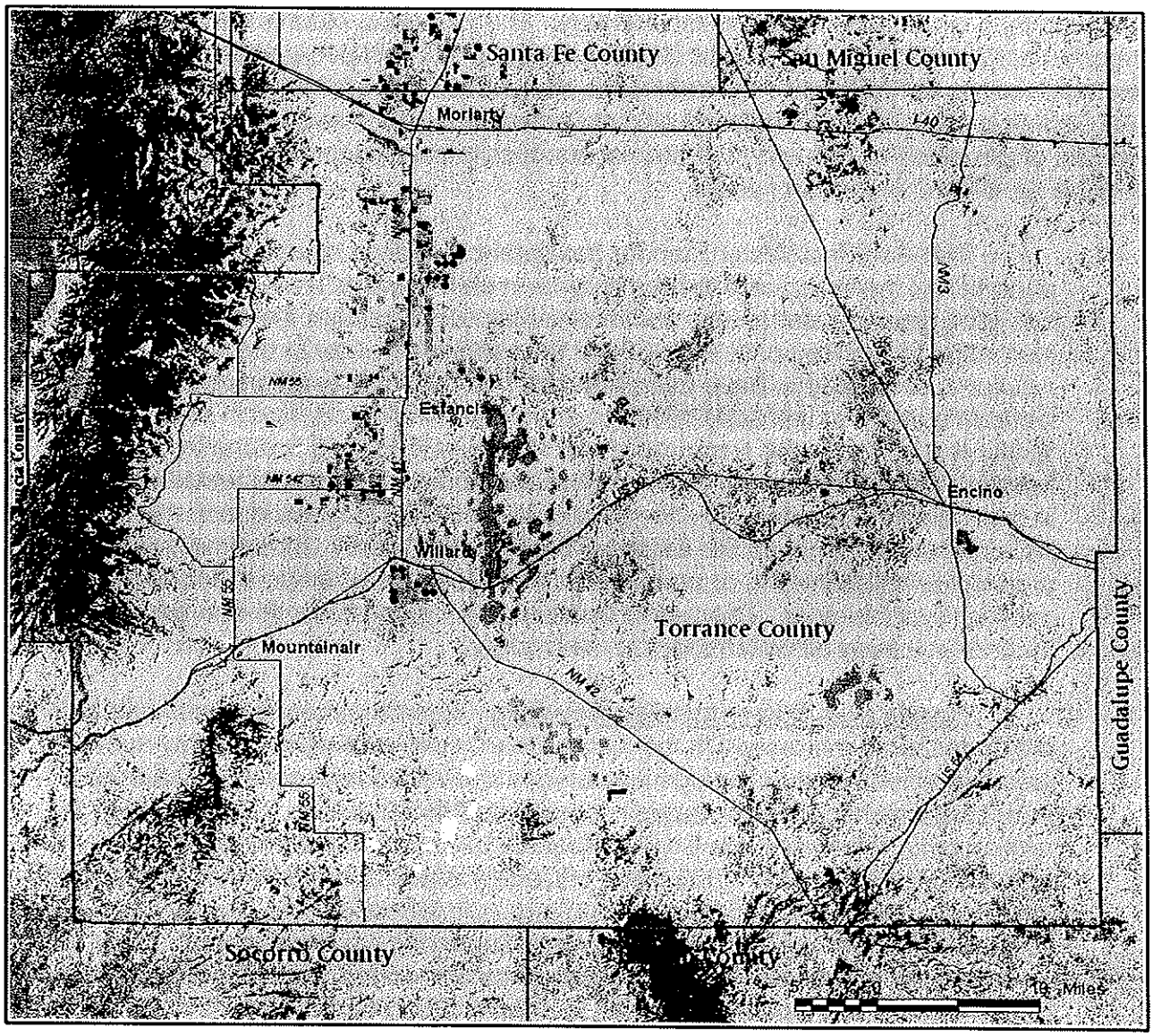
agriculture is responsible for about 95 percent of the annual water demand in the Basin. The municipalities and irrigated agricultural areas are shown in Figure 12, a map showing land cover data from satellite imagery. The Manzano Mountains along the western border of the County are heavily forested and contain some of the major recharge zones for the Basin. However, it is obvious in Figure 12 that the majority of the County is covered by shrublands and dry grasslands which support the vast, open ranges of the ranching industry, but are not conducive to development which would require significant amounts of water.

The Regional Water Plan for the Estancia Basin projects a future of uncertainty: there appears to be a long-term shift towards less surface water, declining groundwater levels, and diminishing recharge into the basin aquifer. According to the Regional Water Plan, the volume of water in the Valley Fill Aquifer is estimated to have been reduced from about 8.1 million acre-feet of water in storage in the early 1900s to about 6.6 million acre-feet in storage by 1995. It is stated in the Regional Water Plan that if nothing is done to curtail the present rate of water consumption, there are about 120 years of water supply left in the Valley Fill Aquifer. The Regional Plan presents suggestions to manage water more effectively in the Estancia Basin. The County Government will need to select and implement, or promote the most feasible strategies to reduce water demand in all sectors. This has to be done in a comprehensive and coordinated manner involving all water users in the County.

Roads and Transportation Services Road maintenance was one of the major concerns expressed in the surveys and interviews where County needs were identified. The public opinion surveys were filled with complaints about poor road conditions, even though some stated that it was to be expected in a rural county. The Torrance County Road Department has a maintenance responsibility for almost 1,000 miles of County roads and has limited specialized equipment for paved road construction and maintenance. The County does have some control over road construction when approving subdivision and development proposals; however acceptance of maintenance responsibility will be limited until the County increases its road building capability.

With limited resources and capabilities, the County would be most effective developing a systematic approach that evaluates road needs and sets priorities for improvements. Most county road departments carry out some type of process of ongoing road inspections and conditions assessment to develop an annual program for county roads.

There is also an apparent demand for public transportation systems in the County. Although a variety of transit programs are available in the County, a lack of county-wide coordination among the operators does not result in the most efficient provision of public transportation services. The County government should provide a forum for increasing public transportation opportunities and coordinating services for transit dependent residents.



Land cover data is derived from satellite imagery and reflects ground conditions between 1988 and 1993.

- Open Water
- Low Intensity Residential
- High Intensity Residential
- Commercial/Industrial/Transportation
- Bare Rock/Sand/Clay
- Quarries/Strip Mines/Gravel Pits
- Deciduous Forest
- Evergreen Forest
- Mixed Forest
- Shrubland
- Grasslands/Herbaceous
- Pasture/Hay
- Row Crops
- Small Grains
- Fallow

Torrance County Comprehensive Plan

Figure 12
Land Cover

Map prepared by:

Mid-Region Council of Governments
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

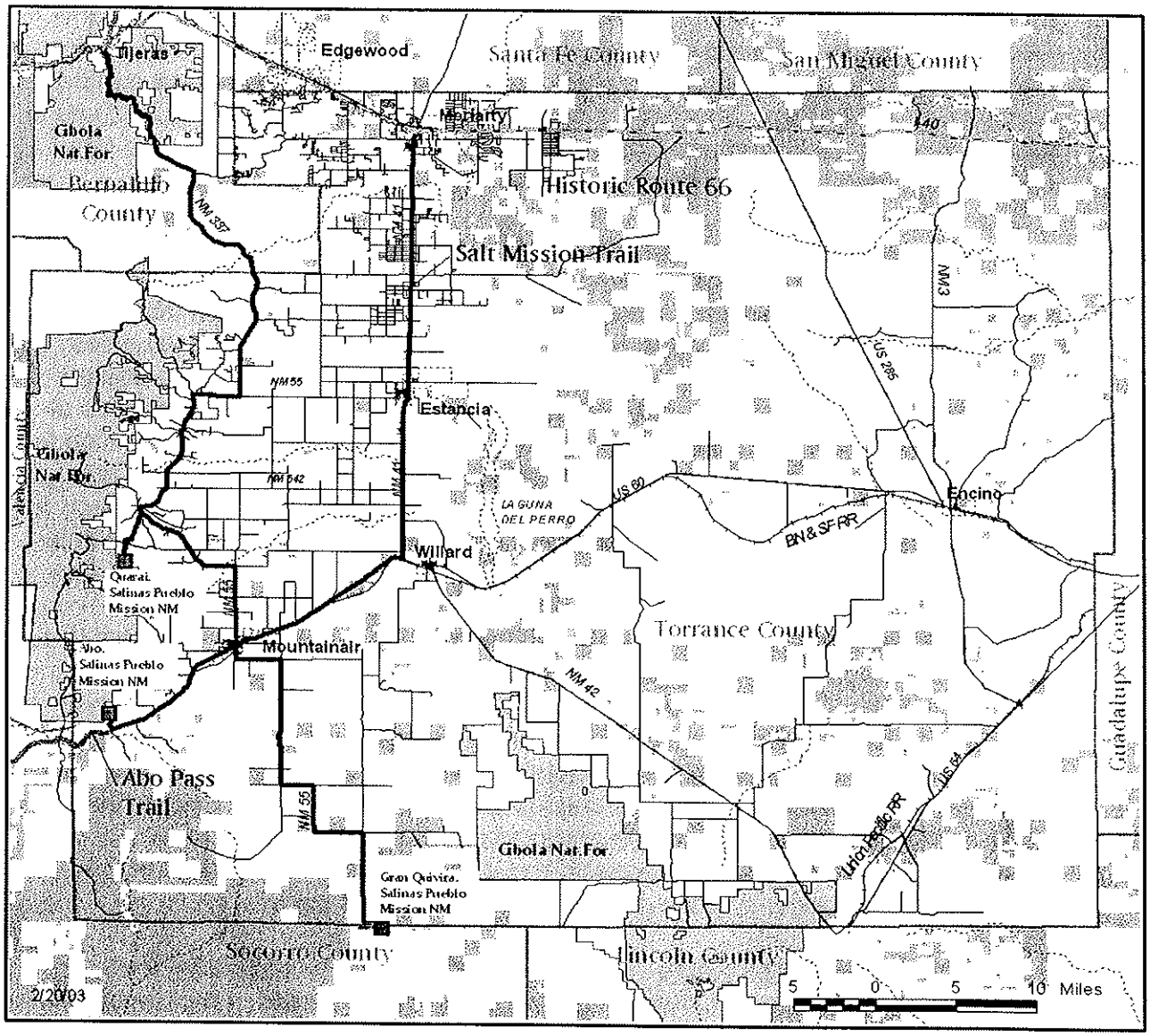
Source: NM Land Cover Dataset, USGS and Earth Data Analysis Center.

A unique feature of the County road network is the presence of federally designated Scenic and Historic Byways. Figure 13 presents a scenic byways map which identifies three of the designated routes: the Salt Missions Trail, the Abo Pass Trail, and Historic Route 66. In order to enhance the economy of the County, particular attention should be given to development along these corridors to capitalize on tourism. There are other features of interest to tourists, such as the Cibola National Forest and Salinas Pueblo Missions (Abo, Quarai, and Gran Quivira), that can be accessed by a well-maintained County road system.

County Economy and Economic Development In New Mexico, local government revenue is significantly supported by a gross receipts tax which is similar to the sales taxes imposed in other states. For example, as much as 70 to 80 percent of the total revenue collected by some New Mexico communities comes from gross receipts taxes. Business development often clusters around the centralized and more urban infrastructure within the municipal boundaries of cities, towns, and villages, leaving the unincorporated lands of counties lacking in the revenue producing development that generates gross receipts taxes. This situation is made worse by the tendency of municipalities to annex developing county lands into their corporate limits for the revenue generating benefits, while the counties lose out on potential gross receipts taxes.

The Torrance County economy suffers from the lack of gross receipts taxes, which could generate development in the unincorporated areas. Furthermore, the County has experienced a number of municipal annexations that claimed new development and transferred tax revenues out of the County coffers. An obvious strategy for the County would be to encourage and support commercial/industrial development and job growth in areas of the County that are not in a location where they can be annexed or incorporated into a new municipality. The standard economic development strategy would continue to attract new development, while expanding existing development.

Housing Opportunities One of the major concerns regarding the housing stock in Torrance County is that well over half consists of mobile homes and manufactured housing. Within the State of New Mexico, less than 20 percent of all housing is mobile homes and manufactured housing. During the 1990s, nearly three out of every four new housing units in the County was listed as a mobile home or manufactured housing unit. Although there is a need for affordable housing in any community, there are problems inherent with such a high percentage of this housing type. A preponderance of mobile homes affects the assessed valuation (and property tax revenues) of the County, tends to lower the market values of property in some areas, and, may result in a housing deterioration rate that is much faster than conventional housing (even though recent design standards for manufactured housing has improved). The County can impose higher standards for the installation and siting of manufactured housing through zoning and other regulatory techniques to improve appearance, property values, and to ensure longevity of such housing stock.



Land Managment Status

- Bureau of Land Management
- US Forest Service
- Indian Lands
- National Park Service
- Private
- State, State Park, State G&F

Designated Scenic Byways

- Abo Pass Trail
- Historic Route 66
- Salt Missions Trail

Torrance County Comprehensive Plan

Figure 13
Scenic Byways, Cultural and Recreational Attractions

Map prepared by:

Mid-Region Council of Governments
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

Source: NMDOT; BLM, NM State Office.

PART V

ACTION PLAN RECOMMENDATIONS

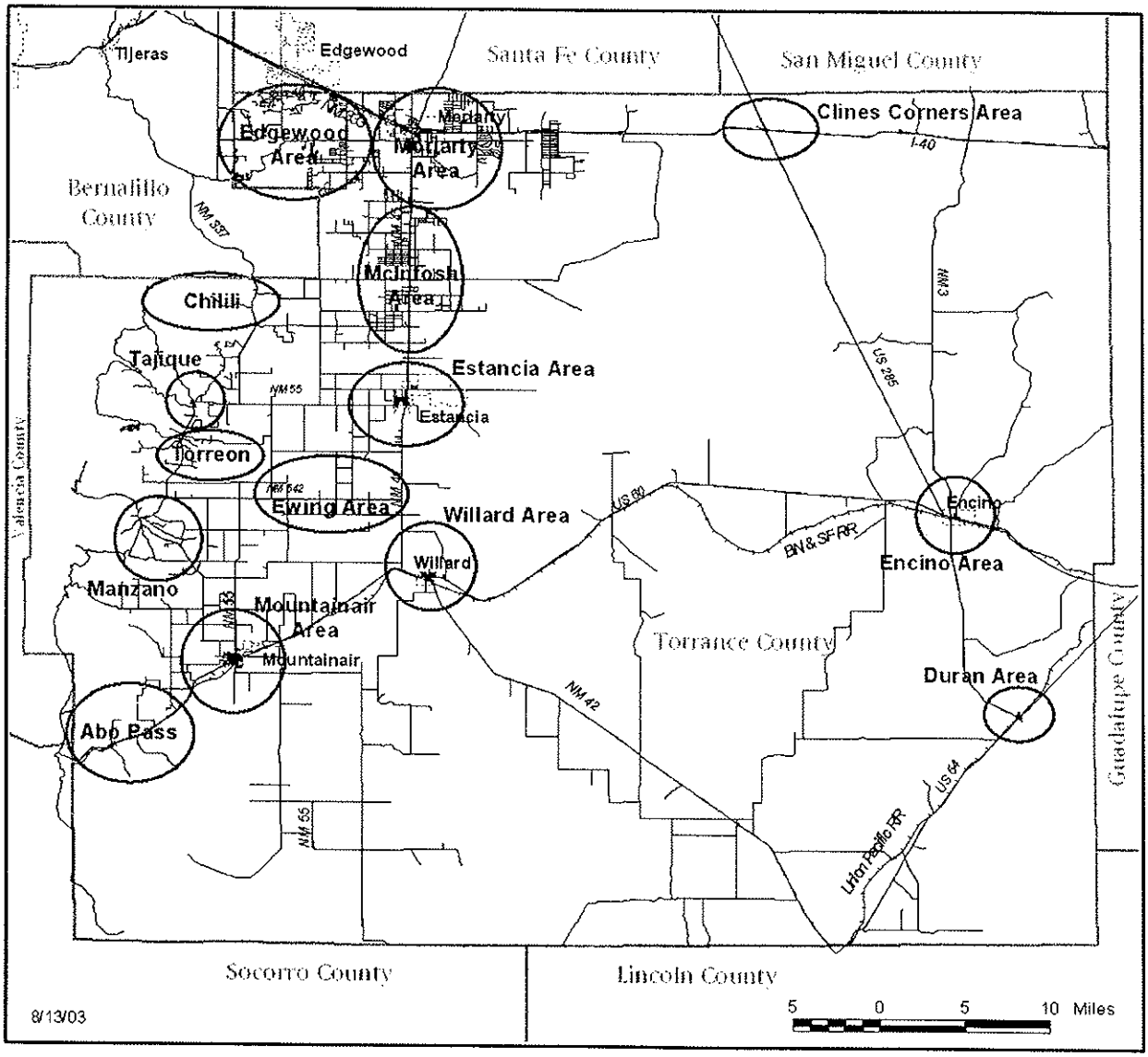
These strategic action recommendations were composed and rewritten many times by the Torrance County Comprehensive Plan Steering Committee with technical assistance provided by MRCOG staff. Subsequently, these recommendations for action were customized and amended by public input and finally adopted by the County Commission. Strategic action recommendations are not mandatory; however they are the heart of the Comprehensive Plan. These recommendations establish a framework for future decision-making and create a rational basis for current and future County development programs, improvement projects, and regulatory actions by the County government.

The complete listing of strategic action recommendations is presented below, including a brief explanation describing each action and a priority rating which is an indicator of the necessity and timing for carrying out the action. These comprehensive plan strategic action recommendations are naturally subject to the discretion of the Board of County Commissioners in determining the appropriate course of action.

These plan recommendations are placed into similar categories used in the listing of goals and objectives, and identify a time framework in terms of the following priority ratings: critical, short, medium, and long range actions. Critical recommendations are those strategic action recommendations that have the highest priority. Short range means an action that may be achieved within a one to five year time frame. Medium range means an action that may be achieved within a five to ten year time frame. Long range means an action that may be achieved within a ten to twenty year time frame. The "Ongoing" priority rating simply means that the strategic action recommendation should be carried out for the foreseeable future over the next twenty years (encompassing short, medium, and long range actions). Following the explanation of each strategic action recommendation is a letter and number that corresponds to the originating goals and objectives. For example, A.3 would refer to the third objective under Goal A. A graphic presentation of the priority and timing of these recommendations is shown in Table 21.

Land Use Planning and Management

Formally designate "County Subcommunities". The County should designate major unincorporated communities and land grant villages within the County boundary as distinctive population clusters with special identities and needs (see Figure 14.) An official recognition of Subcommunities would provide a representative structure for citizen notification and participation in County development issues, and for purposes of emergency response. [A.1, F.3, R.1, T.2]
Priority Rating: Short Range



Torrance County Comprehensive Plan

Figure 14
County Subcommunities

Map prepared by:

Mid-Region Council of Governments
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

Adopt inter-local planning agreements with municipalities. Development activities that occur within a three-mile radius of municipalities are under concurrent jurisdiction of both municipality and County. It is therefore crucial that a means of coordination be established between the two governments for purposes of development review, annexation, and regional services. [A.4, Q.2]
Priority Rating: Critical and Short Range

Increase regulatory enforcement of existing land use ordinances. There is a general feeling by County residents that more stringent enforcement of existing regulations and procedures for land use and development is needed. The County's administration of land use regulations should be properly staffed with zoning enforcement personnel and coordinated with law enforcement and other regulatory agencies. [A.3, C.1, S.2]
Priority Rating: Critical and Short Range

Update the land use management system for the County. Torrance County is comprised of a wide range of land use activities from ranch land to small cities. The County Planning and Zoning Commission should annually review and evaluate current zoning, subdivision, and other land use ordinances for effectiveness. Efforts should be made to streamline the development process and impose simplified procedures wherever possible. New techniques and more innovative methods of land use management such as performance zoning, cumulative zoning, transferable or purchased development rights, and development codes should be investigated for applicability in Torrance County. [A.2, A.3, D.1, D.2, D.4, S.2]
Priority Rating: Ongoing

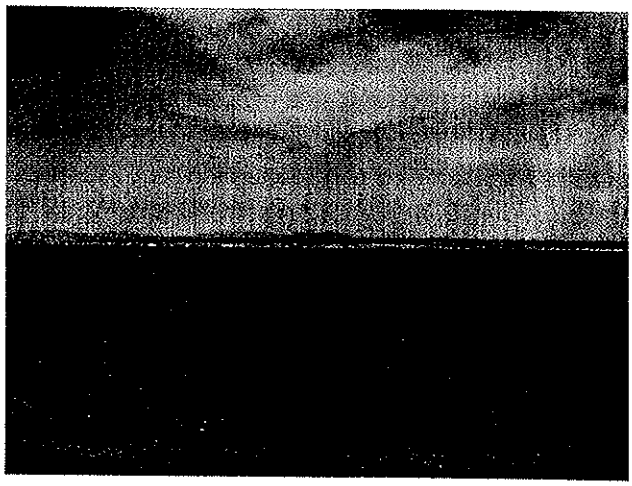
Expand GIS (Geographic Information Systems) mapping for the County. Accurate, reliable, and publicly-accessible mapping is an essential tool for multiple purposes undertaken by County government. The County needs to ensure adequate, trained staff and up-to-date equipment for continuous maintenance of GIS capability and functions in the documentation of maps, records, and data resources. County-wide inventories of land use activities and development data should be available as GIS base information. Future applications for subdivision or proposals for development of land in the County should be provided in a digital format for incorporation into the County's GIS system. Also, the County should maintain a GIS mapping inventory of regional infrastructure such as transportation systems, gas pipelines, telecommunications, and electrical power distribution lines. [B.1, D.5, M.1, M.4, N.3, S.2]
Priority Rating: Ongoing

Ensure compliance with housing and building codes for all County housing. The County should assume the building permitting authority from the State and implement a program to require safe and sound construction of housing through land development regulations affecting all types of housing.

Housing structures in the County should meet basic requirements of public health, safety, and welfare. Special County procedures need to be imposed on the installation and maintenance of mobile homes and manufactured housing. Private property covenants should be respected and encouraged by the County although the County cannot enforce such covenants. [D.2, D.3, S.2]
Priority Rating: Medium Range

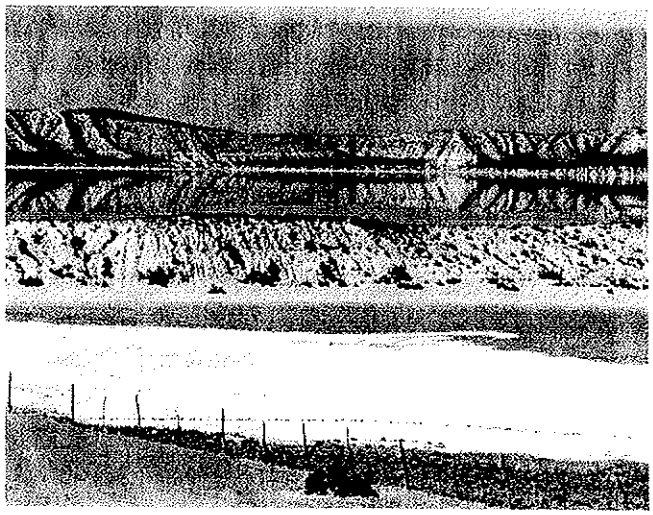
Protect residential areas in the County while allowing mixed-use development. The County should utilize its land use management authority to protect residential areas from disruption by incompatible uses. Existing land use activities that are not compatible with residential development should not be allowed to expand, should be buffered from residential activities, and should be encouraged to relocate to more appropriate locations. However, non-residential activities that are compatible with residential areas should be allowed under specified conditions. [A.1, A.3]
Priority Rating: Ongoing

Protect existing agricultural lands, subject to increased efficiencies of water use. Farming and ranching in the County have a long history, but water resources are being depleted and water conservation and management is critical to the sustainability of agriculture in the Valley. Existing agricultural activities should be protected from encroachment of development through "Right to Farm" statutes and land use zoning. [A.2, A.3, F.1, F.2]
Priority Rating: Ongoing


Agriculture in Torrance County

Develop and adopt a master plan for recreational areas in the County. The County is rich in natural and scenic resources which can be utilized to attract tourism and associated business activities. Potential recreational areas need to be identified and researched to determine their benefits to the County. The County should pursue funding sources, interagency cooperation, and joint powers agreements to develop recreational areas by combining resources and establishing multi-use facilities. A partnership with the U.S. Forest Service might open numerous recreational opportunities within the National Forest lands of the County. [E.1, E.2]
Priority Rating: Medium Range

Protect the Salt Lakes area as a unique feature of the County. The "Laguna de Perro" and surrounding salt lakes are historically and culturally valuable to Torrance County. Appropriate types of land use should be designated around the Salt Lakes area for protection through land use development regulations. The County should also promote this area as a candidate for publicly-owned land, and should explore the possibilities for public access to a salt lakes viewing station. [E.2]
Priority Rating: Ongoing



Salt Lakes in Torrance County

Transportation and Circulation

Establish a County Roads Committee. In order to maintain the most efficient and cost-effective county road network, the County Commission should establish a special advisory committee to assess road conditions and recommend priorities for road improvements. The Roads Committee will identify long-range transportation needs for the County. Membership on the Roads Committee should, as a minimum, include representation from the County Road Department, the public school districts, the U.S. Forest Service, transportation providers operating within the County, and other such entities. [G.1, G.2, H.1, H.2, H.3, H.4, H.5]
Priority Rating: Critical and Short Range

Adopt a county roads evaluation system. The County needs to establish criteria for the evaluation of County road conditions and then conduct an ongoing, systematic analysis of overall transportation needs. A road conditions rating system should be developed to provide a basis for distribution of resources where road improvements are most crucial for the movement of people and goods in the County. [G.1, G.2, H.3]
Priority Rating: Critical and Short Range

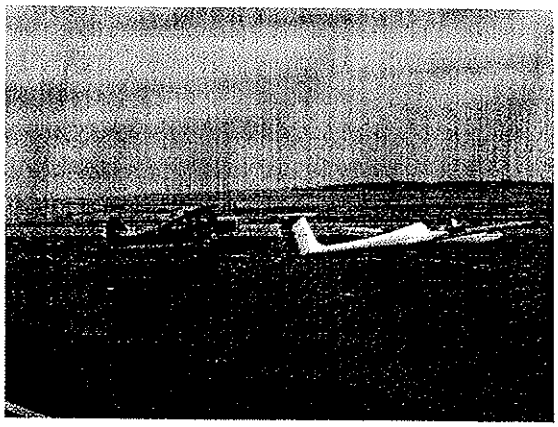
Adopt a long-range transportation plan for the County. The County should establish a long-range road network plan to preserve major travel corridors and public rights-of-way for possible future improvements. An adopted County Transportation Plan should incorporate a multi-modal and intermodal

transportation systems approach for the long term future of the County. The County should also continue to participate in the regional and metropolitan transportation planning process facilitated by the Mid-Region Council of Governments. [G.2, H.1, I.1, I.2, I.3, I.5, M.6]
Priority Rating: Short Range

Promote and support coordinated public transportation. Because there is a diversity of public transportation programs throughout the region, a coordinated mass transit system should be developed to best serve the transit dependent residents of the County. The County should provide a central forum to bring all public transportation programs together for discussion, coordination, and pooling of limited resources. [I.1, M.6]
Priority Rating: Ongoing

Promote passenger rail service through the County. The County should investigate and promote passenger services on the BNSF (Burlington Northern & Santa Fe) rail line through the County. A reactivated and improved passenger rail stop should be recommended at the Town of Mountainair where old depot facilities still exist. [I.4]
Priority Rating: Long Range

Promote aviation transportation in the County. The County should support continued development and improvement of the three publicly-owned airports in the County to expand transportation options and enhance the local economy. All-weather road access to these airports should be improved and maintained to encourage the utilization of air travel in the County. [I.5]
Priority Rating: Ongoing



Moriarty Municipal Airport

Develop emergency transportation plans for the County. For purposes of responding to various emergency situations relating to travel and access, the County should establish transportation contingency plans for emergency services. In order to promote and initiate such contingency plans, the County should investigate interagency agreements with other governmental entities. Emergency management should be coordinated with the Federal Office of Homeland Security and other agencies such as the U.S. and State Departments of Transportation, the Federal Emergency Management Administration (FEMA), and the U.S. Environmental Protection Agency. [H.4, H.5]
Priority Rating: Short Range

Develop and adopt a trails system plan for the County. The County can add to the transportation system by designating routes for bikeways and non-vehicular trails. Initially, bike routes should be investigated on the following roads in the County: N.M. Highway 337, N.M. Highway 333, N .M. Highway 55, and N.M. Highway 41. The abandoned railroad right-of-way from Moriarty to Estancia might also serve as an historic trail. In addition, there are numerous opportunities for recreational trails in the National Forest lands. [E.1, I.3]
Priority Rating: Long Range

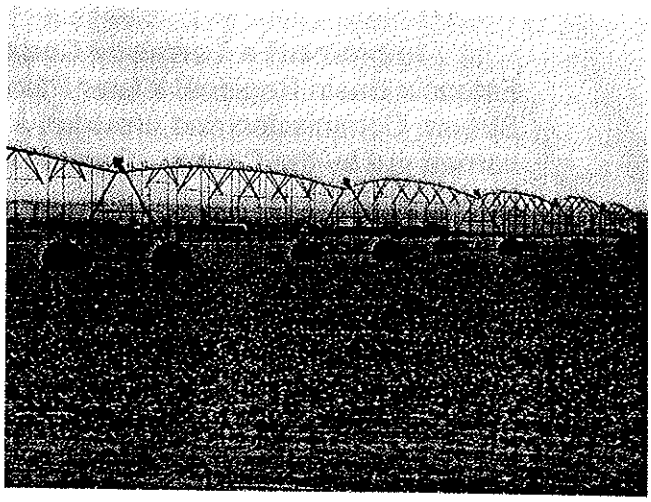
Regional Infrastructure and Natural Resources

Implement a Torrance County Water Management Program. The Estancia Basin Regional Water Plan has been approved by the N.M. Interstate Stream Commission and provides a basis for water management actions to be carried out by the County. Consequently, the County must develop an implementation strategy for managing water resources. The Estancia Basin Water Plan contains recommendations for programs dealing with resource management, conservation, water development, and water quality. The County water management program should identify specific strategies and priorities for actions to be undertaken by the County to protect and preserve its future water supply. Additionally, the County may coordinate development activities with the N.M. Office of the State Engineer in implementing new guidelines for water rights administration in the Estancia Basin. The County has the authority to regulate land use in a manner that protects and preserves water resources. Standards and procedures of regulatory ordinances of the County should be reviewed and modified if necessary to include water impact assessment. [J.1, J.2, J.3, J.4, J.5]
Priority Rating: Critical and Ongoing

Establish a proactive role in solid waste management. The County should maintain a primary role in the activities of the Estancia Valley Solid Waste Authority and should investigate options for such programs to ensure the safe and efficient collection, transport, and disposal of solid waste in the County. Extra effort needs to be made by the County to regulate and impose penalties on the illegal dumping of waste materials. Handling and storage of designated hazardous wastes should be regulated to some extent by the County. As a minimum, a program for the collection and disposal of household hazardous wastes (i.e., paints, motor oil, solvents, pesticides, etc.) should be instituted and maintained for County residents. [K.1, K.2]
Priority Rating: Ongoing

Promote recycling throughout the County. In order to extend the life of the regional landfill, the County should promote recycling efforts, assist the collection organizations, and support businesses that recycle or reuse recycled materials. Areawide recycle collection sites should be designated by County regulatory authority and periodically advertised to the public. [K.3]
Priority Rating: Medium Range

Develop a watershed management program for the County. The majority of Torrance County lies within a hydrologically closed basin, meaning the inflow of water is by direct precipitation and there is no surface water outflow. A watershed management approach would seek to preserve the quality and quantity of water available to the basin. A watershed management program typically includes measures to increase infiltration of rainwater, reduce soil erosion caused by storm water, and lower evapotranspiration rates through vegetation management. The County should review and modify as necessary the zoning and subdivision ordinances to require consideration of watershed management. Flood control structures and non-structural techniques can be applied to minimize the damage caused by flooding and ponding as well as pollution deposited by storm waters. Coordination with other governmental agencies is crucial to an effective watershed management program. [L.1]
Priority Rating: Ongoing



Irrigation in Torrance County

Design and implement a program for storm water pollution control. The County should implement a storm water pollution plan to protect the water quality of the basin aquifer. Storm water quality is affected by land use activities that involve handling, storage, or transport of hazardous or toxic materials, which can lead to uncontained spills and the seeping of hazardous chemicals into the ground, thus contaminating and adversely affecting water resources. The County can impose land use regulations on waste handling and may require flood control structures and non-structural techniques to minimize pollutants that might be picked up and deposited by storm waters. Flood control techniques may include the construction of grassy swales, terraces and retention structures, and landscape/vegetation management to "filter" polluted storm waters. [L.2]
Priority Rating: Medium Range

Promote improved power and telecommunications infrastructure to the County. In order to enhance the quality of life and support economic development in the County, regional infrastructure networks conducting power supplies and telecommunications need to be more accessible to the residents, businesses, and institutions in the County. The County should coordinate planning efforts with local power providers such as the Central NM Electric

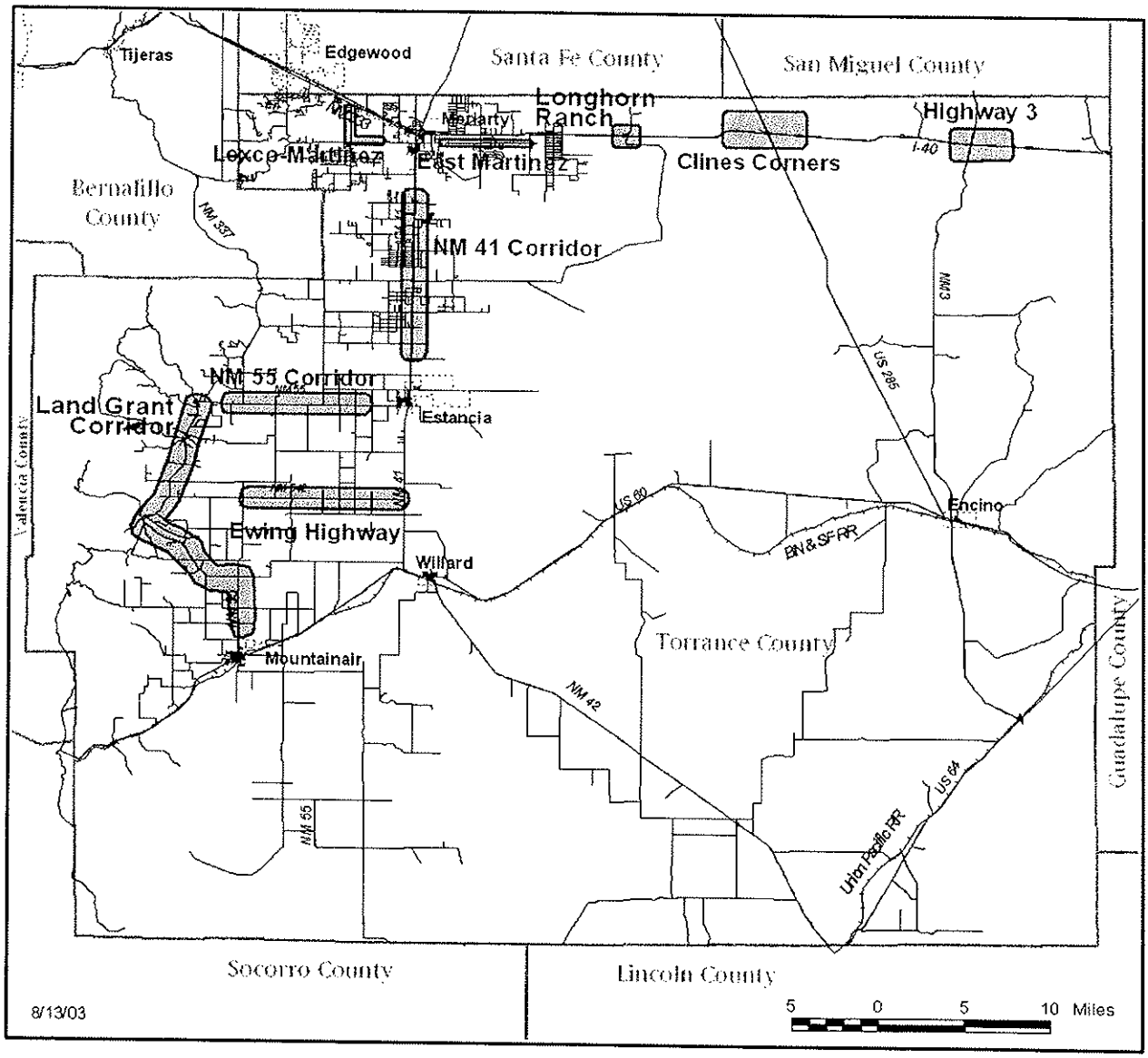
Cooperative and EMW Gas Company. Innovative sources of power generation such as wind turbines and solar power collectors should be investigated and encouraged to locate in the County. Also, the County should explore and promote advanced telecommunications technology such as fiber optics, wireless communications, and other alternative systems. [M.2, M.3, M.4, M.5]
Priority Rating: Critical and Ongoing

Economic Development

Support current programs for economic development. The County should continue to support and coordinate with the activities of economic development organizations such as the Estancia Valley Economic Development Association, local Chambers of Commerce, and business associations. Specific targeted industries and industry clusters should be identified for Torrance County and recruited to the extent possible by the County and its representatives. [N.1, N.5]
Priority Rating: Ongoing

Promote commercial and industrial development in Torrance County. In order to attract new businesses and industrial development, the County should investigate and implement incentives for new development that would benefit both the employer as well as the County. Also, the County should develop a marketing plan to advertise advantages and opportunities to conduct business within the County. [N.2, N.4]
Priority Rating: Critical and Ongoing

Establish County economic development zones. The County should designate economic development zones as targeted areas for business and industrial development that would provide long-term benefits to the County (see Figure 15.) Identification of economic development zones would enable the County to efficiently utilize its capabilities to provide services, facilities, and a regulatory atmosphere that is conducive to business enterprise. Ideally, these economic development zones should be located where they would be free from municipal annexation and incorporation. In some cases, County economic development zones could be placed near municipalities if protected through inter-local agreements for long-term stability and benefit to the County. [D.1, Q.1]
Priority Rating: Critical and Ongoing



Torrance County Comprehensive Plan

Figure 15
Potential
Economic Development
Zones

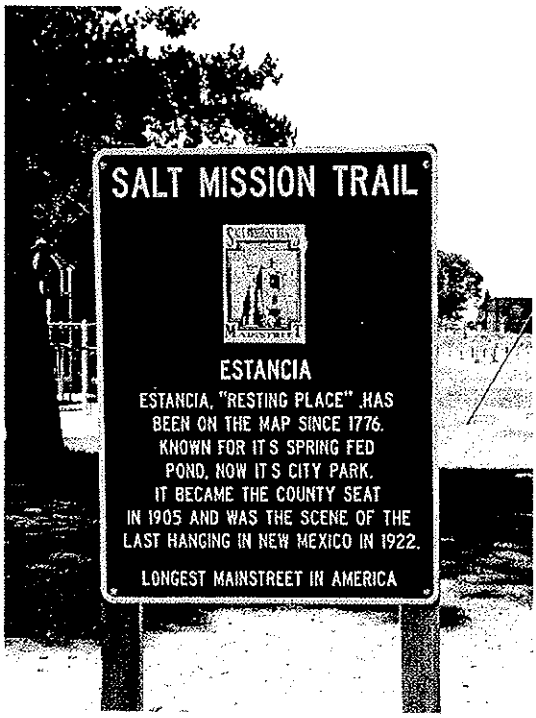
Map prepared by:

Mid-Region
Council of Governments
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

Support continuing education and job training. The County should work in cooperation with other organizations to increase educational opportunities and job training programs available in the County. Support should be given by the County for any efforts to improve the skills, abilities, and educational levels of the County's work force. Regional surveys of existing and potential employers could be used to determine specific training needs for County workers. [P.1, P.2, U.3]
Priority Rating: Ongoing

Explore potential for natural resource development. The County should investigate the economic development potential in the extraction of select natural resources such as minerals and timber, provided that such activities are subject to a permitting process. No extraction of natural resources should be permitted without a final reclamation plan. [O.1]
Priority Rating: Medium Range

Establish a County Bureau of Tourism. The County should establish a "Bureau of Tourism" and delegate certain responsibilities to carry out a program to develop tourism as a viable economic activity for the County. Such a Bureau could facilitate and coordinate tourism activities, provide for the dissemination of information, and continuously seek funding opportunities.
Priority Rating: Short Range



Salt Mission Trail Scenic Byway

County Government Operations

Expand County Commission to a five-member Board. Due to significant changes in the recent development of Torrance County, the governing body should consider an increase in membership to more effectively represent the residents and diverse interests of the County. Torrance County is urbanizing as a result of population growth, subdivision and housing development, and the

emergence of a non-agricultural economy. A five-member County Commission is authorized by State Statute and may be created by action of the County Commission. [R.1]
Priority Rating: Short Range

Continually improve public safety. The County should ensure adequate services for fire protection, law enforcement, emergency response, and animal control. Wherever possible these services should be linked through joint use of facilities, consolidated operations, or by forms of agreements with related agencies. [T.1]
Priority Rating: Ongoing

Expand emergency management programs. In response to the new emphasis on homeland security and disaster preparedness, the County should review and update emergency management programs. Of particular concern, assuming continued dry weather conditions, the County should develop a wildfire management and evacuation plan in conjunction with the U.S. Forest Service and other appropriate agencies and organizations. [T.3]
Priority Rating: Ongoing

Promote and support volunteer efforts for County improvements. The role of local volunteer service organizations should be elevated into partnerships with the County government whenever possible to conduct projects for improving the general appearance and regional character. The County should initiate programs such as: "Clean-up Days," particularly on public lands along highways and in scenic and historic areas; "Neighborhood Watch," for local safety and security; and "Adopt-a-Highway" public/private roadside maintenance arrangements. For optimum results, the County should provide a staff person to coordinate such volunteer service activities. [C.2, C.3, S.2, T.2]
Priority Rating: Ongoing

Support health and social service programs in the County. The County should provide for the health and social welfare of the County residents by coordinating agency efforts and developing alternative funding resources such as tax deductible donations. Much of the County is relatively isolated and there is a serious need for medical and urgent care facilities in the Estancia Valley. Also, the County should ensure that there are adequate services and programs for elderly or handicapped residents as well as the children and youths of the community. [U.1, U.2, U.4, U.5]
Priority Rating: Ongoing

Table 21
Strategic Action Priorities

Strategic Action Recommendations	Critical Need	Short Range 1-5 yrs.	Medium Range 5-10 yrs.	Long Range 10-20 yrs.
Land Use Planning and Management				
Formally designate "County Subcommunities"		☐		
Adopt inter-local planning agreements with municipalities	☐	☐		
Increase regulatory enforcement of existing land use ordinances	☐	☐		
Update the land use management system for the County		☐	☐	☐
Expand GIS (Geographic Information Systems) mapping for the County		☐	☐	☐
Ensure compliance with housing and building codes for all County housing			☐	
Protect residential areas in the County while allowing mixed-use development		☐	☐	☐
Protect existing agricultural lands, subject to increased efficiencies of water use		☐	☐	☐
Develop and adopt a master plan for recreational areas in the County			☐	
Protect the Salt Lakes area as a unique feature of the County		☐	☐	☐
Transportation and Circulation				
Establish a County Roads Committee	☐	☐		
Adopt a county roads evaluation system	☐	☐		
Adopt a long-range transportation plan for the County		☐		
Promote and support coordinated public transportation		☐	☐	☐
Promote passenger rail service through the County				☐
Promote aviation transportation in the County		☐	☐	☐
Development emergency transportation plans for the County		☐		
Develop and adopt a trails system plan for the County				☐
Regional Infrastructure and Natural Resources				
Implement a Torrance County Water Management Program	☐	☐	☐	☐
Establish a proactive role in solid waste management		☐	☐	☐
Promote recycling throughout the County			☐	
Develop a watershed management program for the County		☐	☐	☐
Design and implement a program for storm water pollution control			☐	
Promote improved power and telecommunications infrastructure to the County	☐	☐	☐	☐

Strategic Action Recommendations	Critical Need	Short Range 1-5 yrs.	Medium Range 5-10 yrs.	Long Range 10-20 yrs.
Economic Development				
Support current programs for economic development		☐	☐	☐
Promote commercial and industrial development in Torrance County	☐	☐	☐	☐
Establish County economic development zones	☐	☐		
Support continuing education and job training		☐	☐	☐
Explore potential for natural resource development			☐	
Establish a County Bureau of Tourism		☐		
County Government Operations				
Expand County Commission to a five-member Board		☐		
Continually improve public safety		☐	☐	☐
Expand emergency management programs		☐	☐	☐
Promote and support volunteer efforts for County improvements		☐	☐	☐
Support health and social service programs in the County		☐	☐	☐

PART VI

IMPLEMENTATION OF THE PLAN

Goals, objectives, and strategic action recommendations are the core elements of the Torrance County Comprehensive Plan. Goals describe a future direction for the County. Objectives describe how each of the individual goals might be achieved. Strategic action recommendations portray a course of action to fulfill the goals and objectives.

The recommendations presented in this Comprehensive Plan pertain to the authority and responsibilities of the Board of County Commissioners, and identify other responsible parties where necessary to assist the County in carrying out the particular actions. In addition, a time frame has been proposed (Table 21) within which that action should reasonably occur. This timing or sequence of actions does not imply a set of commitments by the County, but is important in terms of overall County needs and public expectations. Other essential details are also provided for implementation of the specific actions.

The goals, objectives, and recommendations in this Plan reflect a desirable future for Torrance County as envisioned by the many contributors and participants in the planning process. Their aspirations can be realized by establishing clear priorities and carrying out the strategic actions subject to factors such as costs, ease of implementation, time scheduling, and appropriateness. However, the decision to implement this Plan and the specific actions to be taken ultimately falls upon the residents and public officials of Torrance County.

This Comprehensive Plan establishes a basis for policy and decision making by the County government and should be constantly reviewed and refined or revised as necessary. It is a common practice for local governments to update comprehensive plans every five years; but when major changes occur at any time within the County, reevaluation of the strategic actions is crucial to the utility and significance of this Plan.

REFERENCES

Hain, P., Garcia, F. C., and St. Clair, G. K. (Eds.) (1994). New Mexico Government. Albuquerque, N.M.: University of New Mexico Press.

Herrman, Bert. (2003). Mountainair, N.M. Centennial History: 1903-2003. Mountainair, N.M. Mountainair Public Schools.

Middle Rio Grande Council of Governments. (2001). Summary of 2000 Census Data. (S-01-1). Albuquerque.

Middle Rio Grande Council of Governments. (1991). Summary of 1990 census data for New Mexico State Planning and Development District 3 (SPR-239). Albuquerque.

Torrance County Historical Society. (1979). Torrance County History.