

San Juan
County
Growth
Management
Plan

2018 Update



Acknowledgments

The staff at Architectural Research Consultants, Incorporated thanks everyone who contributed to this plan. San Juan County has a bright future, thanks in part to the thoughtful contributions of those listed below. We hope this document will serve well in the effort to protect, promote, and develop San Juan County.

San Juan County Commission

Margaret McDaniel, Chair, District II
Jack Fortner, Chairman Pro-Tem, District IV
Wallace Charley, District I
Jim Crowley, District III
John Beckstead, District V

San Juan County Staff

Dr. Kim Carpenter, County Executive Officer
Mike Stark, County Operations Officer
David Barnett, Subdivision Review Officer
Doug Echols, County Attorney
Fran Fillerup, Administrator, Public Works
Susan Hakanson, (former) Public Relations Manager
Larry Hathaway, Administrator, Community Development
Nick Porell, Deputy Administrator, Public Works
Joe Sawyer, Deputy Attorney
Sherice Snell, GIS Manager
Michele Truby-Tillen, Floodplain Manager

Steering Committee

Dan Flack, DTF Engineering
Dr. Aerial Liese, Faculty, San Juan College
Margaret McDaniel, Chair, County Commissioner, District II
Doug McKim, Recreation Manager, U.S. Bureau of Land Management
Rick Nez, President, San Juan Chapter, Navajo Nation
Sherri Sipe, Commissioner, Town of Aztec

Four Corners Economic Development

Warren Unsicker, (Former) Executive Director
Alicia Corbell, (Former) Director of Retention and Expansion
Sally Burbridge, (Former) Senior Vice President of Economic Development

Northwest New Mexico Council of Governments

Jeff Kiely, Executive Director
Angelina Grey, Associate Planner

Architectural Research Consultants, Incorporated

Liza Miller, Project Manager
Steve Burstein, AICP, Senior Planner
Ben Savoca, Planner
Dolores Anderson, GIS Mapping
Jennifer Abbott, Editor

Contents

Executive Summary	ES-1
1. INTRODUCTION.....	1-1
A. Introduction	1-2
B. Legal and Administrative Framework.....	1-2
2. EXISTING CONDITIONS.....	2-1
A. Introduction	2-2
B. Historic and Projected Population	2-2
C. Population of Cities in San Juan County.....	2-4
D. Native American Residents of San Juan County.....	2-5
E. Age of Residents	2-6
F. Summary of Existing Conditions.....	2-7
3. LAND USE.....	3-1
A. Introduction	3-2
B. Planning Context.....	3-2
C. Existing Conditions	3-2
D. Concepts for Positive Metropolitan Growth in Northern San Juan County.....	3-8
E. Guidance for Land Use Regulations.....	3-9
F. Subdivision Regulations.....	3-15
G. Extraterritorial Planning, Platting and Zoning	3-17
H. Annexation.....	3-19
Goals and Policies	3-20
4. ECONOMIC DEVELOPMENT	4-1
A. Introduction	4-2
B. Existing Conditions	4-2
C. Economic Planning.....	4-9
D. Target Industries	4-11
Goals and Policies	4-21
5. HOUSING.....	5-1
A. Introduction	5-2
B. Existing Conditions	5-2
Goals and Policies	5-8

6. TRANSPORTATION	6-1
A. Introduction	6-2
B. Planning Context.....	6-2
C. Roadway System	6-2
D. Public Transportation	6-5
E. Non-Motorized Transportation System	6-6
F. Railroads.....	6-6
G. Air Transportation	6-9
H. Transportation Safety.....	6-9
Goals and Policies	6-10
7. FACILITIES	7-1
A. Introduction	7-2
B. Existing Conditions	7-2
C. Issues and Opportunities	7-8
Goals and Policies	7-9
8. WATER AND WASTEWATER	8-1
A. Introduction	8-2
B. Natural Conditions	8-2
C. Water Supply and Demand.....	8-3
D. Wastewater Collection and Treatment	8-6
E. Coordination of Water and Wastewater.....	8-7
Goals and Policies	8-8
9. ENVIRONMENT.....	9-1
A. Introduction	9-2
B. Existing Conditions	9-2
Goals and Policies	9-11
10. HAZARDS MITIGATION	10-1
A. Introduction	10-2
B. Hazards Mitigation Planning.....	10-2
C. Existing Conditions	10-4
Goals and Policies	10-12

Appendix	A-1
Meeting and Event Sign-In Sheets	A-2
Community Workshop Boards	A-3
Survey Results: Comments	A-6

List of Exhibits

Exhibit 1-1 Planning Process.....	1-6
Exhibit 2-1 Historic Population of Cities in San Juan County.....	2-3
Exhibit 2-2 UNM GPS Future Population Projections for San Juan County	2-3
Exhibit 2-3 Population Change by Area, 2000-2016	2-4
Exhibit 2-4 Navajo Chapters in San Juan County	2-5
Exhibit 2-5 Population Change by Age, 2010-2016.....	2-6
Exhibit 3-1 Shaded Relief Map of San Juan County with Address Points	3-3
Exhibit 3-2 Map of Existing Land Use in San Juan County	3-4
Exhibit 3-3 Acreage of San Juan County by Land Use.....	3-5
Exhibit 3-4 Land Ownership	3-6
Exhibit 3-5 Scatter Map of Gas and Oil Wells.....	3-7
Exhibit 3-6 Irrigated Farmland in San Juan County	3-8
Exhibit 3-7 Results of Survey Questions about Land Use Regulations	3-11
Exhibit 3-8 Advantages and Disadvantages of Different Zoning Systems	3-13
Exhibit 3-9 Planning and Platting Areas in the County	3-18
Exhibit 4-1 Unemployment Rate, San Juan County, New Mexico, and US	4-2
Exhibit 4-2 San Juan County Covered Employment and Unemployment.....	4-2
Exhibit 4-3 San Juan County Employment by Sector, 2007 2017	4-3
Exhibit 4-4 Projected Jobs Growth by Industry for the Farmington MSA.....	4-4
Exhibit 4-5 Top Employers, San Juan County, 2017	4-5
Exhibit 4-6 Median Income in San Juan County.....	4-6
Exhibit 4-7 Employment and Income by Occupation.....	4-6
Exhibit 4-8 Oil Production (BBL) Production in San Juan County.....	4-7
Exhibit 4-9 Natural Gas Production in San Juan County.....	4-7
Exhibit 4-10 Jobs and Prices of Crude Oil and Natural Gas.....	4-8
Exhibit 4-11 La Ristra Strategic Goals	4-9
Exhibit 4-12 Target Industry Impact Analysis.....	4-12
Exhibit 4-13 Electric Transmission Lines in San Juan County	4-12
Exhibit 4-14 Oil and Natural Gas Lines in San Juan County	4-12
Exhibit 4-15 Petrochemical Manufacturing Process Chart	4-12
Exhibit 4-16 Events and Attractions in San Juan County.....	4-14

Exhibit 4-17 Farmington Area Sightseeing Map for Visitors	4-15
Exhibit 5-1 San Juan County Total Housing Units 1990-2000.....	5-2
Exhibit 5-2 San Juan County Total Housing Units 2010-2016 (estimates)	5-2
Exhibit 5-3 San Juan County Housing Vacancy Rate	5-2
Exhibit 5-4 Household Size, San Juan County	5-3
Exhibit 5-5 Comparative Age of Housing, San Juan County.....	5-3
Exhibit 5-6 Vacancy Status, San Juan County	5-3
Exhibit 5-7 Home Values in San Juan County	5-3
Exhibit 5-8 Residential Data for Total Unit Sales, Volume, Number of Bedrooms and Price	5-4
Exhibit 5-9 Fair Market Rents.....	5-5
Exhibit 5-10 HUD Income Limit Categories	5-5
Exhibit 5-11 Housing Type.....	5-7
Exhibit 7-1 Inventory of County Facilities	7-3
Exhibit 8-1 Map of Watersheds in San Juan County.....	8-2
Exhibit 8-2 Table of Active Water Systems in San Juan County	8-4
Exhibit 8-3 Map of Selected Active Water Systems in San Juan County	8-5
Exhibit 9-1 Threatened and Endangered Species Listed for San Juan County	9-3
Exhibit 9-2 Critical Habitat in San Juan County	9-3
Exhibit 9-3 Soil Survey, San Juan County	9-4
Exhibit 9-4 Impaired Waterways, San Juan County	9-8
Exhibit 9-5 Potential Sources of Water Contamination, San Juan County	9-8
Exhibit 9-6 LAWBP Boundaries and Test Sites.....	9-10
Exhibit 10-1 Ranking of County Resident Concerns about Hazards	10-3
Exhibit 10-2 FEMA Flood Map*	10-6
Exhibit 10-3 Fire History: January 2004 to August 2013.....	10-7
Exhibit 10-4 Fire Risk.....	10-8
Exhibit 10-5 Fire History: 1911 to 2014.....	10-8
Exhibit 10-6 Drought Conditions, September 2018.....	10-9
Exhibit 10-7 Drought History: 2000 to 2018	10-9

Executive Summary

Existing Conditions

A combination of factors has diminished the strength of the oil and gas industry that has driven the economy San Juan County for the past several decades: oversaturation of the natural gas market has dampened prices and discouraged production; new extraction methods require fewer workers per well site; a concentration of ownership of mineral rights has resulted in many companies' relocating operations out of the area; and two electricity providers, Arizona Public Service Electric Company and Public Service Company of New Mexico (PNM), have shuttered parts of their coal power plants and coal mines, and plan to continue to downscale operations.

The loss of these high-paying jobs, which require a great deal of highly specific technical skill, has resulted in a contracting population, decreased median income, and a demographic shift towards an older population.

Entities within the county have made a great effort to diversify the economy and meet the economic demand of various market sectors (see the Economic Development Element), but few target industries can provide the same level of employment and income as the waning oil and gas industry.

Land Use

Residents of San Juan County take great pride in the freedom to use their land as they see fit. Many public survey respondents cited the relative lack of land use regulation as influencing their decision to live in the unincorporated portion of the county as opposed to one of the municipalities, but the lack of regulation also has had deleterious effects on the development of the county. Noncontiguous development has led to inefficient expansion of public infrastructure. Private roadways, not subject to county road standards, have inadvertently spurred greater growth than they have the physical or

functional capacity to handle. Loopholes in subdivision regulations have resulted in the creation of parcels that lack adequate road access and infrastructure. In the absence of zoning, residential development frequently abuts incompatible land uses such as heavy industrial activity. Unconstrained excavation creates erosion and drainage issues that affect neighboring properties.

The public survey conducted during the planning process for this update found very strong and consistent support for increased land use regulation in the county to protect investment, health, and enjoyment of properties. Those results are detailed in the introduction to this plan.

San Juan County should take measures to protect property values and the public health while preserving property owners' rights and freedoms, including enacting performance standards to reduce or mitigate certain impacts on neighboring properties, modifying and updating the subdivision regulations, encouraging contiguous infill development, and adopting an earthworks permitting ordinance.

Economic Development

Growth industries in San Juan County are centered on health care, which is projected as the top growth industry in the county into 2026, as well as arts, recreation, accommodation, and food services. The county saw a spike in unemployment in 2017 and many industries in the county have experienced loss of jobs from before the recession in 2007, with the greatest losses in construction, utilities and mining.

The steep fall in oil prices in 2014, a persistent downturn in the natural gas prices, technological advances that lower staffing needs, industry trends away from coal and PNM's incremental drawdown and planned closure of the San Juan Generating Station have caused significant energy industry jobs losses with

more projected in the future. Counting indirect employment and induced ripple effects, the region could lose up to 3,180 jobs and \$213.3 million in annual income, cutting annual tax receipts for local, tribal and state government by \$43.3 million.

Much effort has been made to reposition the county and diversify its economy, and target industries have been identified in: Outdoor Recreation, Petrochemicals, Agriculture, Retirement Developments.

The Outdoor Recreational Industry Initiative (ORII) is a recent effort to develop and attract outdoor recreation tourism and manufacturing. The group has teamed with the County, City of Farmington, Bureau of Land Management, existing recreational industry business people, San Juan College, and the oil and gas industry to develop a new maker space, identify incentives, revitalize downtowns, develop partnerships, identify funding, and promote recreational entrepreneurship.

The effort to develop petrochemicals manufacturing and distribution would take advantage of the existing oil and gas transportation network and may offer a solution to the issue of developing manufacturing without the transportation infrastructure in place to distribute goods easily.

The county has seen large increases in irrigated acreage, crop diversity and the value of agricultural products produced in the county in recent years. Local efforts, including Local Foods Local Places, stand to expand the agricultural goods industry in the county.

The County continues efforts to attract retirement developments and expand workforce development and business incubation. San Juan College's Enterprise Center plays a central role in workforce development. Another key is attracting businesses and workforce, which may be inhibited by a lack of orderly development and insecurities about future land value and potential uses, due to a lack of existing regulation.

One important tool in attracting development is the Local Economic Development Act (LEDA) ordinance allowing the county to donate public investment in certain private development. The County should review its LEDA ordinance to ensure that it is up to date with a state regulation expanding qualified uses, to identify incentives for target industries, and to market to those sectors.

Housing

Housing unit growth in the county increased steadily from 1990 to 2010, but since 2010, the U.S. Census estimates that fewer than 300 new units were developed. Average vacancy in the county rose from 2011 to 2015 and fell slightly in 2016 to 17.3%, just above the state average of 16.4%. Vacancy in the unincorporated portion of the county is much higher than in the municipalities at 27.7% compared to between 10.6% in Aztec and 18.2% in Bloomfield.

San Juan County's housing stock has a broad spectrum of age and value. Houses are slightly newer on the whole than the statewide average. Housing costs are diverse and housing cost burden (defined as spending 30% or more of total household income on housing) is slightly lower than the state average at 22% of households.

San Juan County Housing Authority administers 365 vouchers for HUD Section 8 Housing, but currently does not have funding to fill all of them. Currently, they have funding to issue 263 vouchers to assist families, but another 526 families are on the waiting list. Moving to the top of the waiting list for eligibility review takes about a year.

The County has an affordable housing plan, developed in 2011 in conjunction with the City of Farmington, but it cannot provide grants until it adopts an affordable housing ordinance that authorizes grants.

Transportation

The County maintains approximately 747 miles of roadway, 232 of which are paved. San Juan County is not responsible for maintaining private roadways in the county, which may not meet county standards for placement, drainage, right of way, or weight limit. Private roadways may be inadequate to carry emergency response vehicles. While the County does not maintain private roadways, it is responsible for ensuring public safety; in the past, private roadways built in floodplains have washed away in storms, requiring costly public intervention to restore access to residents.

San Juan County has worked closely with its municipalities and other governmental entities to improve its alternative transportation systems. Red Apple Transit, a public transportation system operated by the City of Farmington, provides service to the major population centers in the county. The Navajo Transit System and North Central Regional Transit District further expand the public transportation options for residents of San Juan County and the Navajo Nation. An expanded multi-modal network supports the multi-jurisdictional Outdoor Recreation Industry Initiative, and the County will continue to work to expand and improve this network. Recent upgrades to the Four Corners Regional Airport may attract future commercial service. Potential future rail service may bolster economic development initiatives.

Facilities

San Juan County owns and operates over 100 individual facilities. San Juan County takes a proactive role in maintaining its facility inventory. County administration has overseen numerous strategic renovations, expansions, and building systems upgrades to ensure that facilities and their occupants can deliver quality services to county residents. The County has also strategically divested certain properties to entities best suited to maintaining and operating those facilities.

The County should develop a long-range facilities master plan and asset management plan to ensure the longevity and most efficient use of public assets.

Environment

San Juan County boasts a diverse and unique environment with species of concern and sensitive ecological areas that should be actively protected and taken into account when considering future development. Certain soil types in the county may pose challenges for development and soil type should be matched to appropriate development type.

Nearly all available water in the county (99%) is surface water, and special care should be taken to protect the quality of surface waters and riparian ecology. Whenever possible, the County should support several ongoing efforts by various agencies and ecological groups to conduct ongoing studies and restoration efforts.

Potential sources of water contamination are present in the county, including well sites and private septic systems. Many instances of contamination have been documented in the county, although no toxins are listed at acute levels. Toxins listed at chronic levels include aluminum, mercury and selenium. The New Mexico Environment Department lists 60 actively leaking storage tanks in the county to be mitigated. They should be monitored for potential impacts on water resources.

Water and Wastewater

The majority of New Mexico's surface water flows through San Juan County, which has greatly benefited the county's agricultural heritage, rapid industrial growth and quality of life. Recognizing the value of this asset, numerous governmental and non-governmental entities have taken action over the past several decades to expand reservoir capacity, protect and preserve river health, and promote water-efficient practices in residential and agricultural uses. Recent persistent droughts have further

strengthened San Juan County's resolve to protect its surface water.

Mutual Domestic Water Associations (MDWAs) provide most of the domestic water service in San Juan County. These small, independent organizations occasionally encounter issues with water contamination or equipment malfunction. As a result, water quality, water provision, and billing are inconsistent. This plan recommends exploring the feasibility of establishing a regional water authority, which could achieve economies of scale by consolidating staffing, equipment and supplies, and could more readily respond to issues.

Hazards Mitigation

Hazards mitigation is defined as "... any action taken to reduce or eliminate the long-term risk to human life and property from natural and man-made hazards...." The emphasis on long-term risk distinguishes mitigation from actions geared primarily to emergency preparedness and short-term recovery.

The 2013 Multi-Jurisdictional Natural Hazard Mitigation Plan for San Juan County (HMP) identifies the following hazards for San Juan County (in order of priority):

- Drought
- Flooding
- Wildfires / Wildfire Urban Interface (WUI)
- Hazardous materials transportation

Drought will likely be an ongoing hazard in the county, and in 2018 the county experienced the most widespread and severe drought in recent history. In response, the County convened a Drought Task Force that is working with various state, local, and tribal agencies and groups to develop strategies for coping with drought. The County should expect drought to pose a threat as climate change continues to impact precipitation and temperature.

The county has a history of flooding, and although county government must approve building permits, earthworks projects and

unregulated road building can cause drainage changes and flooding hazards for neighboring properties. Adopting drainage planning requirements is an important step in mitigating flooding issues.

The HMP identified 246,491 acres in the Urban Wildfire Interface in unincorporated San Juan County as having several areas at high risk. Residents and businesses in these areas should be encouraged to develop defensible space around structures to minimize the threat of damage from wildfire.

The County should conduct a survey of county property to assess risk to flood or fire, and take the appropriate mitigation steps to protect public assets.

The HMP identified several specific concerns about the transportation of hazardous materials in San Juan County, noting that a spill could cause significant economic disruption from large-scale evacuations. It is a difficult hazard for which to mitigate, given the many unknowable factors involved. However, researching and understanding the materials and areas of greatest risk can provide an opportunity for mitigating certain factors.

1. INTRODUCTION

GROWTH MANAGEMENT
PLANNING & IMPLEMENTATION

A. Introduction

Purpose of the Plan

The Growth Management Plan (GMP) is an official public document adopted by the Board of County Commissioners as a policy guide for decisions about the physical development of the unincorporated county.

New Mexico statutes establish the authority of a county to prepare a comprehensive plan. This chapter presents an overview of the legal framework for “comprehensive” or “master” planning (these terms appear to be used synonymously in the statutes). It quotes and discusses selected relevant statutory provisions and state regulations. Consult the full statutes and state regulations when researching specific questions.

The plan indicates in a general way how the leaders of government want the county to develop in the ensuing 20 to 30 years. It is intended to assist the County in preparing for the future by anticipating change, maximizing strengths and minimizing weaknesses. The plan sets policies that help guide how to address critical issues facing the community, achieving goals according to priority, and coordinating both public and private efforts.

The San Juan County Growth Management Plan provides long-range guidance for development activities integrated across the different disciplines and subjects of physical development of the county. It constitutes a comprehensive plan or a master plan, as enabled in the New Mexico State Statutes.

The Growth Management Plan encompasses all functional elements that bear on physical development in an internally consistent manner, including: land use, environment, water and wastewater, county facilities, transportation,

housing, economic development, and hazards mitigation.

The plan encompasses all geographic parts of the private unincorporated county area, and strongly encourages continuing cooperation with planning for the municipalities of Aztec, Bloomfield, Kirtland, and Farmington, the Navajo Nation and Chapters therein, the Bureau of Land Management and other federal agencies.

B. Legal and Administrative Framework

State Statutes Overview

General Powers of Counties and Municipalities

The statutes of New Mexico enable the preparation of a comprehensive plan by local governments, including both municipalities and counties. Most of the statutory provisions regarding comprehensive plans are written specifically for municipalities. The following statute grants counties the same authority that municipalities have in many areas, including planning. *While the excerpts that follow in this section refer specifically to municipalities, Section 4-37-1 NMSA 1978 indicates that those statutes apply to counties as well:*

All counties are granted the same powers that are granted municipalities except for those powers that are inconsistent with statutory or constitutional limitations placed on counties. Included in this grant of powers to the counties are those powers necessary and proper

The Growth Management Plan is an official public document adopted by the Board of County Commissioners as a policy guide for making decisions about the physical development of the unincorporated county.

to provide for the safety, preserve the health, promote the prosperity and improve the morals, order, comfort and convenience of any county or its inhabitants. The board of county commissioners may make and publish any ordinance to discharge these powers not inconsistent with statutory or constitutional limitations placed on counties.

Purpose of a Plan

Section 3-19-9 NMSA 1978 addresses the general purpose of a master plan. Subsection (A) states:

... a municipal planning commission shall prepare and adopt a master plan for the physical development of the municipality and the area within the planning and platting jurisdiction of the municipality which in the planning commission's judgment bears a relationship to the planning of the municipality.

Subjects the Plan May Recommend on

Section 3-19-9(B) allows that, in addition to recommendations for the physical development of the municipality and its planning jurisdiction, the master plan may also address:

... streets, bridges, viaducts and parkways; parks and playgrounds; floodways, waterways and waterfront development, airports and other ways, grounds, places and space; public schools, public buildings, and other public property; public utilities and terminals, whether publicly owned or privately owned; community centers and neighborhood units and the replanning of blighted districts and slum areas; and public ways, grounds, places, spaces, building properties, utilities or terminals.

Zoning Conformance to Plan

The most specific statutory provision relating to counties is Section 3-21-5 NMSA 1978, entitled "Zoning Conformance to Comprehensive Plan." Subsection (A) states: "The regulations and restrictions of the county or municipal zoning authority are to be in accordance with a comprehensive plan...."

County Planning Commission Formation

Section 4-57-2 NMSA 1978 enables the creation of county planning commissions and describes the power and duties of the commission.

The statute does not specify what the recommendations must address; consequently, recommendations may address the subjects of a comprehensive plan. Section 4-57-2(B) NMSA 1978 allows that a county planning commission may:

- (1) make reports and recommendations for the planning and development of the county to any other individual, partnership, firm, public or private corporation, trust estate, political subdivision or agency of the state or an other legal entity of their legal representatives, agents or assigns;
- (2) recommend to the administrative and governing officials of the county, programs for public improvements and their financing.

Approval of Changes to Public Property and Rights-of-Way

Section 3-19-11 NMSA 1978 addresses the legal status of a municipality's master plan, including:

- (A) After a master plan... has been approved and within the area of the master plan... the approval of the planning commission is necessary to construct, widen, narrow, remove, extend, relocate, vacate, abandon, acquire or change the use of any

- (1) park, street or their public way, ground, place or space;
- (2) public building or structure; or
- (3) utility, whether publicly or privately owned.

- (B) The failure of the planning commission to act within sixty-five days after submission of a proposal to it constitutes approval of the proposal unless the proponent agrees to an extension of time. If the planning commission disapproves a proposal, it must state its reasons to the governing body. The governing body may overrule the planning commission and approve the proposal by a two-thirds vote of all its members.

Subdivision Regulations' Conformance with the Plan

The New Mexico Subdivision Act, NMSA 1978, Section 47-6-1 to -29 (1973, as amended through 2018), requires counties to regulate subdivisions according to requirements and procedures in the act. An amendment was approved in 2003 requiring counties with subdivision regulations that are stricter than the act to have a comprehensive plan that supports the more stringent requirements. Section 47-6-9 (C) states:

Nothing in the New Mexico Subdivision Act shall be construed to limit the authority of counties to adopt subdivision

- (1) the county has adopted a comprehensive plan in accordance with Section 3-21-5 NMSA 1978;
- (2) the comprehensive plan contains goals, objectives and policies that identify and explain the need for requirements that are more stringent; and

- (3) the more stringent regulations are specifically identified in the comprehensive plan.

Extraterritorial Zoning, Planning and Subdivision Regulations

The statutes allow for a one-mile extraterritorial area for zoning and a three-mile extraterritorial area for planning and platting (subdivision). Section 3-21-2(B) NMSA 1978 states:

A municipal zoning authority may adopt a zoning ordinance applicable to the territory within the municipal boundaries and, if not within a class A county with a population of more than three hundred thousand persons according to the last federal decennial census, shall have concurrent authority with the county to zone all or any portion of the territory within its extraterritorial zoning jurisdiction that is within...

- (1) two miles of the boundary of any municipality having a population of twenty thousand or more persons, provided such territory is not within the boundary of another municipality;
- (2) one mile of the boundary of any municipality having a population of one thousand five hundred or more but less than twenty thousand persons, provided such territory is not within the boundaries of another municipality....

Section 3-19-5(A) states:

Each municipality shall have planning and platting jurisdiction within its municipal boundary. Except as provided in Subsection B of this section [for cities with over 200,000 persons], the planning and platting jurisdiction of a municipality:

- (1) having a population of twenty-five thousand or more persons includes all territory within five miles of its boundary and not within the boundary of another municipality; or
- (2) having a population of less than twenty-five thousand persons includes all territory within three miles of its boundary and not within the boundary of another municipality.

The city of Farmington has a 5-mile extraterritorial planning and platting area, while the cities of Aztec and Bloomfield both have 3- mile extraterritorial planning and platting areas. Farmington's extraterritorial zoning area extends 2 miles; Aztec's, Kirtland's, and Bloomfield's zoning areas are both 1 mile. Further information and discussion of extraterritorial planning, platting and zoning is in the Land Use Element.

Planning Process

2007 Growth Management Plan (GMP)

The San Juan County Board of County Commissioners contracted with the Northwest New Mexico Council of Governments in 2006 to develop its first general plan. The Northwest New Mexico Council of Governments and Architectural Research Consultants, Incorporated partnered to work with the county in crafting the plan. A Blue Ribbon Committee was established in May of 2006 by the Board of County Commissioners to guide the plan development process and recommendations, conduct public meetings and make a recommendation to the Board of County Commissioners on adoption of the plan. This diverse and diligent group spent many hours over more than a year to craft the plan.

2012 GMP Update

In 2012, the County embarked on an update of its plan, principally to the Land Use Element. Similar to the 2007 Growth Management Plan, the public input process for this update asked citizens throughout the county to identify what they thought were the most critical issues, explore whether land use regulations are desired and needed, and then to suggest options for the types of regulations needed.

2018 GMP Update

This planning effort began in spring, 2018 with a kickoff meeting with county staff and regional planners. County staff then identified and convened a citizens' focus group to inform policy goals. Over the next few months, planners held regular meetings with both groups to develop and review goals, policies and plan content.

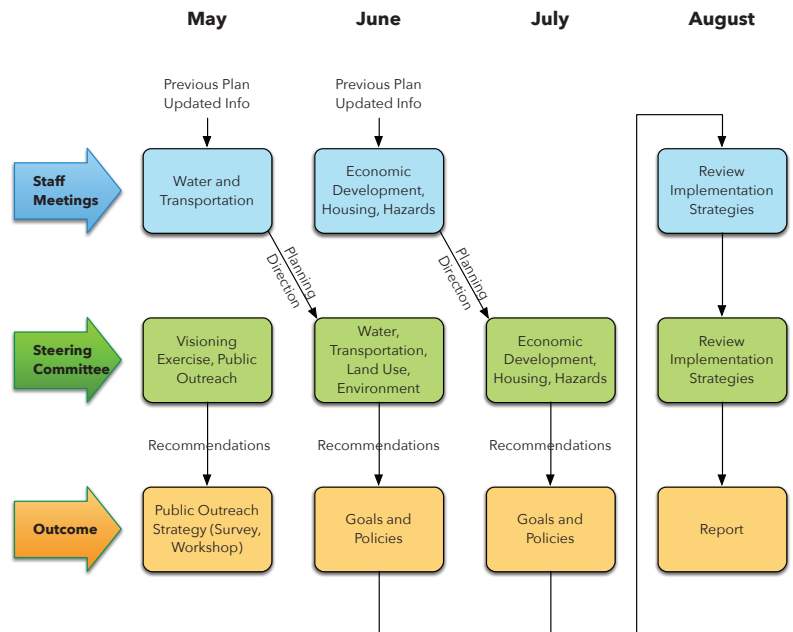
The following graphic illustrates the planning process. During this time, the planning team worked with county staff and the steering committee to develop and distribute a

community survey to measure public concerns. The survey consisted of 25 questions regarding demographics, community character, economic development, hazards and land use that was published via the on-line tool, SurveyMonkey and promoted via mailing lists, and news and radio outlets. The survey was open from June, 2018 through August, 2018 and received 510 responses.

After presenting a draft plan to the steering committee and county staff, the planning team held a community workshop to review draft goals and policies, and solicit public input on Tuesday, July 28, 2018.

After incorporating recommended alterations to the draft plan, planners presented the final draft to the steering committee and county staff on October 17, 2018. Following this last review, the planning team presented the draft plan to the San Juan County Commission for adoption on December 4, 2018.

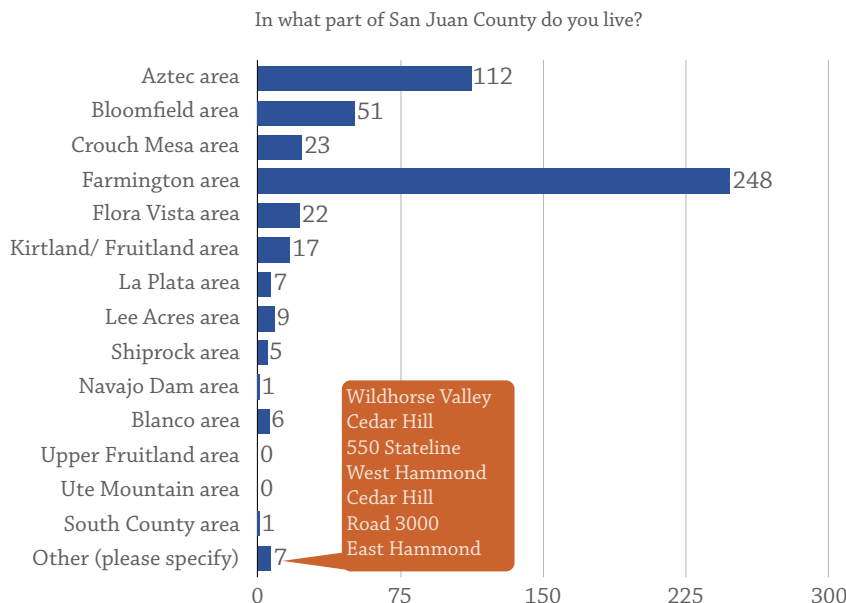
Exhibit 1-1 Planning Process



Public Survey Results

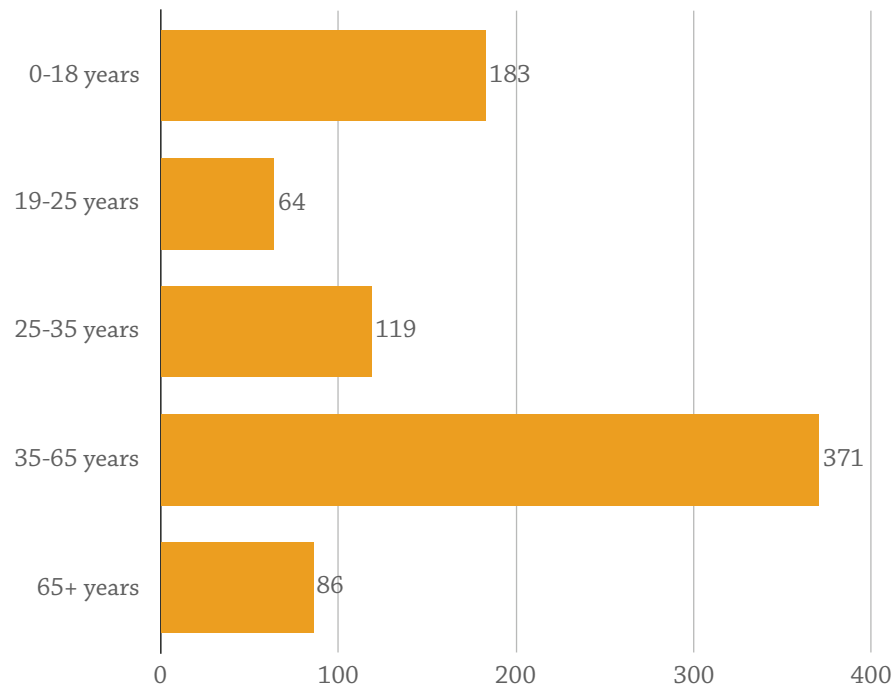
The results of the public survey are below and on the following pages. See the Appendix for a listing of all comments.

The majority of respondents live in the Farmington area, although many represent Aztec and Bloomfield. Many regions in San Juan County had some representation in the survey results.



The on-line survey tool, SurveyMonkey estimates that with a sample size of 510 and county population of 126,926 (2017 ACS estimate), the survey results have a margin of error of just 4%.

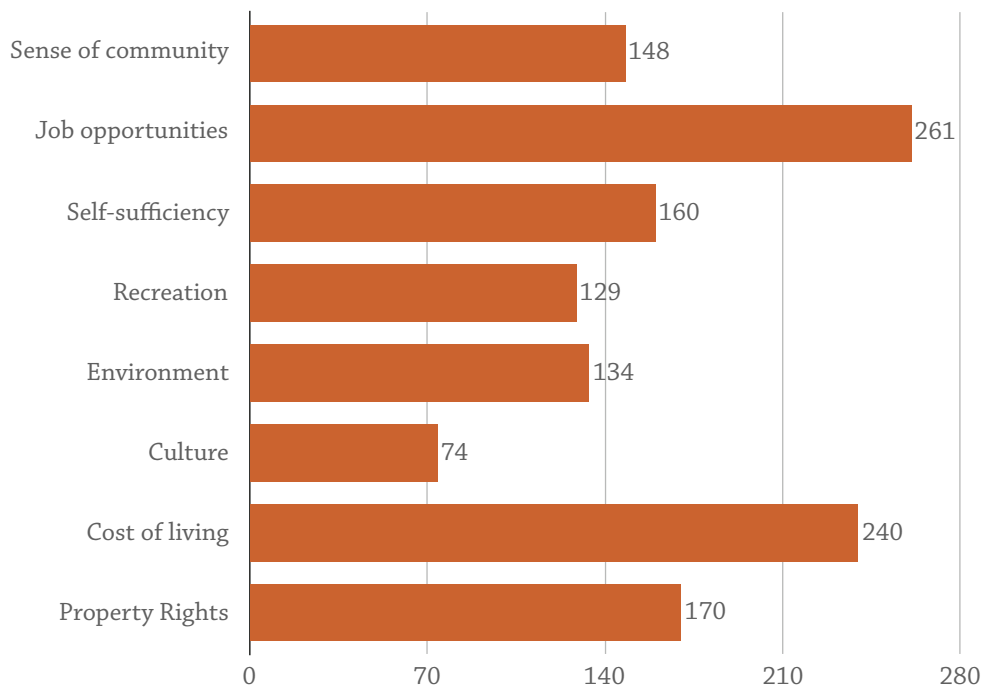
What age ranges are represented in your household? (Select all that apply)



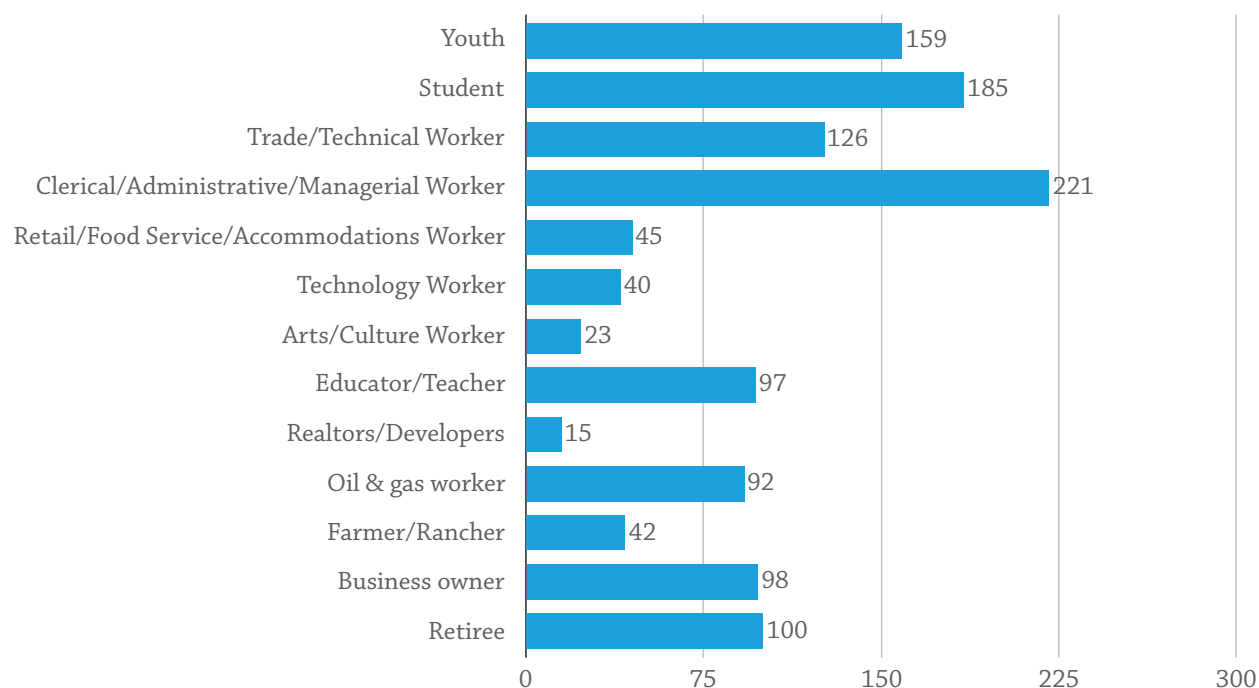
While the majority of respondents represent the 35- to 65-year-old age range, a significant number of younger people are also represented.

Job opportunities, cost of living, and property rights ranked as the top three most important aspects of living in San Juan County.

What aspects of San Juan's character are most important to you? (chosen as top priority)



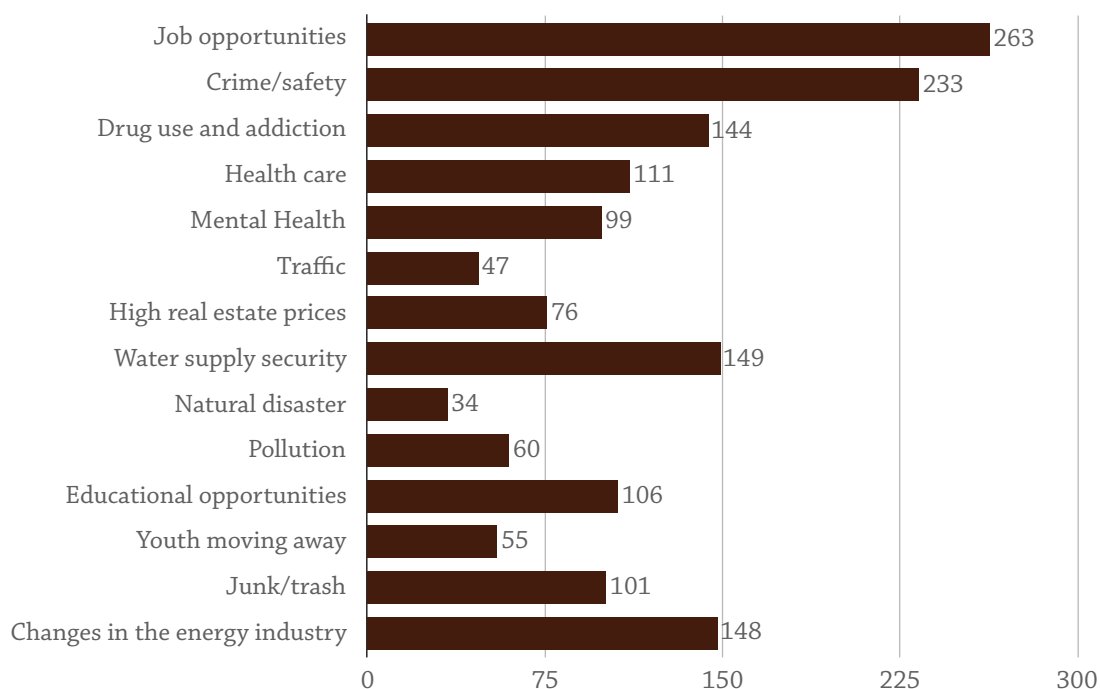
Would you consider yourself or a family member a part of any of the following communities?
(select all that apply)



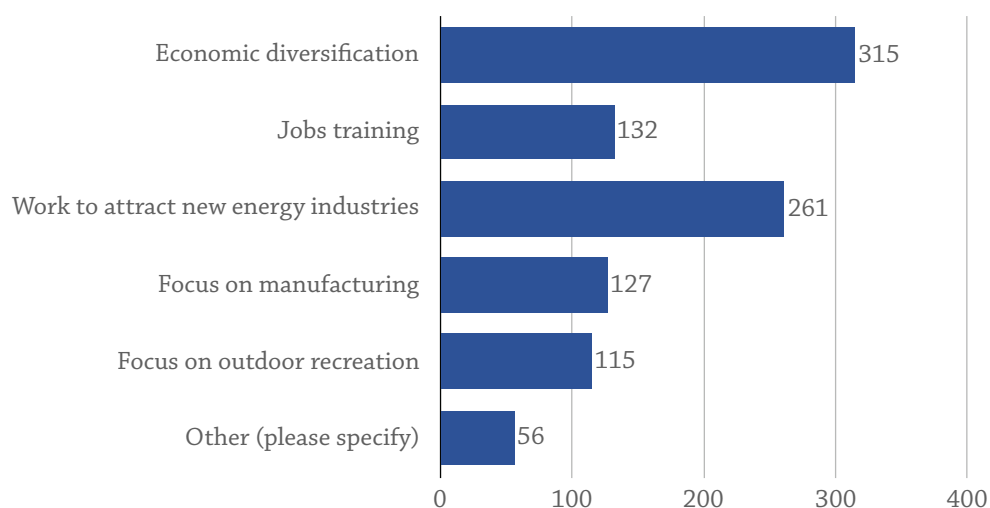
A broad spectrum of county residents, including youth, students, retirees, business owners, and trade workers participated in the survey.

Job opportunities and crime/safety ranked as top concerns, with additional concern expressed about water supply security, changes in the energy sector and drug use and addiction.

What are your top concerns for the county? (chosen as top priority)



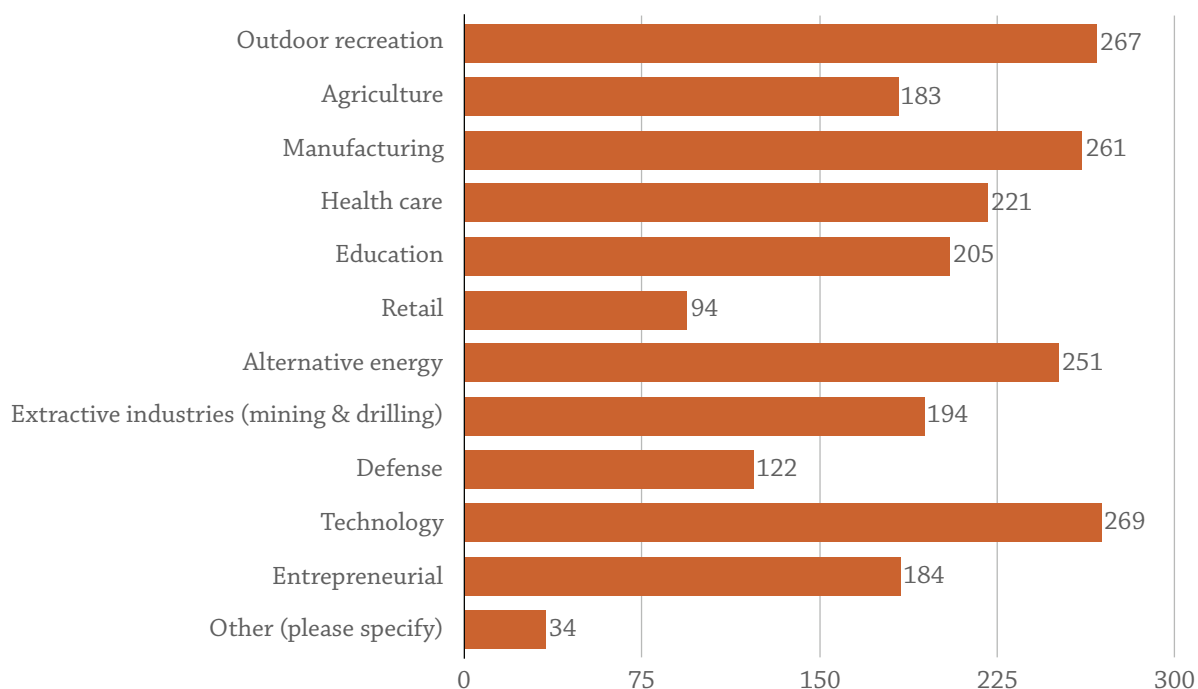
How should the county respond to changes in the energy industries?



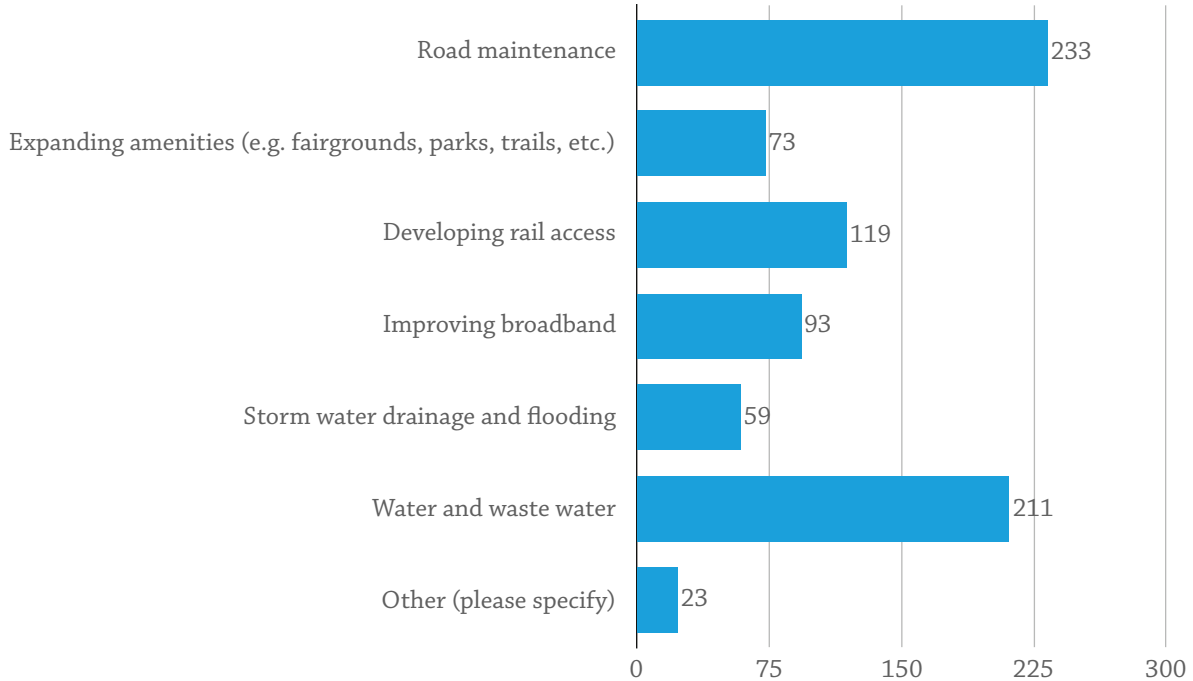
In response to changes in the energy sector, residents support economic diversification and efforts to attract new energy industries. The Economic Development Element of this plan discusses these strategies.

The wide level of support expressed for a wide variety of focus industries represents an opportunity to carry out economic diversification supported as an economic development strategy.

What industries should the County work hardest to retain and recruit?
(select all that apply)



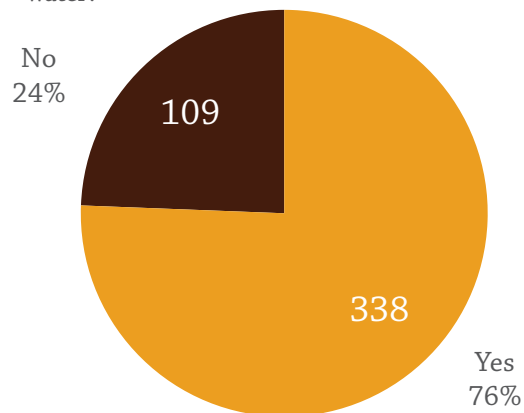
What infrastructure should the county prioritize? (Please rank your top 3)



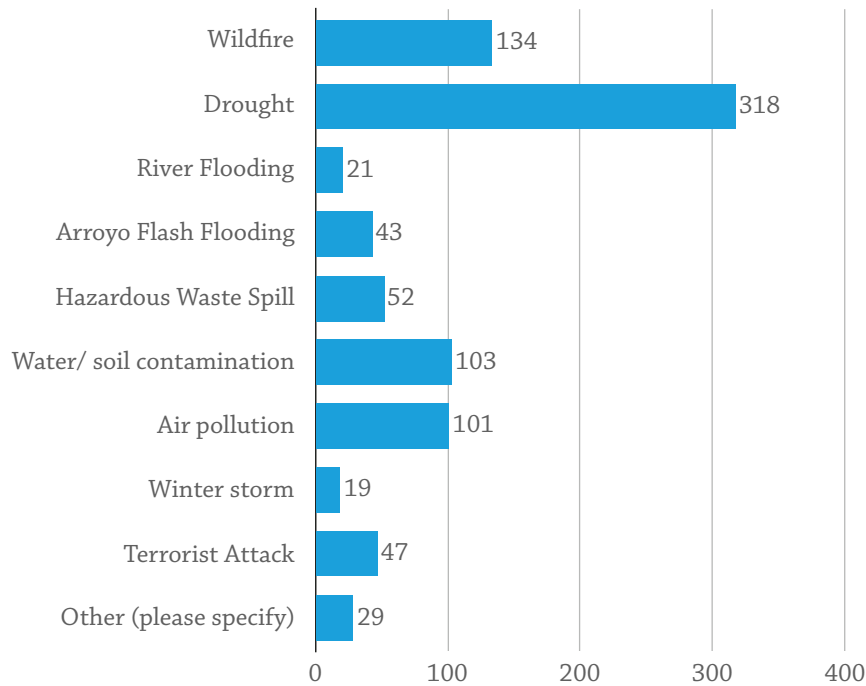
Regarding infrastructure priorities and utility management, respondents identified road maintenance, and water and wastewater as top priorities. The many independent water systems in the county present safety and reliability issues for many residents. One approach to improving the situation could be to establish a regional water authority. Three-fourths of

respondents (76%) support this approach. A significant number said that their support was conditional on improved understanding of the structure, governance and management of a regional water authority. The Water and Wastewater Element of this plan further discusses the topic of a regional water authority.

Would you support the establishment of a regional water authority that would assume responsibility for managing non-agricultural water?



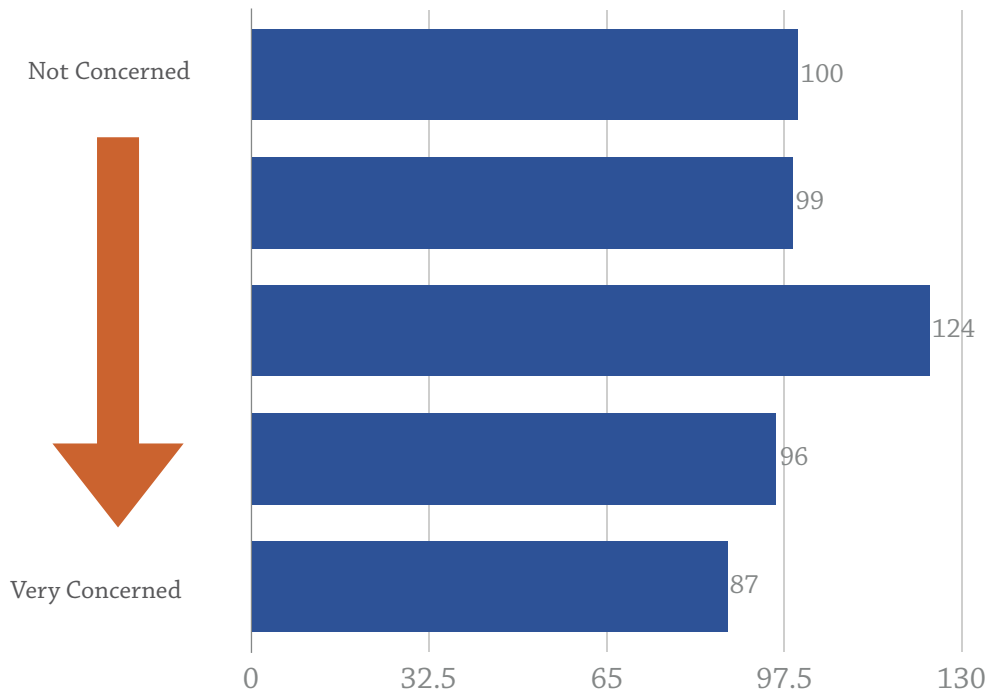
Which of the following natural or man-made hazards are you very concerned about?



Drought was by far the top hazard concern. Planners conducted the survey in the summer of 2018, during an intense period of drought in the county. The Hazards Element of this plan further addresses the topic.

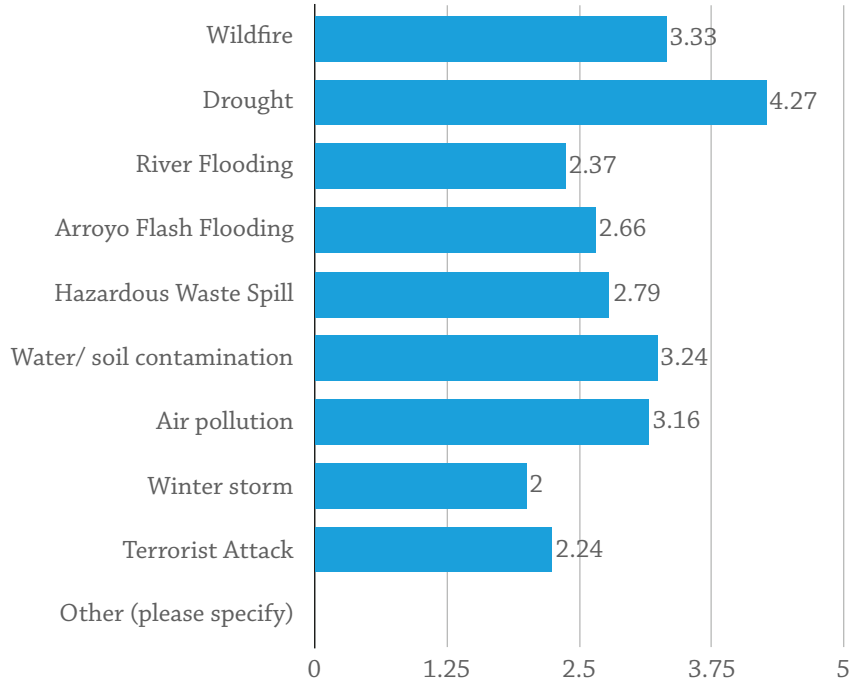
Although about 20% of respondents identified water and soil contamination as a very concerning hazard, there was little strong consensus about concerns regarding the Gold King Mine spill of 2015.

How concerned are you about impacts from Gold King Mine contamination?



Which of the following natural or man-made hazards are you most concerned about?

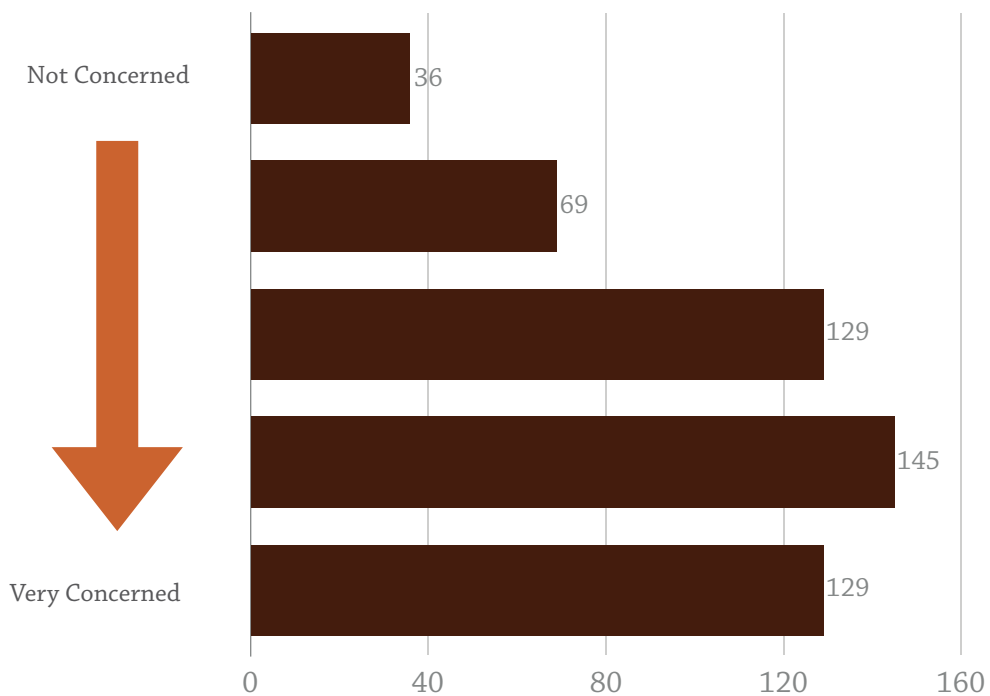
(weighted average)



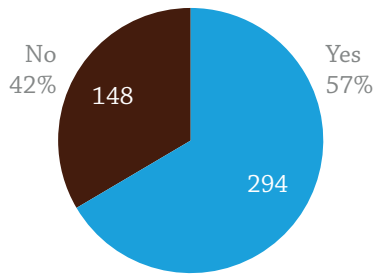
Concerns regarding hazards are centered on drought, but are measurable across a wide range of threats including wildfire and soil and water contamination.

Concerns about contamination appear to be mostly focused on septic systems and other industrial uses, suggesting public support for stricter regulation, monitoring, and/or standards regarding personal wastewater and industrial uses.

How concerned are you about water contamination from other sources like private septic systems or industrial uses?

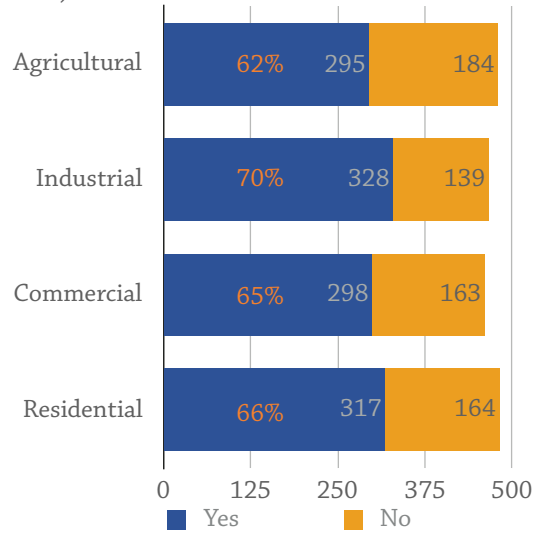


Do you worry about non-compatible land uses (e.g. industrial next to residential) affecting your property value or ability to finance?



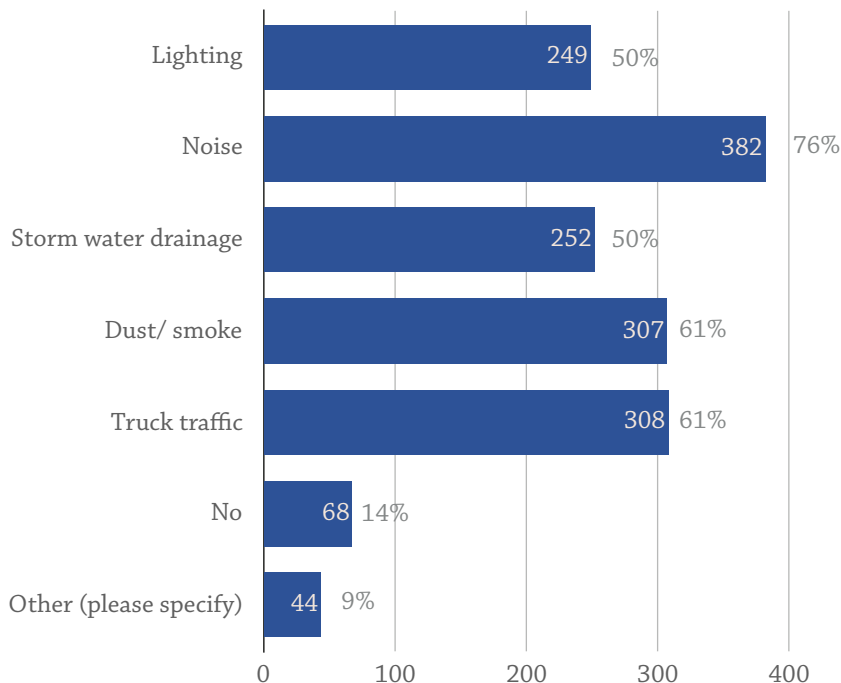
More than half of respondents, 57%, expressed concern that the current lack of regulation could adversely affect personal property values and capabilities.

Should the county adopt land use restrictions to protect certain uses? (select yes or no for each)



One approach to protecting property owner's rights and property values is developing protections in certain areas for certain uses. This approach found strong support, over 60% in all cases, for protecting agricultural, industrial, commercial, and residential uses.

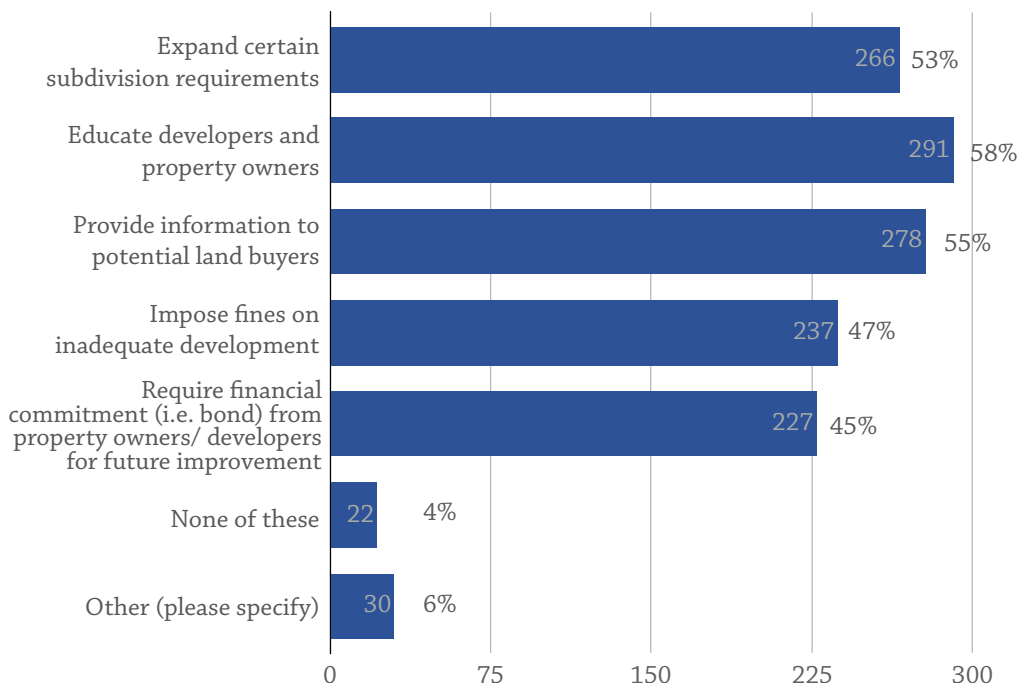
Are there issues that property owners should be required to mitigate if they are close to residential neighborhoods? (select all that apply)



Using a performance-based approach to protecting residential property from undesired by-products of near-by land uses also found significant support. Over half of respondents support mitigation requirements for lighting, noise, drainage, particulates, and truck traffic. The issue with the strongest support for mitigation requirements is noise, with over three-fourths (76%) expressing support.

Just 14% of respondents stated that no land use issues exist that require mitigation.

Subdivisions with inadequate private roads and drainage plans can lead to safety issues that require public investment to fix. Which steps should the county take to ensure appropriate development standards?

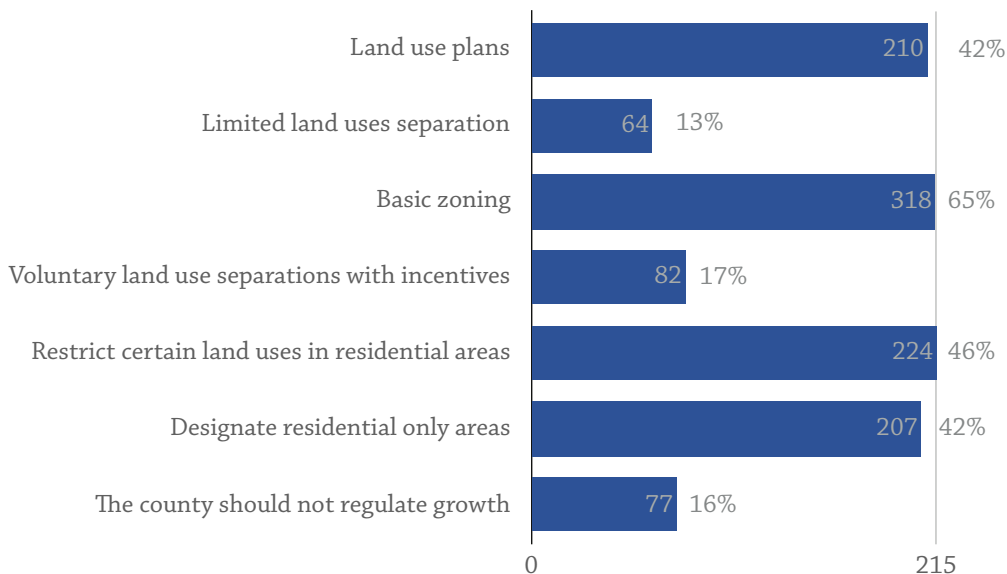


Approaches for combating substandard subdivision development and bad practices received varying levels of support, with education and outreach at the top followed by expanded subdivision requirements. Imposing financial consequences received relatively strong support from a minority of respondents. Just

4% rejected all proposed efforts to combat these issues.

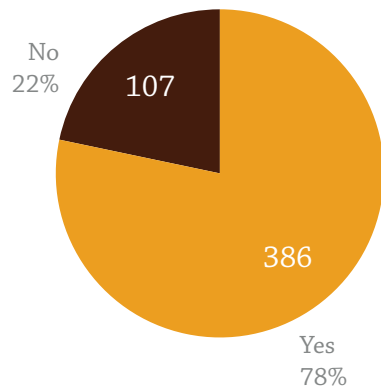
A majority, 65%, of respondents expressed support for basic zoning, while just 16% feel the County should not regulate growth.

How should the county manage growth in populated areas? (check all that apply)



65% support basic zoning.

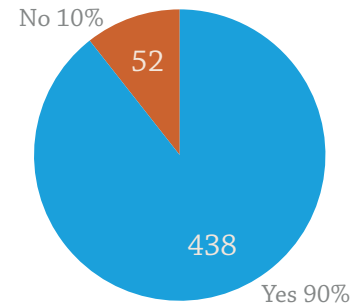
Should the County require permitting for large earthworks projects (e.g., major cut and fill or excavation)



The public expressed strong support for stricter regulation of earthworks, and water availability disclosure as well; 78% of respondents support requiring permitting for large projects. It should be noted that several of those answering “no” included the caveat that permitting should be required if property owners could endanger nearby property either structurally or because of drainage issues—standard reasons for considering such regulation.

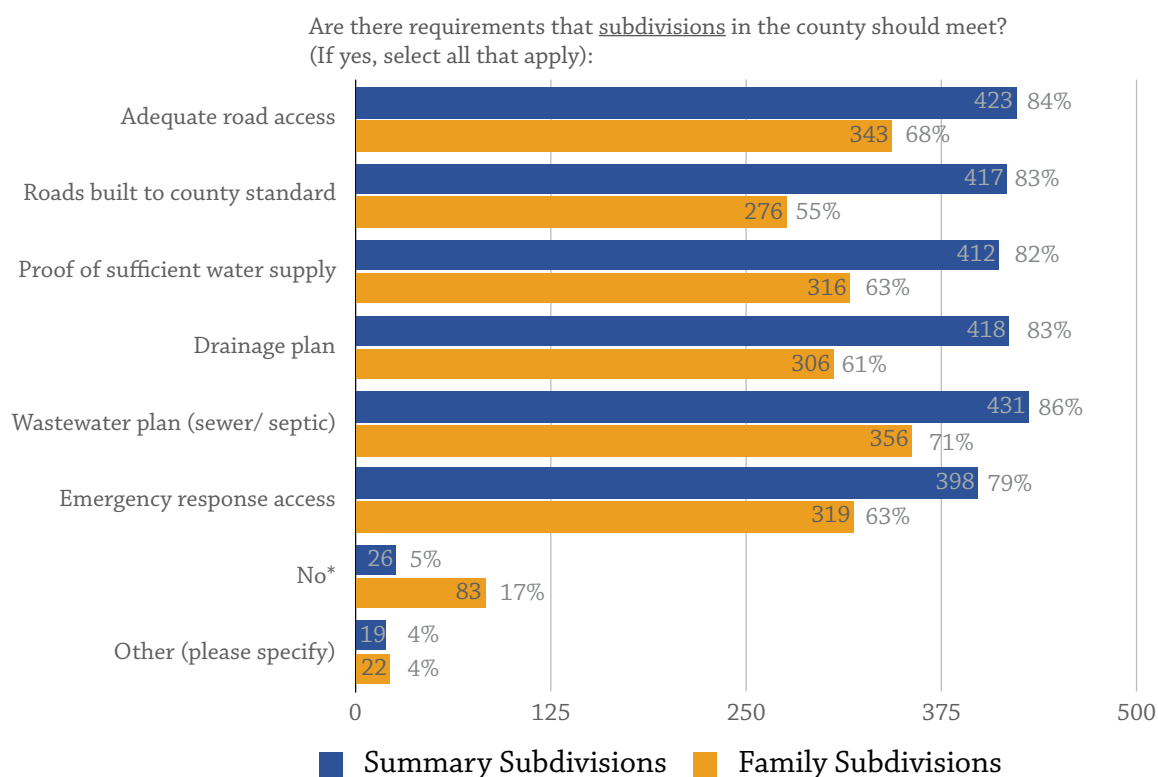
Support for requiring disclosure of water availability at the time of property sale was even stronger, at a full 90% . Methodology for adding the requirement should be explored in cooperation with local real estate agents.

Should the county require property owners to disclose water availability and road ownership to buyers when land is sold?



Requirements that specifically apply to subdivisions also garnered strong support, especially for summary, or for-profit, subdivisions which received overwhelming support. Over or close to 80% of respondents support all requirements in these cases. A majority support all requirements for family subdivisions. Just 17% believe family subdivisions should remain exempt from requirements and just 5% feel summary subdivisions should be exempt.

An overwhelming majority support expanded requirements for summary subdivisions.



Vision Statement

A vision statement is an aspirational goal for a community. It describes the community that San Juan County wants to become. A vision statement provides policy direction and motivation for future decision-making and community investment. It defines what the community wants to achieve and what it wants to see realized, preserved, and changed in the community. Future planning efforts should update vision statements regularly, since the statements are the guiding factors for community development in San Juan County for the foreseeable future.

Based on input gathered from county staff, the planning steering committee and the public via the planning process, the planning team presents the following vision statement for the future of San Juan County.

San Juan County is an independent,
resilient, and self-sufficient community.

Our strong, diverse economy has a foundation in
energy production, agriculture, manufacturing, and recreation.

We support our local businesses and
the highly trained workforce they employ.
Our young people remain in the county after college
to build businesses and grow families.

We protect our resources and celebrate our natural environment.
We deeply value our personal freedoms.

Implementation Plan

Land Use		
Task	Responsible Party	Time Frame
Develop and adopt permitting requirements to mitigate certain impacts to neighboring properties, including an earthworks ordinance as required by the MS4 storm water discharge permit, noise, particulates, and traffic as recommended in the Land Use Element of this plan.	County staff and County Commission	1-2 years
Develop and adopt an ordinance that expands subdivision requirements to limit exemptions from state regulatory requirements for summary subdivisions and family subdivisions, as recommended in the Land Use Element of this plan.	County staff and County Commission	1-2 years
Conduct public outreach to educate property owners about land use issues and expanded permitting and subdivision requirements.	County staff	2 years, ongoing
Support consistent enforcement of new permitting and subdivision requirements by adequately funding and staffing necessary enforcement staff, limiting exemptions from requirements, and establishing punitive measures where appropriate.	County Commission and County Staff	2 years, ongoing
Conduct public outreach and internal research to determine the need for expanded growth management tools for the County, including performance and basic zoning.	County staff	3-5 years
Hold a summit with county municipalities to expand education and cooperation in annexation, extra-territorial zoning and compact development.	County staff	3-5 years
Identify incentives to promote infill and compact development in the county, such as land and infrastructure donations.	County and Municipal staff	2 years, ongoing
Identify potential sites and funding sources for brownfield clean-up.	County staff	3-5 years
Consider adopting basic protections for residential, commercial, industrial and agricultural land uses, including performance and/or basic zoning.	County staff and County Commission	3-5 years

Facilities		
Task	Responsible Party	Time Frame
Update the facilities condition assessment of county facilities to identify needs.	County staff	1-2 years
Continue to work with facility managers to develop replacement and maintenance schedule for facilities and associated equipment.	County staff	1-2 years
Continue to prioritize repair and replacement projects for immediate and short-term completion.	County staff, County Commission	1-2 years
Continue to include prioritized and scheduled repairs and replacement projects in the county's Infrastructure Capital Improvement Plan (ICIP) in a timely manner.	County staff, County Commission	ongoing
Update the asset management / risk management plan to ensure continued timely maintenance and upkeep of county facilities, improve longevity of public investment, and protect the safety of the public and public employees.	County staff	2-3 years
Consider developing a facilities master plan to streamline facility programming, identify opportunities to eliminate waste, and prioritize efficiency of use and future facilities investments.	County staff	2-3 years
Monitor use and needs to maintain existing services at an appropriate level, including emergency response, solid waste management, and government.	County staff	ongoing
Consider future opportunities to expand public facilities, including recreational , economic development, and educational projects.	County staff, County Commission	3-5 years
Conduct a facilities and services summit with local municipalities and state agencies to identify opportunities for collaboration to eliminate redundant services and develop collaborations that take advantage of efficiencies of scale.	County staff	3-5 years

Transportation		
Task	Responsible Party	Time Frame
Actively discourage the development of long, dead-end roads.	County staff, County Commission, private developers, oil and gas companies	ongoing
Continue to enforce road design standards for subdivisions.	County staff, County Commission	1-2 years
Establish appropriate maximum slope and minimum width for right-of-access easements in family exemptions.	County staff, County Commission	1-2 years
Incorporate Complete Streets principals in all possible transportation projects.	County staff	1-2 years
Continue to collaborate with local and regional transportation agencies and planning entities to maintain and improve transportation in the county.	County staff	ongoing
Regularly update the Metropolitan Transportation Plan, and include projects in ICIP and Statewide Transportation Improvement Program.	County staff	ongoing
Include transportation assets with facilities assets in the asset management plan.	County staff	1-2 years

Water and Wastewater		
Task	Responsible Party	Time Frame
Convene a water and wastewater summit with municipal water department managers, mutual domestic water consumers associations (MDWCAs), and San Juan Water Commission to identify strategies and opportunities for improving water and wastewater services and infrastructure in the county.	County staff, municipal water managers, and regional water partners	1-2 years
Encourage MDWCAs to establish and enforce drought restriction guidelines.	County staff, MDWCAs	1-2 years
Conduct a costs, benefits and liabilities study, including public engagement and intra-agency collaboration, to determine the potential for consolidation of water systems under a regional water authority.	County staff, municipal water managers, and regional water partners	2-3 years
If supported by regional water authority feasibility study findings, provide support as needed for the formation and operation of a regional water authority.	County staff	3-5 years
Support San Juan Water Commission efforts to secure and obtain additional water rights.	County staff	ongoing
Work with the San Juan County Extension Office and state engineer's office to develop and promote sustainable agricultural practices, including education and outreach programs.	County staff and San Juan County Extension Office	3-5 years
Establish relationships with regional utility providers to expand and promote credits and rebates for efficiency upgrades and improvements for utility customers.	County staff, municipal water managers, and regional water partners	3-5 years
Enable water districts to expand storage and cross connections by acting as fiscal agent.	County Staff, MDWCAs	3-5 years

Housing		
Task	Responsible Party	Time Frame
Develop material and in-house knowledge to promote homeowner assistance programs, including U.S. Department of Agriculture (USDA) assistance.	County staff	2-3 years
Strengthen working relationships with regional USDA rural development, Economic Council Helping Others Inc. (ECHO) housing assistance, Affordable Housing Alliance, San Juan County Partnership, San Juan Safe Communities Initiative, and Habitat for Humanity to improve access to housing and home ownership for San Juan residents.	County staff and local housing advocacy groups	1-2 years
Regularly update the Affordable Housing Plan for Northeast San Juan County, NM.	County staff, City of Farmington staff	1-2 years
Adopt an affordable housing ordinance.	County staff, County Commission	1-2 years
Work with regional utility providers to develop and promote incentive and rebate programs for efficiency upgrades.	County staff, regional utility providers	2-3 years
Encourage infill and brownfield development over greenfield development.	County staff	2-3 years
Consider developing density guidelines to promote higher density, more efficient development	County staff	3-5 years

Environment		
Task	Responsible Party	Time Frame
Support soil and water conservation projects to improve watershed health and promote environmentally sound agricultural practices.	County staff, soil and water conservation	ongoing
Support alternative energy projects in the county.	County staff	ongoing
Consider adopting standards that require developers to reclaim defunct energy sites, similar to Bureau of Land Management (BLM) New Mexico reclamation requirements.	County staff, County Commission	3-5 years
Continue working with local energy producers to limit and minimize environmental damage resulting from extractive industries, including pollution and ecological fracturing.	County staff	ongoing
Continue enforcing trash and refuse, junked vehicle, and mobile home ordinances, and conducting clean-up efforts to improve the cleanliness of San Juan County.	County staff	ongoing
Conduct a feasibility study to determine the potential for expanding the county recycling program and participation in it.	County staff	3-5 years
Support local watershed restoration groups and projects.	County staff	ongoing

Hazards Mitigation		
Task	Responsible Party	Time Frame
When available, update flood maps to reflect new, more accurate Federal Emergency Management Agency (FEMA) flood mapping.	County staff	1-2 years
Identify Wildlife Urban Interface (WUI) areas; discourage development and encourage defensible space maintenance.	County staff	1-2 years
Continue to support the drought task force.	County staff	ongoing
Encourage and assist municipalities and river restoration efforts to clear overgrown riparian areas in the county.	County staff	ongoing
Convene a hazard resilience task force to identify risks and develop strategies for minimizing risk and improving recovery, prioritizing strategies, and monitoring implementation and effectiveness of strategies.	County staff, emergency responders	2-3 years
Assess flood and fire risk to county facilities and property, and develop defensible space and drainage plans where needed.	County staff	1-2 years
Continue supporting local fire and sheriffs' offices and other emergency responders in the region.	County staff	ongoing
Collaborate with and support local and regional hazards response and mitigation departments and organizations.	County staff, regional emergency and hazards responders and planners	ongoing
Regularly update the County's hazard mitigation plan and community wildfire protection plan.	County staff, local municipalities	ongoing
Lobby state representatives to increase daily fines for noncompliant property owners.	County staff, state representatives	1-2 years
Consider adopting a remediation ordinance requiring property owners to remediate brownfield and hazardous sites in the county.	County staff, County Commission	2-3 years

Economic Development		
Task	Responsible Party	Time Frame
Conduct a market study to identify trends and target consumers for outdoor recreation and recreational product manufacturing, identify existing and required infrastructure and assets, and outline a step-by-step plan for achieving goals.	County staff	1-2 years
Collaborate with the Farmington Convention & Visitors Bureau to promote county attractions, expand marketing efforts to additional markets and media, and conduct outreach to international travel agents to develop international tourism packages and amenities.	County staff, Farmington Convention & Visitors Bureau	1-2 years
Develop a clear strategy for attracting desired businesses and visitors, and develop travel and incentive packages.	County staff	1-2 years
Continue working with the BLM to expand trails and develop trail heads, signage and trail features.	County staff, BLM	ongoing
Develop and distribute a trails map based on county GIS data that will include trail type, difficulty level, hydrology and attractions such as national parks.	County staff, Farmington Convention & Visitors Bureau	1-2 years
Continue to attend recreation expos to attract businesses, especially tours and equipment rental businesses, as well as recreational manufacturers.	County staff, Four Corners Economic Development (4CED)	ongoing
Identify and promote business development incentives for desired industries, including Local Economic Development Act (LEDA) incentives such as industrial revenue bonds, land donation, general fund commitment and others.	County staff	1-2 years
Conduct an audit of incentives offered by comparable New Mexico entities to ensure competitiveness.	County staff, 4CED	1-2 years
Continue working with the state legislature to identify strategies for coping with changes in the energy industry.	County staff, regional representatives	1-2 years
Consider options to expand private land area in the county.	County staff, BLM	ongoing
Support expanding fiber-optic services in the county.	County staff	ongoing
Where appropriate, support expanding infrastructure and services to industrial parks.	County staff	3-5 years
Provide support for the Local Food, Local Places effort to develop a food hub and commercial kitchen in downtown Farmington.	County staff, County Commission	1-2 years
Employ mapping and community outreach to identify natural and cultural recreational assets for protection, including open space, riparian areas and rivers, geologic formations, ecologically sensitive areas and historical sites, and take measures to preserve them as assets to San Juan's economy and quality of life.	County staff, public, County Commission	2-3 years

2. EXISTING CONDITIONS

DEMOGRAPHIC TRENDS IN
SAN JUAN COUNTY

A. Introduction

This section provides background information on San Juan County, including an analysis of demographic trends and a discussion of the historic context and resources of the county.

Long-term demographic and economic trends tend to shape the future of communities. While the past does not dictate the future, the dynamics of long-range trends generally continue with some momentum into the future, unless unforeseen conditions intervene.

B. Historic and Projected Population

Over the 90-year period of 1910-2000, San Juan County grew from a small rural population of under 9,000 residents to a substantial and fairly complex group of communities encompassing urban centers and various rural areas.

The cyclical nature of the oil and gas industries caused minor fluctuations in populations over the decades, but from the 1950s through about 2010, the region grew steadily. The recession that occurred in the first decade of the new millenium also coincided with a global increase in extraction of natural gas, the major product

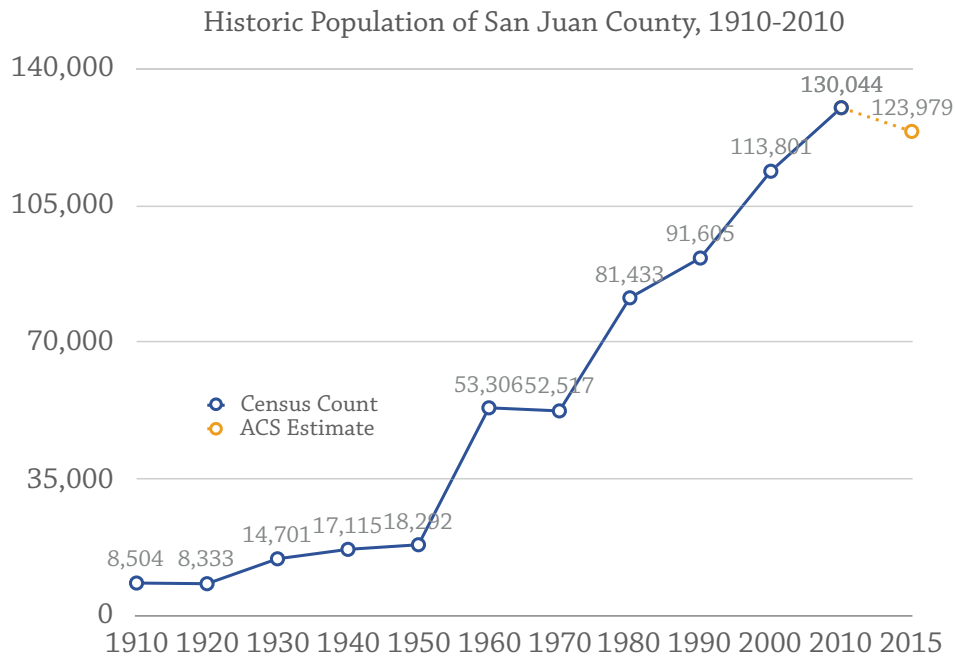
of the San Juan Basin. This oversupply reduced market value and disincentivized new drilling. As a result, natural gas production continues to decline, and with it, so does the population of San Juan County.

The 2010 Census count established the population at just over 130,000 people. Since then, the population has contracted; the 2016 American Community Survey (ACS) (an average of survey results from the previous five years) estimated San Juan County's population to be only 122,537.

Geospatial and Population Studies (GPS) at the University of New Mexico projects future populations for each county in the state. In 2012 — as the nation began to recover from the 2008 recession and long before the numbers indicated that New Mexico would lag behind this recovery — GPS projected the 2040 population to be over 175,000 people. In 2018, once it became apparent that New Mexico had lagged behind the nation in its economic recovery, GPS revised its projections downward, to just under 138,000 people in 2040.

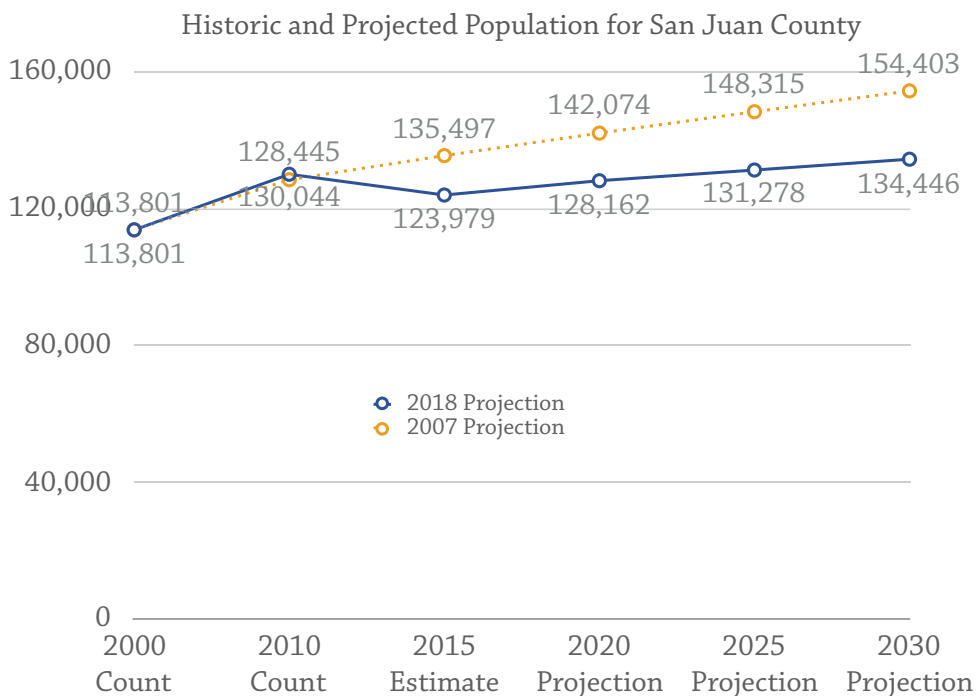
Unlike many other counties in the state, San Juan County will continue to grow, although at a slower rate than previously assumed.

Exhibit 2-1 Historic Population of Cities in San Juan County



Source: US Census Bureau, Decennial Census, 1910-2010, and American Communities Survey (ACS) 5-Year Estimate (2011-2015), Table S0101

Exhibit 2-2 UNM GPS Future Population Projections for San Juan County



Sources: UNM Geospatial and Population Studies July 2018 Population Projections, UNM Bureau of Business and Economic Research 2007 Population Projections

C. Population of Cities in San Juan County

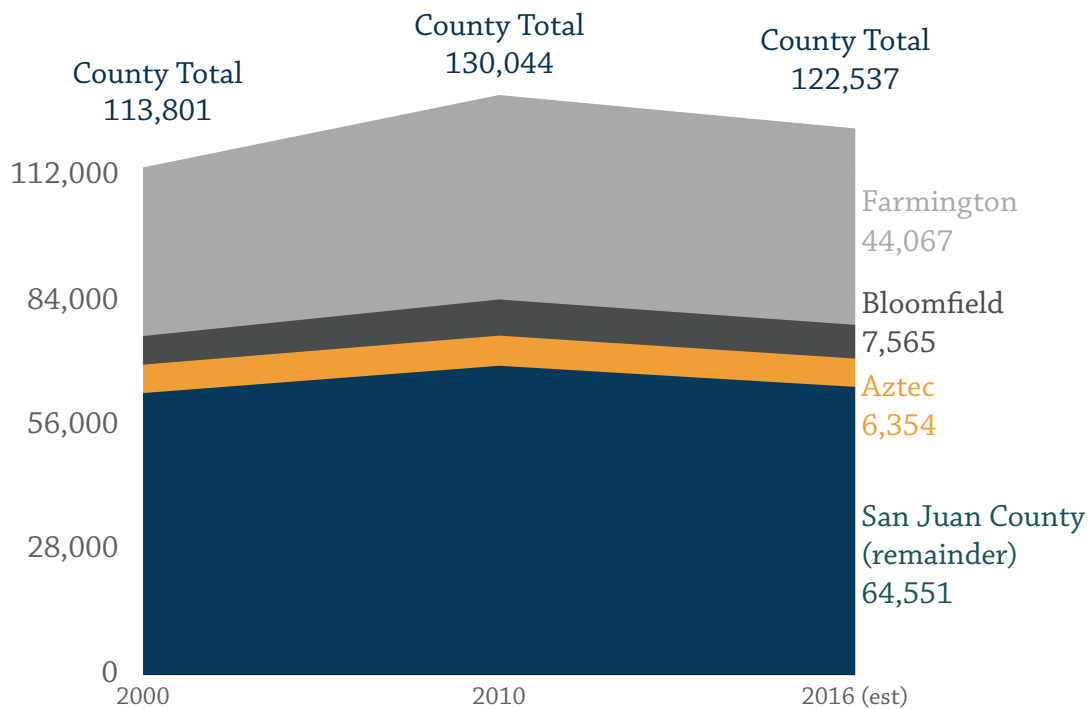
The population of the cities within San Juan County grows and declines in rough proportion to the county's overall population. Farmington, by far the largest municipality in the county, accounts for approximately one-third of the county's population. Bloomfield, Aztec and the recently incorporated Kirtland all have less than 10,000 people. Note that this analysis does not include Kirtland as a separate entity because the incorporated boundaries of the town of

Kirtland do not match its former boundaries as a Census Designated Place (CDP). (The U.S. Census American Community Survey [ACS] five-year population estimate for 2011-2015 for the CDP was 6,068, whereas the 2012-2016 estimate for the town of Kirtland was 751.)

Shiprock is the largest unincorporated community in San Juan County, with an ACS 2012-2016 population estimate of 8,135.

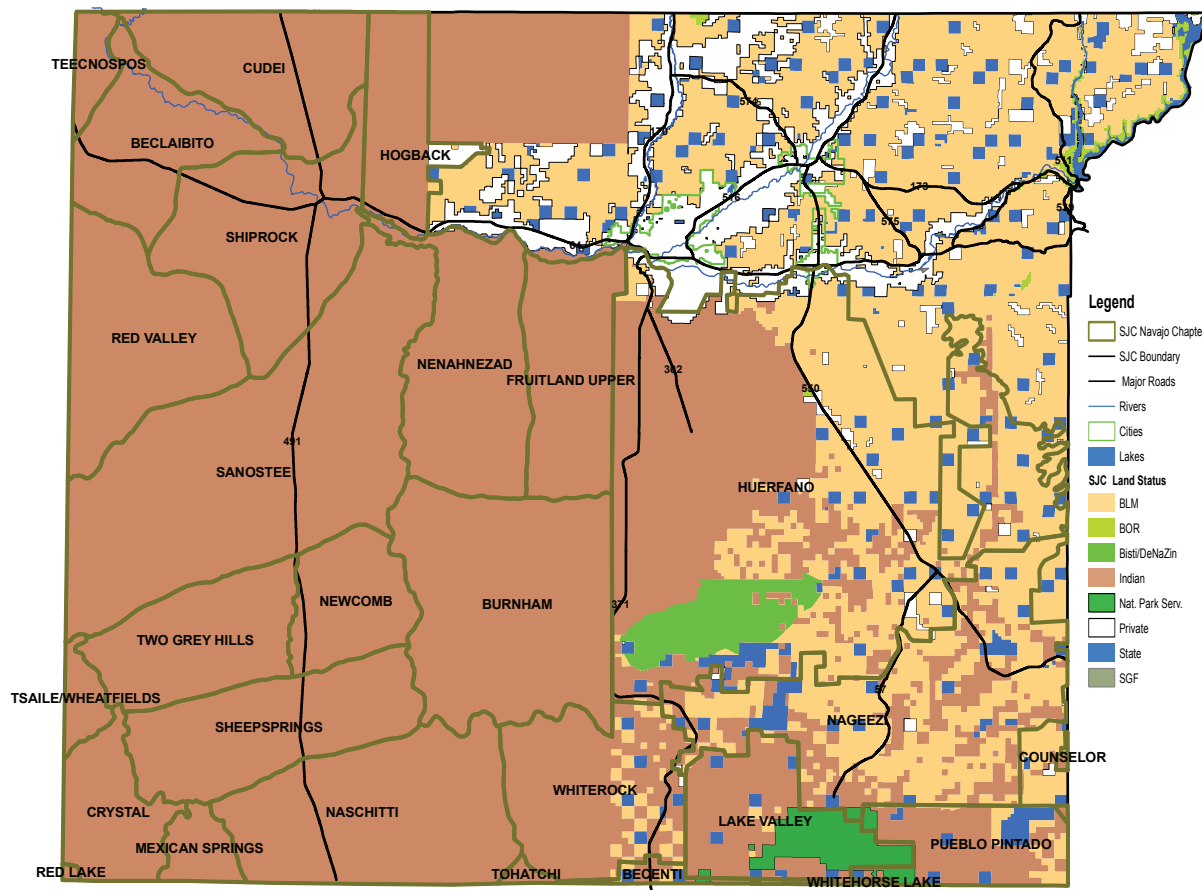
Exhibit 2-3 Population Change by Area, 2000-2016

San Juan County Population Change by Area



Source: US Census, 2000 & 2010 & Census ACS estimate, 2016

Exhibit 2-4 Navajo Chapters in San Juan County



D. Jurisdictions

Jurisdictional Limitations

The Navajo Nation has jurisdiction over the western half of the county. The Ute Mountain Ute Tribe has jurisdiction over a portion of land along the Colorado border. This plan encourages coordination and collaboration between San Juan County and tribal entities (as well as other stakeholder agencies at all levels of government). However, because the county administration does not hold authority over tribal land, this report makes recommendations only for unincorporated land not held by any tribal agency, authority, or jurisdiction.

Navajo Nation Chapters

Three Navajo agencies — Northern (Shiprock), Fort Defiance, and Eastern — exist at least in part within the boundaries of San Juan County. These agencies include 16 Navajo Chapters, shown on the map above.

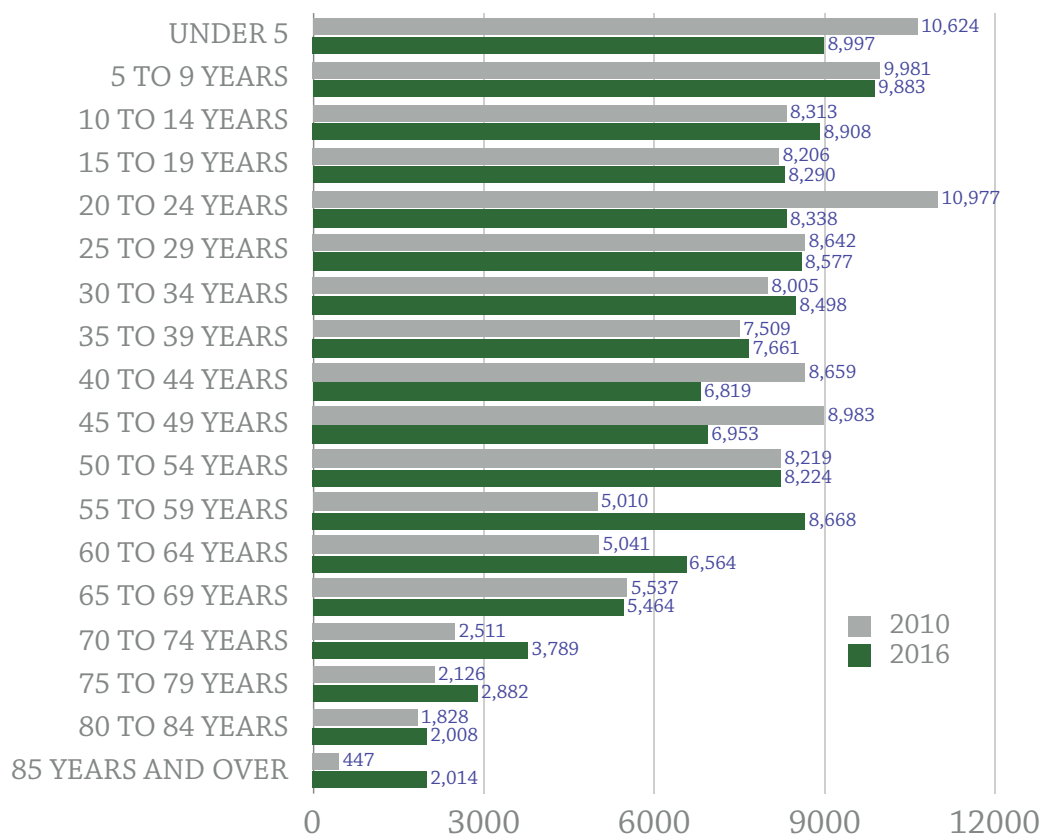
E. Age of Residents

The U.S. Census identified the median age of San Juan County residents as 31.0 in 2000 and 33.0 in 2010 (per U.S. Census table P13). The 2016 American Community Survey (1-year estimate, U.S. Census table B01002) estimated the median age to be 35.6, with a margin of error of ± 0.3 .

This increase in median age agrees with age cohort analysis, which shows a decline in college- and working-age populations and an

increase in seniors. This demographic shift is common across New Mexico, although in most rural communities, this shift occurs as young people migrate to larger cities to seek employment. In the case of San Juan County, the shift is more likely due to changes in the oil and gas industry, as companies relocate their workers out of the county to other extraction areas.

Exhibit 2-5 Population Change by Age, 2010-2016



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2006-2010 and 2012-2016), Table B01001

F. Summary of Existing Conditions

A combination of factors has diminished the strength of the oil and gas industry that has driven the economy San Juan County for the past several decades. Oversaturation of the natural gas market has dampened prices and discouraged production; new extraction methods require fewer workers per well site; a concentration of ownership of mineral rights has resulted in many companies relocating operations out of the area; and two electricity providers, Arizona Public Services Company and Public Service Company of New Mexico, have shuttered parts of their coal power plants and coal mines, and plan to continue to downscale operations.

The loss of associated high-paying jobs which require a great deal of highly specific technical skill, has resulted in dwindling population, decreasing median income, and a demographic shift towards an older population.

Entities within the county have made great efforts to diversify the economy and meet the economic demand of various market sectors (see the Economic Development Element), but few target industries can provide the same level of employment and income as the waning oil and gas industry.

3. LAND USE

GUIDING THE PHYSICAL GROWTH
OF SAN JUAN COUNTY

A. Introduction

The purpose of the Land Use Element is to guide the future pattern of land use in the unincorporated county area over the next 20 years. The Land Use Element presents a broad vision of current and future distribution and character of land uses. It is the “keystone” in the growth management plan, integrating all of the plan components. Consequently, it should be consistent with and supported by the other elements of the plan.

The Land Use Element contains more detail than other elements, in order to give guidance to land use regulations. Participants in the planning process raised concerns related to these subjects, and identified them to be among the most important and far-reaching, and as challenging opportunities available to San Juan County.

In addition, since New Mexico statutes require consistency in zoning and subdivision regulations relating to comprehensive plans, the Land Use Element in particular must guide and support development of any new regulations and amendments to existing regulations.

B. Planning Context

The economy and ecology of the county are tied to its land use. Given the importance of agriculture, outdoor recreation, and the energy and fossil fuel industries to San Juan County, it is imperative that land use policy support these endeavors without compromising the county’s identity or its future.

The original 2007 Growth Management Plan and subsequent 2012 update recommended that the County pursue zoning and other land use regulations. The County opted for a more incremental approach, adopting land use regulations that restricted adult entertainment uses and protected against nuisances such as trash, junk cars and substandard mobile home parks.

The overall planning process for this update to the Growth Management Plan solicited opinions from county officials and participants about

the desire for land use regulations and provided options for potential types of regulations.

C. Existing Conditions

Land Form

San Juan County is situated in the far northwest corner of New Mexico, in the Four Corners area. All of the county is on the west slope of the Continental Divide and part of the Colorado Plateau. All of San Juan County, except the west side of the Chuska Mountains and the southwest corner, is in the San Juan River drainage.

The valleys of the San Juan, Animas and La Plata Rivers, uplands and mesas characterize northern the county. Riparian areas, floodplains and generally flat bottom lands lie next to the rivers. Mesas are forested with predominantly piñon and juniper trees or with grasslands, depending on elevation and moisture. The Navajo Reservoir is a large body of water fed by the San Juan, Piedra and Los Piños Rivers of Colorado, and surrounded by piñon and juniper forest. It is located on the New Mexico/Colorado state line. Badlands are present in a number of areas of the county, due to highly erosive soils overlaying sandstone strata. The Bisti Badlands in the south central part of the county are the epitome of this land form, although there are many other such areas in the county. Chaco Wash is a prominent drainage to the south of the San Juan River, the basin for which covers much of the county. The Chuska Mountains are situated on the western border of the county and the New Mexico state line, and located in the Navajo Reservation. The highest elevation of San Juan County is in the Chuska Mountains. Shiprock is one of the outstanding volcanic peaks in the nation. Angel Peak is another popular summit to the south of Bloomfield. A number of natural arches are located in the Aztec area.

The map in Exhibit 3-1 shows the drainages, ridges and elevational ranges of the county. These physical features generally characterize the land forms. Address points (in red) show the settlement pattern in northern San Juan County. Most residents and businesses are located in the valley floors and nearby uplands.

Exhibit 3-1 Shaded Relief Map of San Juan County with Address Points

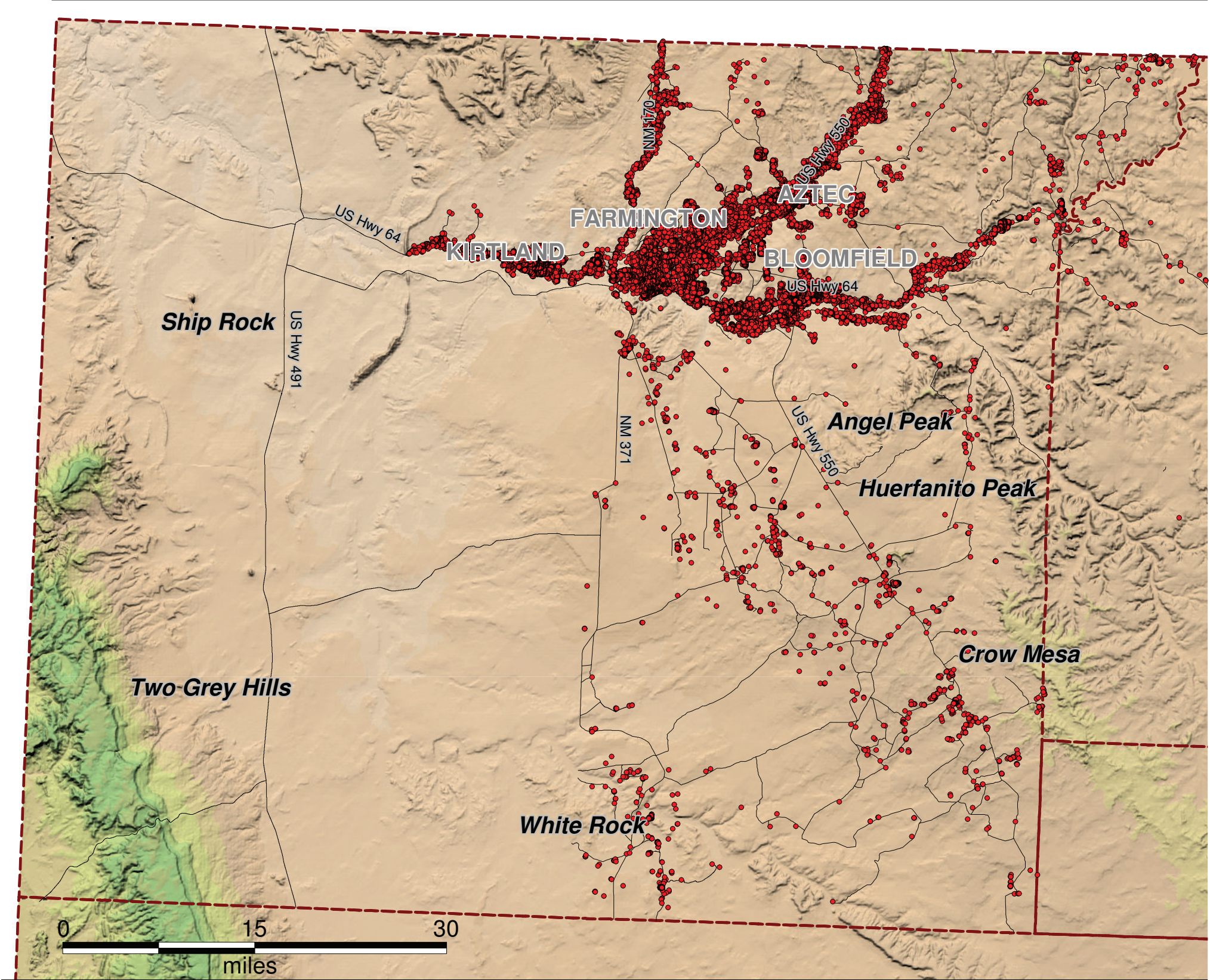
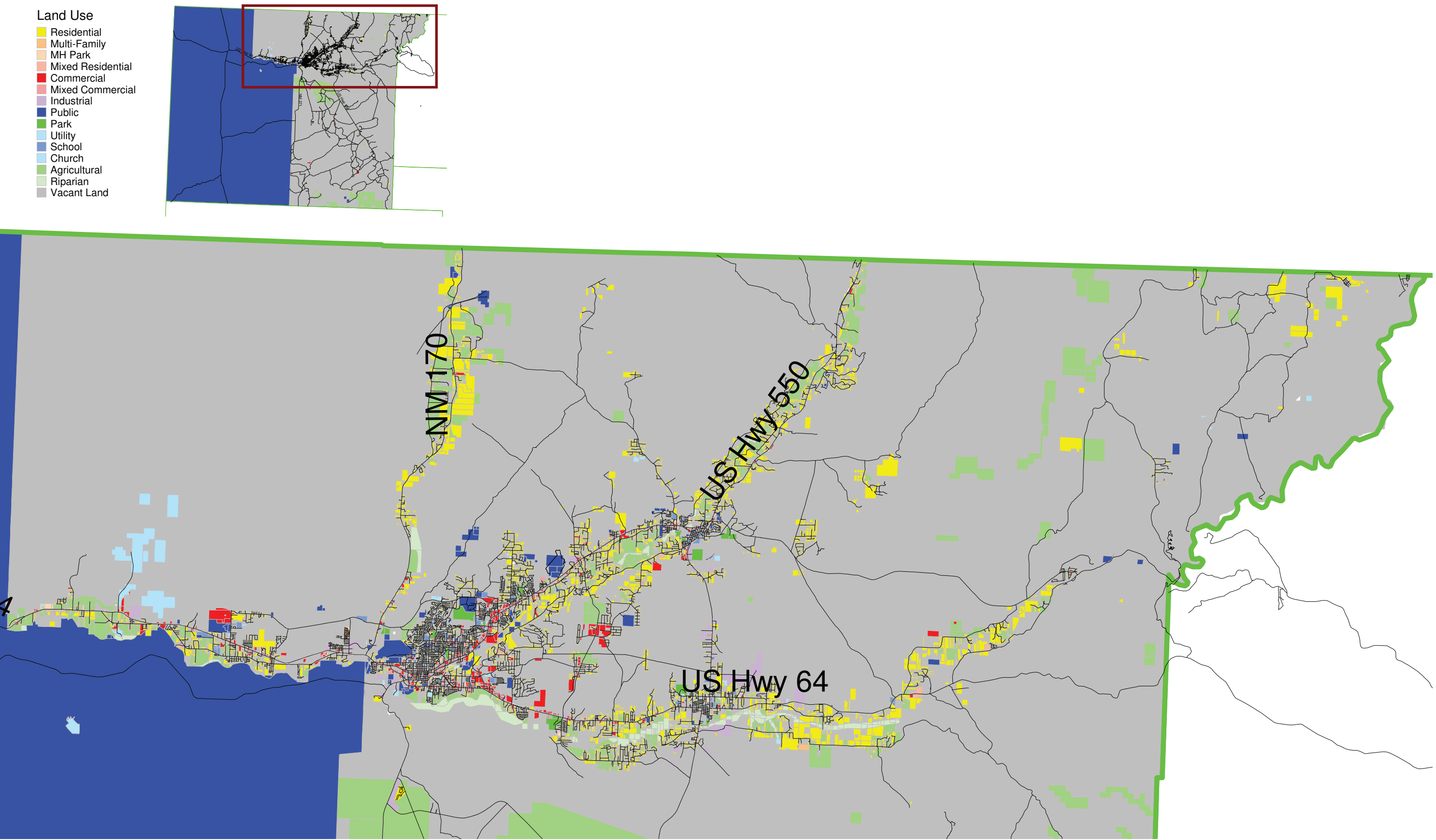


Exhibit 3-2 Map of Existing Land Use in San Juan County



Structures appear only in the northern county and checkerboard area of the Navajo Nation. Address points on the Navajo Reservation were not available.

Note that reservation land is not under the jurisdiction of San Juan County and this analysis does not separately determine land use for it.

Land Use

To determine land use in San Juan County, the planning team began with analysis of data provided by County administration. The planning team studied aerial imagery to achieve greater granularity, such as separating residential uses from an otherwise agricultural parcel.

Exhibit 3-2 illustrates land use in San Juan County, with an inset map of the northeast corner of the county. The table in Exhibit 3-3 identifies the total acreage devoted to each use.

The general land use pattern of unincorporated San Juan County is a mix of urban uses and irrigated agriculture in the valley floors. Various settlements are located in upland areas directly above valley floors and on mesas. Additional mixed urban development is clustered close to the cities, but mostly not quite contiguous to them. Placement of mixed retail and heavy commercial and industrial uses is largely in corridors along major roads, with some residential uses mixed in. Refineries are large industrial land uses clustered on the fringe of Bloomfield; other large industrial uses, principally the power plants, are located in the

Exhibit 3-3 Acreage of San Juan County by Land Use

Land Use Category	Aztec	Bloomfield	Farmington	Kirtland	Navajo Nation	Ute Mountain	Unincorporated County Land	Total
Residential	943	1,462	4,996	154			36,032	43,588
Multi-Family	31	23	200	1			114	370
Mobile Home Park	68	73	208	12			248	609
Residential Mix	20	16	22	16			1,074	1,149
Commercial	189	121	2,097	408			4,157	6,973
Commercial Mix	9	4	78	10			141	243
Industrial	99	885	359				1,189	2,533
Public	296	80	2,483	298	1,710,631	104,414	1,875	1,820,076
Park	336	178	615				31,688	32,817
Utility		15	32				2,832	2,879
School	128	132	359	2			262	884
Partial Exempt	82	73	320	29			743	1,247
Irrigated Agriculture	117	163	136				114,818	115,233
Riparian	137	184	440		19,190		18,334	38,285
Vacant Land	5,206	8,031	7,661	85			1,452,080	1,473,064
Total Acreage	7,663	11,439	20,009	1,016	1,729,820	104,414	1,665,587	3,539,948

Kirtland area.

As part of community-based planning efforts, more detailed study by the County is necessary. The study should identify community-scale land-use patterns, including more specific density ranges; where uses may be located in natural hazard areas; and compatibility of uses that are proximate to one another.

Planners recommend that the County's GIS team develop a more accurate existing land use inventory and GIS database based on the county assessor's database.

Land Ownership

San Juan County consists of over 5,500 square miles of land. The Navajo Indian Reservation and a small portion of the Ute Mountain Ute Indian Reservation occupy approximately 3,600 square miles, or 65% of the county land area. The Bureau of Land Management manages over 1,200 square miles of public lands, or approximately 23% of the county.

The eastern portion of the county is a patchwork of ownership, including the Bureau of Land Management, the Bureau of Reclamation, and land owned by tribal entities that is not considered reservation land.

Private land is a relatively small share of the county with approximately 360 square miles, or 6.5% of the land area. This impacts the county's ability to attract private investment, although the Bureau of Land Management and the

Exhibit 3-4 Land Ownership

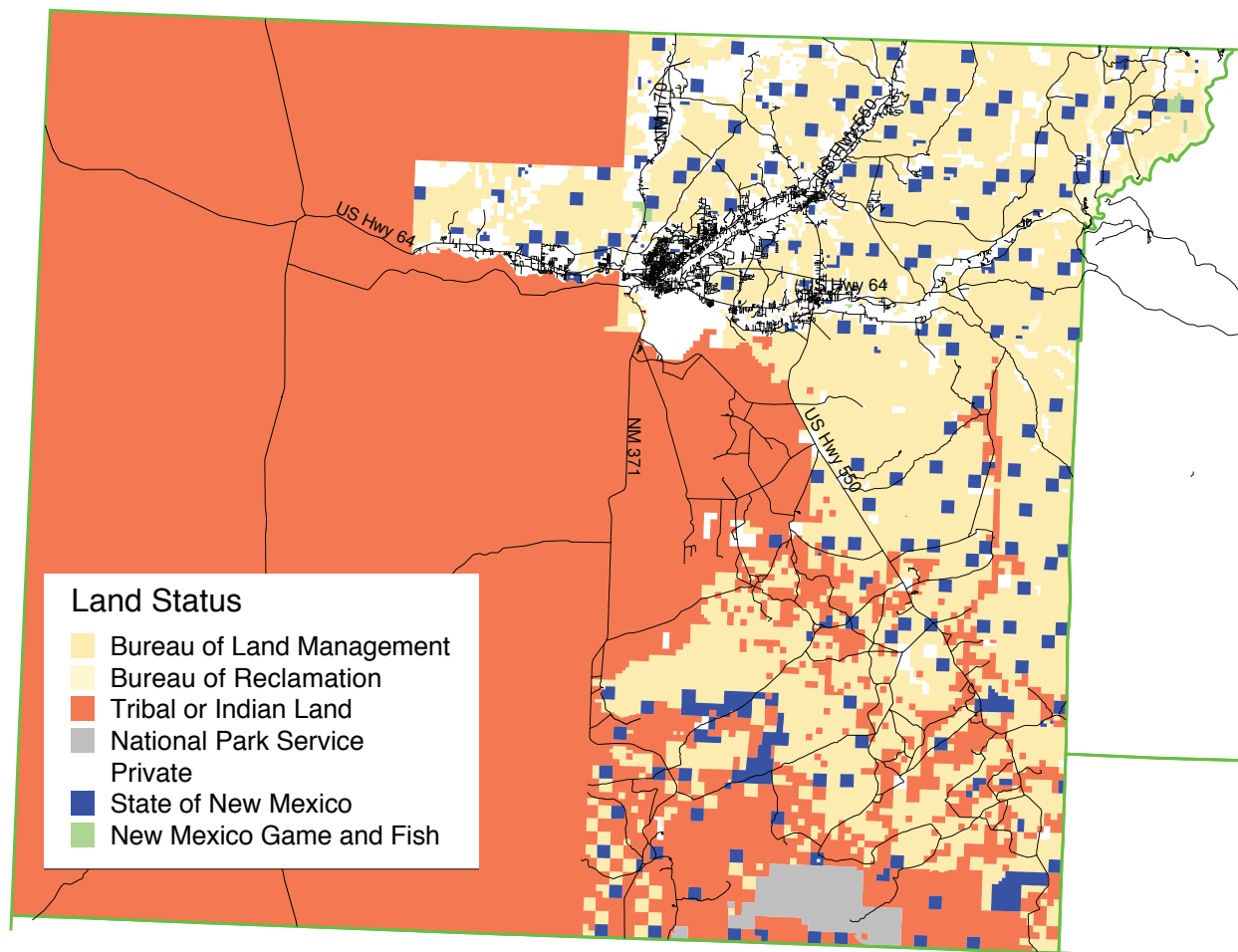
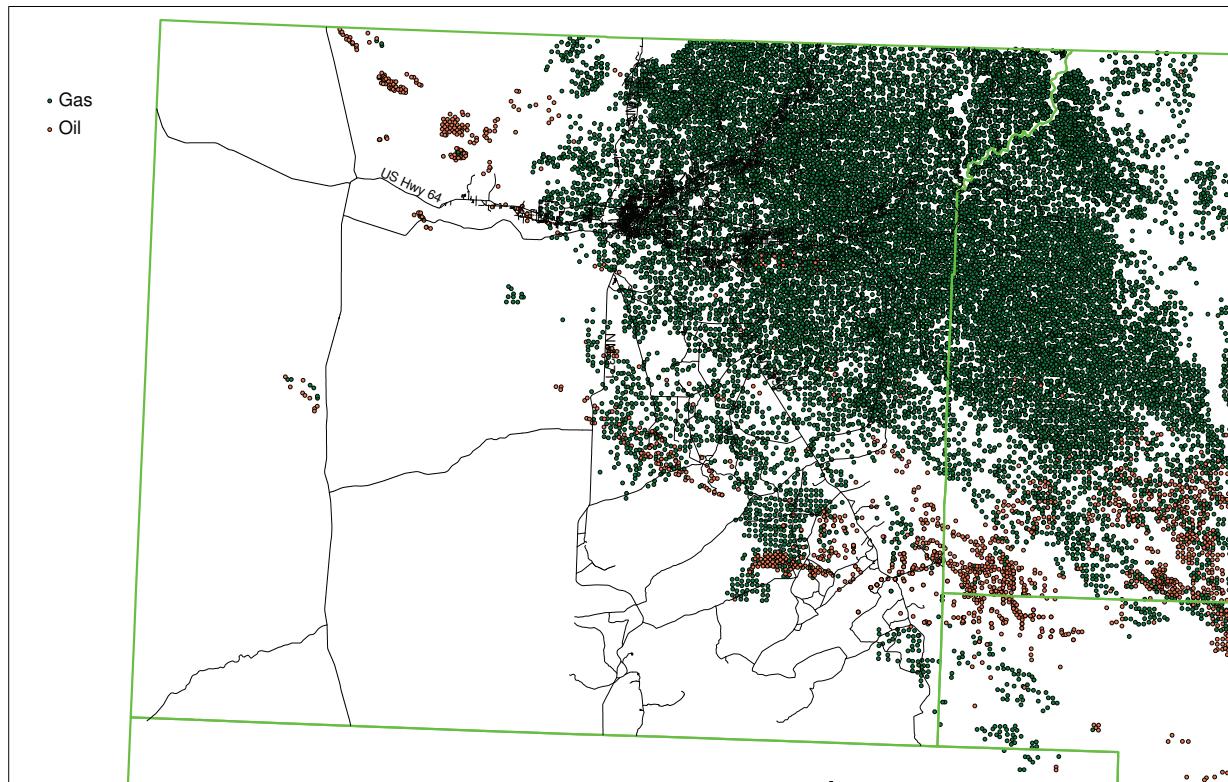


Exhibit 3-5 Scatter Map of Gas and Oil Wells



Bureau of Reclamation permit certain extraction industries to lease the land for their operations. Exhibit 3-5 shows a map of gas and oil wells.

Water and Agriculture

Two-thirds of the surface water in the state of New Mexico flows through San Juan County. Even though most of the water is not used locally, the availability of surface water has supported irrigated agriculture and a significant urban population. Alluvial soils deposited in the valley floors have been substantial assets supporting crop production. With water diverted from Navajo Reservoir, the Navajo Agricultural Products Industry (NAPI) has also successfully cultivated thousands of acres on mesas south of the San Juan River.

The New Mexico Office of the State Engineer estimated irrigated acreage in San Juan County in a 2010 report, as shown in Exhibit 3-6. Residents of the county irrigate approximately 85,000 acres of land. By comparison, this number was just over 73,000 in the year

2000; the number of flood-irrigated acres has decreased slightly, while the number of sprinkler-irrigated acres has increased substantially. The NAPI project alone accounts for nearly 64,000 acres (up from just under 50,000 in 2010), accounting for three quarters of irrigated farmland in the county.

Ditch companies, organized by farmers to divert water from rivers into channels, provide irrigation water to much of the valley floors. In 1911, 260 irrigation ditches and 10,000 acres were under cultivation. By 1938, over 24,000 acres were under agricultural cultivation. Fruit orchards had been one of the prominent crops in the early 20th century, with over 1,900 acres in production in 1938. Due in part to irregular freezes and thaws, orchard production was inconsistent, and orchard acreage has declined. Urban development in areas where there had been many orchards also led to the decline in orchard acreage. While fewer ditches remain, production of alfalfa, hay and a wide variety of other crops is a strong economic activity in the county. The Bolack Farm, southeast of

Drainage	Flood Irrigated	Sprinkler Irrigated	Total
Animas River	3,665	1,158	4,823
Chaco Canyon	372		372
Hammond Irrigation District	244	2,810	3,054
La Plata River	2,240	414	2,654
Pine River Irrigation District	325	81	406
San Juan River	8,297	1,616	9,913
Navajo Indian Irrigation Project		63,832	63,832
Total Acreage	15,143	69,911	85,054

Exhibit 3-6 Irrigated Farmland in San Juan County

Source: New Mexico Water Use by Categories 2010, by Longworth, John W., P.E.; Valdez, Julie M.; Magnuson, Molly L., P.E.; and Richard, Kenneth, New Mexico State Engineer Office, Technical Report 54, October 2013.

Farmington, has demonstrated at the New Mexico State Fair the remarkable productivity of San Juan County irrigated agriculture over several decades.

The importance of irrigated farming and ranching land uses in the county also carries economic value. According to the 2012 Census of Agriculture compiled by the United States Department of Agriculture, San Juan County farms had total sales of \$71.3 million, up from \$57.2 million in the 2007 census. Vegetables, melons, potatoes, and sweet potatoes represent the majority of these sales, at \$21.2 million. Livestock and poultry account for about \$7.9 million in sales, of which \$5.5 million comes from cattle and calves.

Cattle ranching is a major activity on both private and public lands. In 2012, the county had over 20,000 cattle and calves, although this number has declined slightly with each census. There were over 4,500 horses and ponies, the second highest of any county in the state after McKinley County. The county's 19,000 goats represent over 20% of all goats in the state (again second only to McKinley County).

D. Concepts for Positive Metropolitan Growth in Northern San Juan County

The boom and bust nature of San Juan County's economy leads to alternating periods of growth and stagnation, which impact its development patterns. Land use changes have resulted from sporadic population growth through the development of new residential areas, new and expanded employment sites, new and improved roads, and other services. During periods of growth, the county has grown at a faster rate than the four municipalities, but lacks the urban infrastructure and services that the cities provide, resulting in "leapfrog" development rather than orderly, uniform expansion. The County and other entities (including utility providers) who must extend their services to new development encounter costly logistical challenges.

Without appropriate land use protections, this haphazard growth reduces protections for property owners from incompatible uses, excessive stormwater runoff, or risk of flooding. Sporadic development also poses challenges for providing law enforcement and emergency response services.

The County should coordinate with the other governmental bodies in the area to encourage

new development adjacent to existing development, achieving greater efficiency in service provision. Furthermore, this approach would preserve the rural character of the undeveloped portions of the county.

The 2007 Growth Management Plan identified several growth areas to target investment, “with an orderly mix of residential, commercial, employment, and public facilities and services.” The plan recognized that undeveloped upland areas near major roads and employment provide opportunities for new growth. The plan referred to these as Village activity centers or Village clusters:

Village activity centers should be developed with higher density residential, including attached, multi-family housing, and clustered retail, office, and public facilities such as schools, libraries, parks or community centers. Streets interconnected between subdivisions and village centers, bicycle paths or on-street lanes, and sidewalks are needed to provide good access in the growth areas for all modes of travel. All such county growth areas should retain some aspects of their “rural character,” which might be defined by the community members somewhat differently for each community.

Village clusters can consist of a variety of lot sizes and housing types, [such as in Flora Vista, Crouch Mesa, and Navajo Dam]. Village activity centers can consist of retail stores on main roads next to parks and plaza areas, as well as public schools. They would be largely internal to development, with many streets and trails providing access to them. Open space and trails can be designed as scenic breaks very close to neighborhoods. They would also protect arroyos, wildlife corridors, areas with good views, and/or characteristic grassland or wooded vegetation. (2007 GMP page IV-15)

E. Guidance for Land Use Regulations

Existing Regulations

As recommended by previous growth management plans, the County has adopted a number of ordinances to regulate land use in San Juan County:

- Ordinance No. 72 regulates junk vehicles and junk mobile homes, and establishes registration fees and site requirements for junkyards and recycling centers.
- Ordinance No. 73 limits the disposal of trash to licensed landfills, and enforces against trash and refuse accumulating on private property.
- Ordinance No. 76 establishes requirements for Manufactured Home Parks and Recreational Vehicle Parks.
- Ordinance No. 85 regulates the location of adult entertainment businesses and establishes a permitting process for them.

Plan participants have expressed a desire to establish an ordinance requiring an earthworks permit for any major earth disturbance, such as for gravel pits, mining operations, or substantial site development. These activities generate noise and vibration, dust and air pollution, and heavy truck traffic that can negatively impact surrounding properties. A lack of maintenance of disturbed land leads to increased erosion, poorer water quality in rivers, negative impacts to neighbors, and greater costs to maintain county roadways.

This ordinance must clearly define the scale and the type of project that will require permitting, and circumstances that would exempt activity from requiring a permit. The County must establish a process for permit applications, exemption applications, and appeals.

Plan participants have identified an ongoing issue regarding the disposal of junk mobile/manufactured homes. The County may want to

pursue funding options, such as grant funding, increases in mobile/manufactured home tax, and/or a disposal fee, to fund additional county disposal personnel and/or other programming to assist with the disposal of condemned mobile/manufactured homes.

San Juan County has adopted subdivision regulations that are closely modeled after the New Mexico Subdivision Act (see Subdivision Regulations below). The County also adopted a floodplain ordinance which addresses development activities in flood-prone areas as delineated by Federal Emergency Management Agency (FEMA) mapping.

In addition to county regulations, state and federal environmental regulations require permits for certain land use and development activities. The Clean Water Act requires a Stormwater Pollution Prevention Plan (SPPP) permit for disturbance activities that affect one or more acres of land. The County does not comply with current EPA Municipal Separate Storm Sewer System (MS4) requirements.

Statutory Enabling for County Zoning

San Juan County does not have zoning regulations. Input from the steering committee, county staff, and survey respondents has identified zoning as a potential solution to some of the county's land use concerns.

The power for counties to zone in New Mexico is granted by §3-21-1 NMSA 1978, which states:

- For the purpose of promoting health, safety, morals or the general welfare, a county or municipality is a zoning authority and may regulate and restrict within its jurisdiction the:
- height, number of stories and size of buildings and other structures;
 - percentage of a lot that may be occupied;
 - size of yards, courts and other open space;
 - density of population; and

- location and use of buildings, structures and land for trade, industry, residence or other purposes.

The ability of municipalities and counties to zone only applies to private, fee simple land. This ability does not extend to public lands (including those managed by the Bureau of Land Management, U.S. Forest Service, and National Park Service or Indian Trust and Allotment lands).

Components of a Zoning Code

Although zoning ordinances vary greatly, most include the same standard components. General provisions include:

- A statement of purpose describes what the jurisdiction seeks to accomplish through the use of the ordinance.
- Applicability provisions identify the geographic area covered and specific situations that are covered or exempt from the ordinance.
- Definitions explain terms that may be ambiguous or which are unique to zoning.
- Zoning map provisions establish the procedures for creating and updating an official zoning map, if one is used.
- Administrative provisions describe how the zoning code will be administered by the jurisdiction's governing body, the planning commission, the zoning board, and/or the zoning or planning staff.

Public Opinion about Land Use Regulations

The potential for incompatible land uses has increased with economic and population growth. Residents have expressed concern about the potential for incompatible uses adjacent to their properties that could diminish their property value or their enjoyment of their land. In an online public survey, 57% of respondents stated that they were worried about noncompatible

land uses affecting their property value or ability to finance.

Members of the steering committee and San Juan County staff described complaints by the public about specific uses that impacted residential neighborhoods — gravel pits, animal husbandry, veterinary clinics, and others — and also mentioned specific nuisances that incompatible uses caused, such as dust, odors, excessive light or noise, or unsightly debris.

While residents care deeply about maintaining their property values and their way of life, they also highly value the freedoms they associate with living in unincorporated San Juan County, including the ability to use their land as they see fit. Any land use regulations should seek a balance between protecting property values from incompatible adjacent uses and preserving property owners’ freedoms to develop and use private land as they desire.

Potential Zoning Systems

Zoning ordinances have guided development and growth in the United States for over a century. In that time, several different systems have evolved to provide governments, landowners, and developers with flexibility in approaching land use.

Traditional Zoning

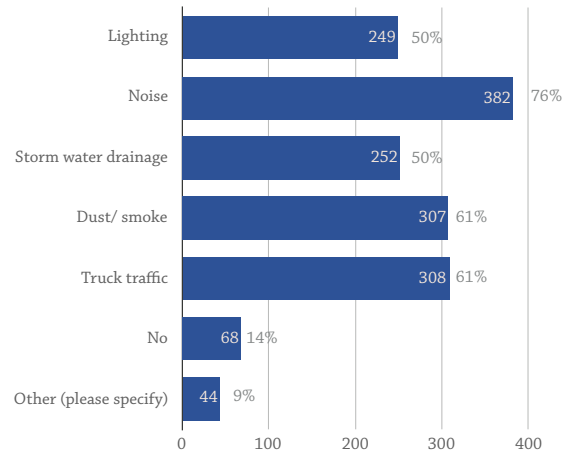
Traditional zoning, also known as “Euclidean zoning” or “use zoning,” comprehensively divides the jurisdiction into zoning districts with different permitted uses. Zoning ordinances typically organize these uses into a “use table,” which outlines, by zone, which uses are:

- Permitted (allowed and intended uses)
- Prohibited (uses inappropriate for zone)
- Conditional (uses that must meet certain criteria, sometimes including approval during a public hearing)

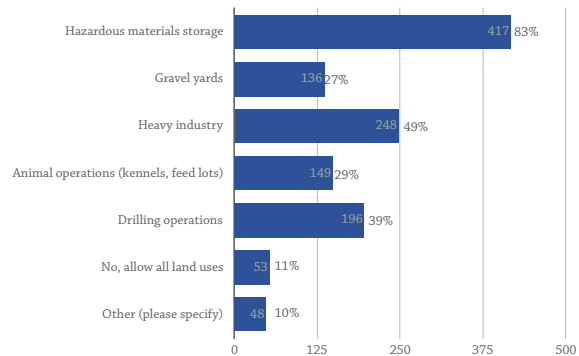
Permitted uses are often cumulative, such that the highest zone (usually single-family residential) is the most restrictive and lower zones are less restrictive (i.e., they permit more types of uses, including those permitted in

Exhibit 3-7 Results of Survey Questions about Land Use Regulations

Are there issues that property owners should be required to mitigate if they are close to residential neighborhoods? (select all that apply)



Are there land uses that should not be allowed near residential neighborhoods in the county? (If yes, select all that apply):



higher zones), with heavy industrial uses usually being the least restrictive. Alternatively, the zones may be exclusive, allowing only one type of use per zone.

Typical zones in a traditional county zoning code include A-1 and A-2 Agriculture Residential, Residential, and Commercial. It is important to customize any model code to assure that the code supports the local land use objectives.

Other, more flexible regulatory systems have been developed as traditional zoning proved too rigid to effectively accommodate growth.

Performance Zoning

Performance zoning, also called “impact zoning” or occasionally “points-based zoning,” concerns

itself with the spillover effects of land use on adjacent properties and the community. This system establishes criteria to measure the effects of a certain land use and may use a points system to assess the criteria. If the use meets the criteria sufficiently, it is allowed. The main concern related to performance zoning ordinances is that the criteria may be vague or over-broad. Standards must be workable and specific.

John Ottensmann writes in “Market-Based Exchanges of Rights within a System of Performance Zoning”¹:

Performance zoning represents an alternative to traditional zoning. It provides greater flexibility by requiring that any development meet specified performance standards, rather than meeting detailed requirements as to allowed uses and the characteristics of those uses. The flexibility allowed by performance zoning should allow greater opportunity for market forces to affect land use and thus provide for greater economic efficiency.

A performance standards system could primarily protect nearby residential uses in predominantly residential areas and mixed use areas that are a combination of single family residential with agriculture, home occupations, and business activities that exceed the intensity of home occupations, such as trucking operations, storage, auto repair shops, or salvage operations.

The performance standards approach presumes the basic property right to have a single family homes (site-built or mobile/manufactured homes) and many other uses, and does not regulate lot size density, building site location, setbacks, and any other such site standards. Rather, performance standards seek to limit the impacts on certain neighboring property from nuisances such as:

- Traffic generation (such as number of trips or types of heavy vehicles)
- Noise (decibels or hours of operation)
- Odor
- Vibration
- Exterior lighting and glare
- Toxic and hazardous materials
- Fire and explosion hazards
- Trash generation and management
- Water use or storm drainage

Performance standards need not adopt elements of traditional zoning such as zoning district maps or use tables, but pairing the two can provide San Juan County with greater discretion to guide its growth by prohibiting certain uses that would impede future development.

Overlay Zoning

Governing entities often use overlay zoning when the jurisdiction chooses to regulate an area for a certain purpose that spans multiple land uses, for instance, historic preservation or conservation of an environmentally sensitive area. Hydrologic zoning — establishing maximum densities for development in districts mapped according to generalized groundwater resources — is another example. The existing land uses may continue, but an overlay zone imposes restrictions on the properties related to the overlay zone purpose. Some new development or changed land uses may be limited because of the restrictions of the overlay zone. Overlay zones sometimes use design codes addressing characteristics of architectural style or site design to protect community character that is special to an area.

Planned Development Codes

Planned development codes may require developers to submit information on a larger project and work with the jurisdiction, which may condition approval of the project on certain changes. This sort of code, which often unifies zoning and subdivision regulations, allows flexibility and the opportunity for negotiation between the local government and the developer.

¹ Ottensmann, John R. (1999-2000). “Market-Based Exchanges of Rights within a System of Performance Zoning.” Indiana University, School of Public and Environmental Affairs. Retrieved from http://www-pam.usc.edu/volume1/v1i1a4s1.html#ottensmann_contents on August 16, 2018.

Exhibit 3-8 Advantages and Disadvantages of Different Zoning Systems

Zoning Type	Advantages	Disadvantages
Traditional Zoning	• Familiar to professionals, public officials and the public • Easy for staff to implement and the public to interpret • Flexibility for varied design within the limits of the use and dimensional standards	• Lack of flexibility to address different site characteristics and surroundings • Allows for uncertainty about product design
Performance Zoning	• Flexibility to vary uses, density, and intensity of development • Addresses impacts of development	• May not sufficiently address site-specific conditions or constraints • Difficult to implement because of complex calculations and discretion of decision-making body
Overlay Zoning	• Flexibility to impose specific requirements for area- specific or site-specific needs	• If different zones overlap, may create confusing requirements
Design Codes	• Easy to understand • Does not limit use of land	• Hard to apply to built-out areas • Does not provide much design flexibility
Planned Development Codes	• Allows for creativity in design and mixed uses • Can obtain public benefits as part of development negotiation • Can involve all parties in solutions to problems	• Decision-making body has a great deal of discretion • Negotiations may result in negative impressions for public
Form-Based Codes	• Creates a predictable physical result • Can codify aspects that are appealing about existing physical design	• Does not outline permitted land uses, possibly leading to incompatible uses next to one another. Could be difficult to understand for people who are used to traditional zoning • May include so much detail that it would be too strict for some areas or communities

Jurisdictions may also use some combination of these zoning types, or they may experiment with ordinances that cannot be classified as any of these types. They may also implement zoning in only certain areas of the county, rather than implementing it across the entire jurisdiction.

Form-Based Codes

Form-based codes are a relatively new tool. Rather than designating zones to separate different land uses, form-based codes focus on the physical character of development. Form-based codes often include the following:

- A regulating plan designating locations where different building form standards apply
- Building form standards controlling the configurations, features and functions of buildings
- Architectural standards controlling architecture, materials and quality
- Public space and street standards regulating design of these elements, including sidewalks, travel lanes and trees, and other items lining the streets
- A clearly defined administrative process

Comparison of Land Use Regulation Systems

The table on the following page provides an overview of advantages and disadvantages of each system of zoning.

Other tools that are commonly used together with zoning to regulate land use include subdivision ordinances (discussed below), which include platting controls and design standards such as street layout; building permit requirements; and clearing and grubbing regulations. Some jurisdictions use growth management programs such as: planned growth programs, which cap the number of new units allowed in a jurisdiction over a period of time; growth boundary restrictions, which delineate areas for growth and prohibit development outside of those areas; and concurrency

requirements, which condition building permits or plat approval on the existence of sufficient public improvements. Trash regulations, open burning controls, mobile home controls, environmental regulations, transfers of development rights (TDR) laws, conservation easement regulations, and impact fee requirements are all regulations that affect land use, although they may not address it directly.

Recommended Regulatory Approach

The introduction of performance standards at this juncture is an incremental, logical extension to the County's individual ordinances approach enacted in 2012 for adult entertainment, mobile homes, and trash and junk (see "Existing Regulations" above).

State law prohibits San Juan County from enacting more stringent land use regulations than those that appear in the New Mexico Subdivision Act unless those regulations appear in an adopted comprehensive plan.

Adoption does not obligate the County to enact or abide by any recommendation set forth in this document.

The County may choose to establish conditions that would trigger or exempt a property's obligation to meet a particular performance standard (e.g., proximity to residential properties, or development within an established industrial area). Alternately, the County may consider establishing zones of activity which explicitly allow or prohibit certain uses or activities, employing a hybrid approach between performance standards and traditional zoning.

The County must also consider how performance standards apply to oil and gas wells. It may choose to exempt them outright, or

“grandfather” in existing wells while applying standards to new wells, or establish a proximity to existing residences (whether a distance to a single home or a concentration of a certain number of dwelling units per acre) that would trigger application of the standards.

Following the performance standards approach may entail a unified framework that encompasses all these ordinances. The County should consult with the county attorney about these points.

Administration and Implementation

Adoption of a zoning code is not the end of the process. Staff, planning commissioners, and elected officials must be trained to use the regulations. County planning and zoning staff in particular must be trained to write recommendation reports, present issues to the zoning board and/or planning commission, work with the public, and understand the relationships between the zoning code and other ordinances and plans. Existing ordinances and plans, such as a subdivision ordinance, may need to be reviewed and amended to comply with the new zoning code. A zoning official will need to periodically tour areas of the county, receive complaints from people reporting zoning violations, explain the code to property owners and others, cite code violators, and pursue legal action as necessary through the county legal department. The county may need to write job descriptions, hire additional staff for new duties, or create a planning commission.

Furthermore, it is necessary to remember that the regulations are a dynamic document that should be continually reviewed and updated as necessary.

F. Subdivision Regulations

The New Mexico State Subdivision Act (§47-6 NMSA 1978) provides the legal framework by which landowners in unincorporated portions

of the state may subdivide their land. The act includes provisions for right of access, utility easements, terrain management, and other stipulations intended to protect residents and preserve property values. The act also puts forth the proper legal processes by which landowners may subdivide their land. The statute permits counties the authority to establish additional regulations provided such ordinances are recommended by a comprehensive plan.

San Juan County has its own subdivision regulations which largely mirror the State’s subdivision act. County staff and members of the public have expressed concern that property owners and developers have exploited loopholes in the subdivision regulations, namely those exempting family divisions (§47-6-2-M-9) and those applying different standards to so-called “summary” subdivisions (§47-6-11-I), both of which are described in greater detail below.

According to reports from San Juan County staff, residents have purchased land not knowing the parcels were formed by these methods. Because they were not subject to subdivision guidelines, these parcels may have inadequate site drainage or lack access to a public road. Public Works representatives attested to the fact that some private roads accessing these parcels — in effect, driveways — have not been built to county specifications and have washed away in floods, stranding residents and requiring costly and occasionally perilous public intervention.

Family Exemptions

The New Mexico Subdivision Act identifies 13 types of parcel line modifications that it excludes from the definition of a subdivision. Among them is:

... the division of land to create a parcel that is sold or donated as a gift to an immediate family member; however, this exception shall be limited to allow the seller or donor to sell or give no more than one parcel per tract of land per immediate family member.

Because these parcel divisions do not meet the definition of a subdivision, they are exempt from complying fully with county subdivision regulations.

County staff have reported that some landowners apply for a family exemption, but rather than transfer ownership to their family members, they sell the newly divided parcels to others.

The County recognizes the importance of landownership as a means for families not only to accrue and pass on wealth but also to preserve heritage and tradition. The County seeks to meet the needs of future landowners without placing undue burden on those seeking to pass ownership of their land to their family members.

The New Mexico Subdivision Act grants counties the authority to develop more stringent subdivision regulations provided that the county's comprehensive plan (i.e., this document) specifically calls for them:

Nothing in the New Mexico Subdivision Act shall be construed to limit the authority of counties to adopt subdivision regulations with requirements that are more stringent than the requirements set forth in the New Mexico Subdivision Act, provided that:

- (1) the county has adopted a comprehensive plan in accordance with Section 3-21-5 NMSA 1978;
- (2) the comprehensive plan contains goals, objectives and policies that identify and explain the need for requirements that are more stringent; and
- (3) the more stringent regulations are specifically identified in the comprehensive plan.

This report recommends modifying the county subdivision regulations to establish the following requirements to approve a family exemption in unincorporated San Juan County:

- The parcel division must establish a “right of access” easement — a portion of the land set aside to allow all parcels to access an adjacent roadway. This easement must be of a sufficient width and slope (to be established by the County) to permit a future roadway, although the property owner does not need to develop, grade or pave the easement.
- The parcel division must also establish a utility easement connecting each parcel to existing utility lines, or note that existing utilities adjacent to the parcels do not exist.
- Family divisions must immediately title the deed(s) to the family members identified as recipients of the new parcels, or must stipulate the transfer at a future time (such as in a will). Land transfers to minors will be subject to applicable laws such as the New Mexico Uniform Probate Code (NM ST §45) or the Uniform Transfers to Minors Act.
- The landowners shall not further transfer ownership or subdivide the land for a minimum of five years. The County may choose to identify exemptions to this stipulation (such as the death of the landowner). The County must establish a process by which property owners may appeal to the County Commission or another appropriate body to circumvent this stipulation.

Summary Subdivisions

The New Mexico Subdivision Act classifies subdivisions into multiple types. A type-three subdivision “... means any subdivision containing not fewer than twenty-five but not more than four hundred ninety-nine parcels, any one of which is less than ten acres in size,” whereas a type-five subdivision “... means any subdivision containing not more than twenty-four parcels, each of which is ten acres or more in size.” The act — and the County's subdivision regulations — specify that any type-three subdivision of five parcels or less may follow the same approval as a type-five subdivision, passing through an expedited process known as “summary review” (hence the name “summary

subdivision”).

San Juan County’s current summary review process imposes far fewer requirements than the standard subdivision application process. For instance, per §6.2.8 of the County’s Subdivision Standards:

No separate water supply plan, water quality plan, liquid waste disposal plan, solid waste disposal plan or terrain management plan shall be required beyond that which is necessary to complete the disclosure statement. The Subdivider shall not be required to provide improvements such as irrigation water, fire protection, fencing, water, liquid waste systems, and solid waste disposal unless otherwise required by law.

As with family divisions, this loophole has the potential to result in situations in which future landowners may be unaware of the process by which their parcel came into being. Residents of summary subdivisions have complained to County staff of a lack of maintenance on their street, unaware that it was a private roadway not under County ownership or jurisdiction.

Unlike family divisions, summary subdivisions occur ostensibly for the purpose of developing and/or selling the land for profit. Costs associated with compliance may be recouped through land sale.

This report proposes three potential options to revise County subdivision regulations regarding summary subdivisions:

Option 1: Revise Summary Process

- Landowners must demonstrate proof of adequate water supply and utility access for the proposed development
- Landowners must demonstrate that each parcel meets eligibility requirements for a septic permit, although one need not be obtained at the time of subdivision approval

- The developer must either construct a road according to county standards or provide bonding for the future construction of such a road. The intention of this provision is that should the County choose to acquire the roadway at a future date and incorporate it into its road inventory, it may do so without substantial modifications to the roadway.
- A stormwater drainage plan must accompany the application. The application must receive approval by the county floodplain manager.

Option 2: Redefine Summary Subdivision

- To qualify for the summary review process, all parcels must be adjacent to an existing public right-of-way with access to a roadway and utilities.
- Lot arrangement must be such that there will be no foreseeable difficulties, for reasons of topography or other conditions, in securing building permits to build on all lots

Option 3: Remove Summary Review Process

- The County will no longer follow the summary review process, and will require all type-three subdivisions to follow the same process, regardless of the number of parcels.

G. Extraterritorial Planning, Platting and Zoning

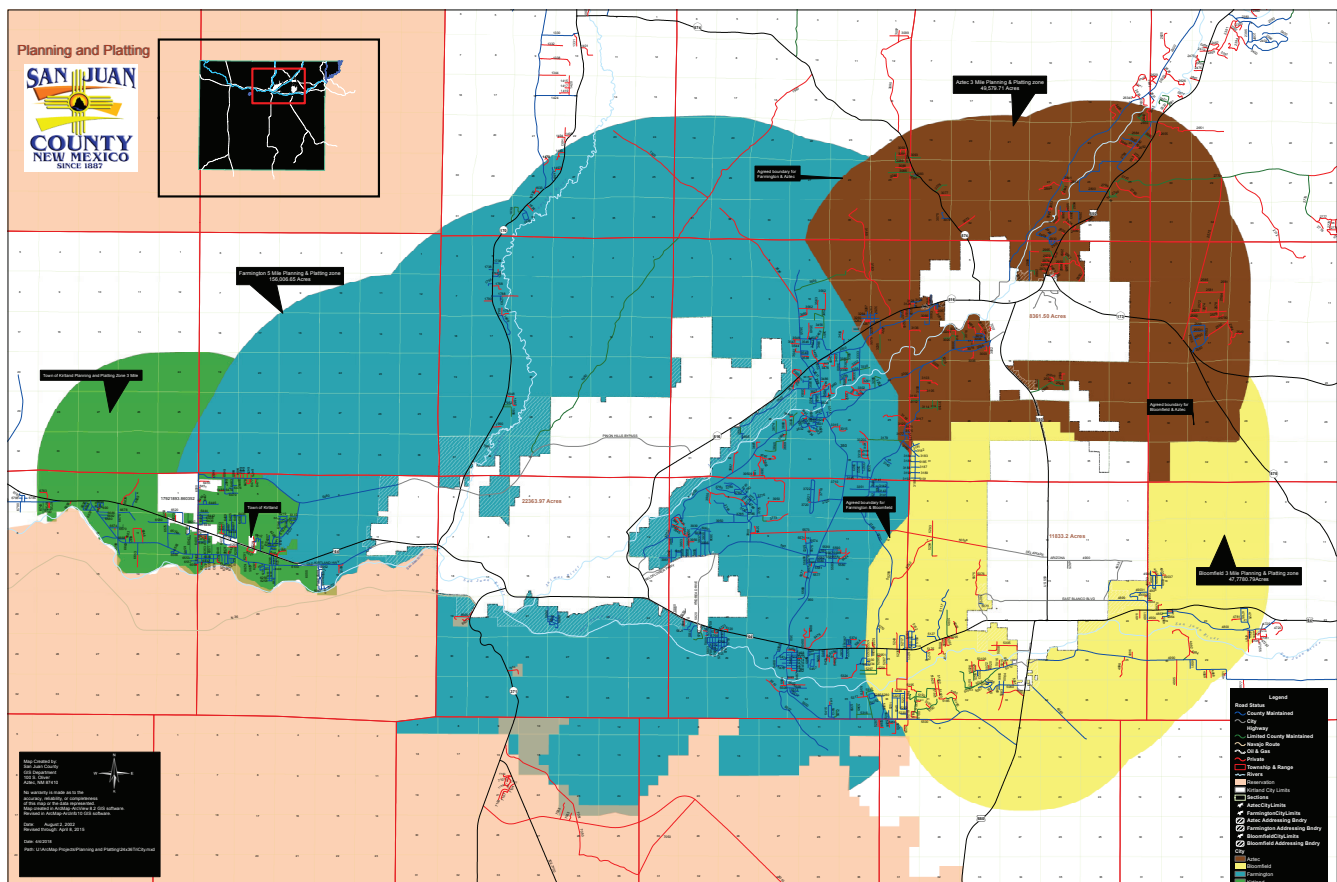
Extraterritorial planning, platting and zoning reflect the responsibility shared among the county and cities to plan together for unincorporated areas in proximity to cities. Comprehensive plans developed by both the city and county may address the extraterritorial area — or, alternately, a single plan for an area might be adopted jointly by both jurisdictions. Both municipalities and counties are required to regulate subdivisions. Platting, or the

Statutory Authority for Extraterritorial Planning, Platting and Zoning

- Establishment of boundaries of the extraterritorial planning and platting jurisdiction in Section 3-19-5 NMSA 1978
- Subdivision regulations in municipal planning and platting jurisdiction in Section 3-19-6 NMSA 1978

- Master planning in Section 3-19-9 NMSA 1978
- Concurrent jurisdiction of subdivisions in Section 3-20-5 NMSA 1978
- Extraterritorial zoning in Section 3-21-3 1978
- Extraterritorial zoning and subdivision regulations in Section 3-21-3.1 NMSA 1978: Counties and municipalities are enabled, but not required to establish a joint municipal county zoning authority for purposes of adopting, amending and regulating subdivision regulations. Section 3-21-3.1 states: “... such subdivision ordinances and regulations may define ‘subdivision’ in a manner which differs from the definitions set forth in Subsection A of Section 3-20-1 NMSA 1978 and in Subsection I of Section 47-6-2 NMSA 1978” where county subdivision exemptions are defined.

Exhibit 3-9 Planning and Platting Areas in the County



Extraterritorial Areas in San Juan County

Consistent with state statutes, jurisdictional areas for extraterritorial planning and platting in San Juan County are:

- Territory within five miles from Farmington city limits
- Territory within three miles from Aztec and Bloomfield city limits
- Territory within 1 mile from Kirtland city limits

State statutes enable establishing jurisdictional areas in San Juan County for extraterritorial zoning for:

- Territory within two miles from Farmington city limits
- Territory within one mile from Aztec and Bloomfield city limits
- Territory within 1 mile from Kirtland city limits

County/city agreements can modify distances for extraterritorial jurisdictional areas. Section 3-19-5(C) NMSA 1978 states that the planning and platting jurisdiction shall terminate equidistant from the boundary of each municipality. Exhibit 3-9 shows that application to the extraterritorial planning and platting areas in San Juan County. Most of the urbanized areas of the unincorporated county are within the extraterritorial planning and platting areas.

Policies governing extraterritorial areas occasionally conflict with one another or introduce confusion about which municipality maintains jurisdiction over which land. The County should coordinate efforts to revise these policies for better clarity, especially in light of the recent incorporation of the City of Kirtland. The revised policies should better define each municipality's roles, responsibilities and limits regarding extraterritorial jurisdiction.

H. Annexation

Annexations have occurred in the cities' extraterritorial areas. Cities' annexation policies tend to vary over time and may not be adopted or otherwise made explicit. Cities are usually reluctant to annex areas where the costs for new facilities and services appear to exceed a gain in revenues. If a city's water or sewer treatment plants were near or exceeding capacity and annexation would strain those plants, the city would tend to reject annexation. Undeveloped areas and commercial corridors often appear most attractive to cities for annexation.

Islands of unincorporated areas surrounded by cities present problems for providing services. For example, Farmington has not annexed Totah Vista, located on the south side of Farmington. The sheriff's department provides law enforcement there, and must travel through the city to reach the community. This delay in response is inefficient and potentially hazardous.

Goals and Policies

1. Protect property values and public health while preserving property owners' rights and freedoms

- a. Consider enacting performance standards to reduce or mitigate certain impacts on neighboring properties
 - i. Develop a permit system for activities that may impact neighbors in parameters such as: traffic generation (e.g., number of trips or types of heavy vehicles); noise (decibels or hours of operation); odor; vibration; exterior lighting and glare; toxic and hazardous materials; fire and explosion hazards; trash generation and management; and water use or storm drainage
 - ii. Establish conditions that would trigger or exempt a property's obligation to meet a particular performance standard
 - iii. Define specifically how the permit system applies to oil and gas wells close to or remote from residential areas
 - iv. Consider at a later date whether to establish zoning districts to give further guidance on performance standards and allowed uses

2. Adopt county ordinances to guide certain types of subdivisions and divisions of land exempt from the definition of subdivisions in San Juan County

- a. Modify the requirements for Family Exemption approval
 - i. The parcel division must establish a "right of access" easement — a portion of the land set aside to allow all parcels to access an adjacent roadway. This easement must be of a sufficient width and slope (to be established by the County) to permit a future roadway, although the property owner does not need to develop, grade, or pave the easement.
 - ii. The parcel division must also establish a utility easement connecting each parcel to existing utility lines, or note that existing utilities adjacent to the parcels do not exist
 - iii. Property owners dividing land for family transfer must immediately title the deed(s) to the family members identified as recipients of the new parcels. The County may choose to allow stipulations for transfer at a future time (such as in a will). Land transfers to minors will be subject to applicable laws such as the New Mexico Uniform Probate Code (NM ST §45) or the Uniform Transfers to Minors Act.
 - iv. The landowners may not further transfer ownership or subdivide the land for a minimum of five years. The County may choose to identify exemptions to this stipulation (such as the death of the landowner). The County must establish a process by which property owners may appeal to the County Commission or another appropriate body to circumvent this stipulation.
- b. Revise the Summary Review process for so-called "summary subdivisions" to one of the three following options:
 - i. Option 1: Revise Summary Process.
Landowners must demonstrate proof of adequate water supply and utility access for the proposed development. Landowners must demonstrate that each parcel meets eligibility

requirements for a septic permit, although one need not be obtained at the time of subdivision approval. The developer must either construct a road according to county standards or provide bonding for the future construction of such a road. A stormwater drainage plan must accompany the application.

- ii. Option 2: Redefine Summary Subdivision. To qualify for the summary review process, all parcels must be adjacent to an existing public right of way with access to a roadway and utilities. Lot arrangement must be such that there will be no foreseeable difficulties, for reasons of topography or other conditions, in securing building permits to build on all lots.
- iii. Option 3: Remove Summary Review Process. The County will no longer follow the summary review process, and will require all type-three subdivisions to follow the same process, regardless of the number of parcels.

3. Promote safe and orderly development in the county, protecting public health and well-being

- a. Coordinate with other governmental agencies to encourage contiguous or infill development
 - i. Discourage “leapfrog” development and optimize public and private infrastructure investment
 - ii. Discourage “shoestring” annexation by municipalities
- b. Work with municipalities to clarify misunderstandings in extraterritorial planning, platting, and zoning policy

4. Promote land development practices that minimize erosion and safeguard natural drainages

- a. Consider adopting an earthworks permit. This ordinance must clearly define the scale and the type of project that will require permitting, and circumstances that would exempt activity from requiring a permit. The County must establish a process for permit applications, exemption applications, and appeals.

4. ECONOMIC DEVELOPMENT

STRENGTHENING &
DIVERSIFYING THE ECONOMY IN
SAN JUAN COUNTY

A. Introduction

The purpose of the Economic Development Element is to consolidate baseline information about San Juan County's economic conditions and to establish long-range priorities, goals and policies that guide efforts to invest in and improve the economy.

B. Existing Conditions

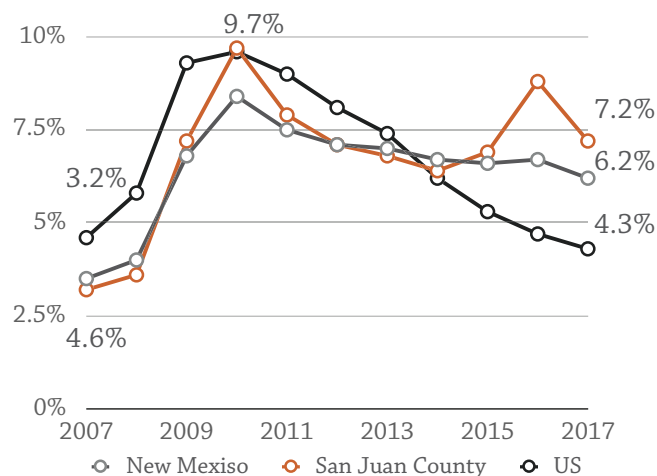
Jobs and Employment

Unemployment in San Juan County, as in the state and nation, saw a huge spike around the 2009 recession. In San Juan County, unemployment increased from 4.6% in 2007 to a high of 9.7% in 2010. After that, unemployment in the county fell precipitously, at a steeper rate than either state or national averages. However, in 2014, county unemployment began a steep increase as energy sector jobs began to disappear. While unemployment in New Mexico and the U.S. continued to fall, in San Juan County it reached a peak of 8.8% in 2016 before falling slightly in 2017 to 7.2%. It is still significantly higher than the state average of 6.2% and the national average of 4.3%.

Overall, employment in San Juan County has risen from 47,780 jobs in 2000 to 49,349 in 2017. Jobs in the county fell when the recession hit from a peak of 51,952 in 2009 and have not recovered as of 2017. Since the fall, 2016 saw the lowest jobs number in San Juan County at 49,042 with a slight up-tick in 2017, coinciding with unemployment trends.

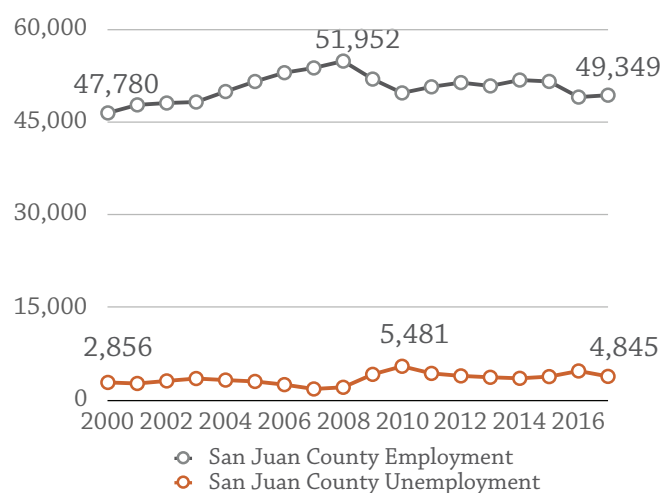
San Juan County's economy's struggle to recover from the recession is evident across almost all employment sectors. Of the 18 private sectors listed by New Mexico Department of Workforce Solutions, just four experienced positive growth since 2007 before the recession: agriculture, forestry, fishing, and hunting; health care and social assistance; arts, entertainment, and recreation; and accommodation and food services.

Exhibit 4-1 Unemployment Rate, San Juan County, New Mexico, and US



Source: Economic Research & Analysis, New Mexico Department of Labor, Table A - Civilian Labor Force

Exhibit 4-2 San Juan County Covered Employment and Unemployment



Source: Economic Research & Analysis, New Mexico Department of Labor, Table A - Civilian Labor Force

Exhibit 4-3 San Juan County Employment by Sector, 2007 2017

Sector	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change 2007- 2017	% Change
Grand Total	49584	50848	47864	45903	48411	49099	49350	50137	50388	47759	47841	-1743	-4%
Total Private	40057	41213	38156	36623	37664	38184	38086	38948	38861	36571	36803	-3254	-8%
Agriculture, etc.	151	178	182	180	189	257	252	242	233	252	271	120	79%
Mining	5796	6012	5402	5513	6411	6429	6476	6718	6052	4968	4962	-834	-14%
Utilities	1293	1299	1315	1107	1018	1006	971	911	852	830	812	-481	-37%
Construction	4853	5329	4042	3752	3436	3522	3466	3550	3780	3118	3477	-1376	-28%
Manufacturing	1569	1555	1267	1147	1294	1369	1283	1320	1239	974	1091	-478	-30%
Wholesale Trade	1898	1986	1791	1597	1590	1730	1773	1813	1699	1507	1531	-367	-19%
Retail Trade	6389	6436	6182	5989	6091	6180	6162	6286	6346	6120	5968	-421	-7%
Transportation & Warehousing	1412	1468	1310	1135	1202	1285	1323	1387	1404	1160	1167	-245	-17%
Information	308	286	283	272	272	266	258	252	210	236	221	-87	-28%
Finance & Ins.	937	937	942	893	902	907	890	896	913	905	866	-71	-8%
Real Estate	601	641	624	508	532	471	492	499	537	529	522	-79	-13%
Prof. & Tech. Svcs	1166	1152	1074	997	928	944	957	965	992	1042	982	-184	-16%
Management	260	243	241	217	209	228	248	251	267	255	249	-11	-4%
Admin. & Waste Svc	1427	1430	1281	1248	1178	1154	1144	1155	1141	1011	1021	-406	-28%
Education	379	330	322	335	338	348	347	336	335	323	335	-44	-12%
Health & Social	5088	5296	5469	5623	6131	6160	6356	6412	6656	6927	6978	1890	37%
Arts & Recreation	447	450	496	454	480	531	466	432	424	462	470	23	5%
Accommodation & Food Services	4120	4196	4041	3986	4060	3951	3985	4284	4523	4735	4696	576	14%
Other Services	1963	1989	1892	1670	1403	1446	1237	1239	1258	1217	1184	-779	-40%
Total Government	9527	9635	9708	9280	10744	10914	11261	11189	11217	11188	11038	1511	16%
Federal					1598	1608	1540	1487	1479	1494	1498	NA	
State	9071	9160	9235	8823	8705	8869	9278	9257	9292	9248	9099	28	0%
Local	456	475	473	457	441	437	443	446	445	446	441	-15	-3%

Source: New Mexico Dept. of Workforce Solutions, Economic Research and Analysis Bureau, Table D.

* Non-Disclosure - Sum of industries may not add to total due to Non-Disclosure.

Table D is derived from the Quarterly Census of Employment and Wages publication.

2nd Quarter Average

Employment numbers for local government are inaccurate. In 2018 San Juan County employed 620 and estimate around that number in previous years.

The strength in the arts and recreation, and accommodation and food services sectors may indicate a recent increase in tourism in the county and could serve as a strong foothold for growing those sectors further. Overall, those sectors have added just under 600 jobs since 2007.

By far the greatest increase in number of jobs has been the health care and social services sector, adding 1,890 jobs in the last decade. In the Farmington Metropolitan Statistical Area (MSA), which contains San Juan County, the New Mexico Department of Workforce Solutions (NMDWS) projects the health care sector will continue to grow, accounting for the top two sectors for projected jobs growth over the next

decade. NMDWS projects ambulatory health care jobs to grow by 2.45%, or 782 jobs by 2026, and social assistance to grow by 2.37, or 388 jobs in that time.

Third on the NMDWS list of projected growth sectors is support activities for mining, with 2.35% projected growth by 2016, for a total 640 added jobs. By contrast, from 2007 to 2017, the construction, utilities and mining sectors lost a combined 2,691 jobs in the last decade.

Other sectors with heavy job loss in the last decade are utilities, transportation and warehousing, manufacturing, retail, and administrative and waste services, each losing between 400 and 500 jobs in the past decade.

Exhibit 4-4 Projected Jobs Growth by Industry for the Farmington MSA

Rank	Industry	2016 Estimated Employment	2026 Projected Employment	Total Annual Percent Change	Total 2016-2026 Employment Change
1	Ambulatory Health Care Services	2,852	3,634	2.45%	782
2	Social Assistance	1,467	1,855	2.37%	388
3	Support Activities for Mining	2,446	3,086	2.35%	640
4	Waste Management and Remediation Service	282	324	1.40%	42
5	Professional, Scientific, and Technical Services	1,026	1,141	1.07%	115
6	Food Services and Drinking Places	4,218	4,615	0.90%	397
7	Administrative and Support Services	731	797	0.87%	66
8	Motion Picture and Sound Recording Industries	69	74	0.70%	5
9	Specialty Trade Contractors	1,379	1,473	0.66%	94
10	Repair and Maintenance	780	828	0.60%	48

Source: NMDWS, Employment Projections program

Exhibit 4-5 Top Employers, San Juan County, 2017

Ranking 2017/2018	Economic Base Company	Full Time 2017/2018	Part Time 2017/2018	2018 Total/ Change from 2017
1/1	San Juan Regional Medical Center	1,646 / 1,572	200 / 275	1,847/ +1
2/2	Farmington Municipal Schools	1,610 / 1,240	246 / 187	1,427/ -429
3/3	City of Farmington	746 / 725	343 / 314	1,039/ -50
4/4	Central Consolidated Schools	911 / 955	0 / 0	955/ +44
5/5	San Juan County	630 / 620	6/ 26	646/ +10
-/6	• Andeavor	- / 583	-/ 24	607/ +607
7/7	Bloomfield School District	480 / 505	120 / 107	612/ +12
10/8	• Aztec Well Servicing	425 / 499	0/ 0	499/ +74
6/9	San Juan College	481 / 482	429 / 427	909/ / +1
8/10	• Raytheon Missile Systems Diné Facility	450 / 480	0/ 0	480/ +30
9/11	Aztec Municipal School District	392 / 440	8/ 3	443/ +43
14/12	• Process Equipment & Service Company	333 / 386	0/ 5	391/ +58
-/13	• Hilcorp (formerly ConocoPhillips)	512*/ 385	-/ 0	385/ -127
12/14	• Arizona Public Service Company - Four Corners Power Plant	343 / 341	0/ 1	342/ -1
11/15	• Bisti Fuels	348 / 339	0/ 1	340/ -8
19/16	• Riley Industrial Services, Inc.	226 / 324	2/ 0	324/ +96
16/17	Presbyterian Medical Services	297 / 269	51/ 64	333/ -15
13/18	• Westmoreland Coal Company	341 / 269	0/ 0	269/ -70
18/19	• Four Corners Materials	250 / 255	3/ 2	257/ +4
15/20	• Enterprise Products Operating LLC	302 / 250	0/ 0	250/ -52
Total 2018/ Change from 2017 total**		10,919/ +257	1,436/ -176	12,355/ +657

Source: Four Corners Economic Development, 2018

*2016 Employment total for ConocoPhillips

**Includes 2017 Top 20 Companies San Juan Generating Station (2017:265 FT, 2018: 231 FT), & Navajo Agricultural Products Inc, (2017: 186 FT, 2018: 189 FT)

• Denotes private employer

Top Employers

The most recent report by the Four Corners Economic Development (4CED) on San Juan County's biggest employers highlights a troubling trend. Among the top 10 employers in San Juan County, eight are in the public sector.

Major Employment in the Private Sector

From 2017 to 2018, the number of private sector employers in the top 20 in San Juan remained steady at 11 but added 466 jobs. In 2018, private sector jobs accounted for 30%, or 3,645 of the 12,355 jobs listed by the top 20 employers.

Income and Wages

The average annual household income in San Juan County was estimated by the U.S. Census American Community Survey in 2016 at \$48,624. After adjusting for inflation, average household income is estimated to have been lower in 2016 than it was in 2010 in Farmington, Aztec and the county as a whole. Inflation-adjusted average income has rose in Bloomfield from 2010 to 2016, but only by \$262.

According to NMDWS, in the Farmington Metropolitan Statistical Area (MSA) in 2016, the top three occupations in terms of jobs were: office and administrative support (6,670 jobs), food preparation and serving related (5,390 jobs), and construction and extraction (5,390 jobs). Earned average annual wages were between \$20,600 for service industry workers and \$51,260 for construction and extraction industry workers.

The highest average annual salaries in the Farmington MSA went to management (\$94,040), health care practitioners and technical workers (\$82,210), architects and engineers (\$84,080), and those in the legal profession (\$85,920). The lowest average annual salaries went to food preparation and serving (\$20,600), personal care and service workers (\$23,800), building and grounds cleaning and maintenance workers (\$24,520), and farming, fishing and forestry workers (\$23,110).

Exhibit 4-6 Median Income in San Juan County

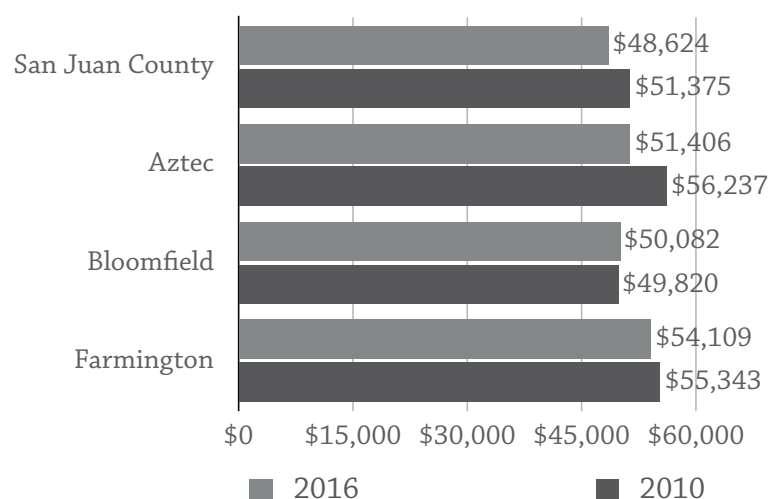


Exhibit 4-7 Employment and Income by Occupation

Occupation Title	Total Employment	Average Annual Wage
Office & Administrative Support	6,670	\$33,820
Food Preparation & Serving Related	5,390	\$20,600
Construction & Extraction	5,390	\$51,260
Sales & Related	4,630	\$33,530
Transportation & Material Moving	3,230	\$39,090
Education, Training & Library	3,150	\$51,840
Installation, Maintenance & Repair	3,110	\$47,670
Health Care Practitioners & Technical	2,570	\$82,210
Personal Care & Service	2,470	\$23,800
Production	2,310	\$50,320
Management	1,990	\$94,040
Building & Grounds Cleaning & Maintenance	1,570	\$24,520
Health Care Support	1,440	\$30,980
Business & Financial Operations	1,270	\$59,420
Protective Service	1,110	\$38,240
Architecture & Engineering	640	\$84,080
Community & Social Service	530	\$47,900
Life, Physical & Social Science	350	\$60,710
Computer & Mathematical	240	\$67,290
Arts, Design, Entertainment, Sports & Media	230	\$37,670
Farming, Fishing & Forestry	190	\$23,110
Legal	120	\$85,920

Energy Sector

Overview

The fundamental driver of the San Juan economy is, and has historically been, energy extraction and generation. The Regional Economic Assessment and Strategy for the Coal-Impacted Four Corners Region estimated that the utilities and mining sectors in the four corners region accounted for over 8,000 jobs and \$700 million in wages in 2014.

The industry has provided high-paying jobs that require little specialized education, however, the Northwest New Mexico Economic Assessment and Strategy report of 2017 notes that:

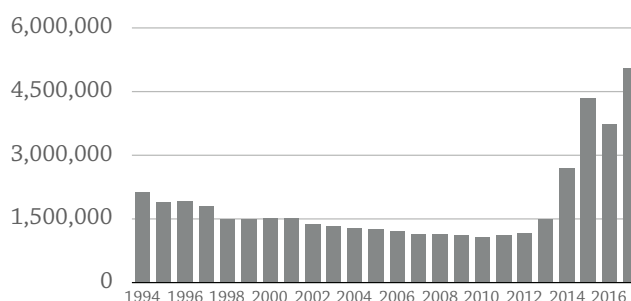
The boom and bust cycles related to commodity prices of raw materials such as coal, uranium, oil, timber and natural gas can lead to lack of local investment by both private and public entities due to uncertainties regarding future economic conditions.

The county is currently in the midst of a “bust” cycle, after the steep fall in oil prices in 2014, a persistent downturn in the natural gas prices, technological advances that reduce staffing needs, industry trends away from coal, and Public Service Company’s incremental draw down and planned closure of the San Juan Generating Station. The county has already experienced significant energy industry job losses and more are projected in the coming years as a result and the effects of this downturn are expected to be long-term and far reaching.

In addition to job losses, the downturn in the coal and natural gas industries will result in significant tax revenue losses for the county.

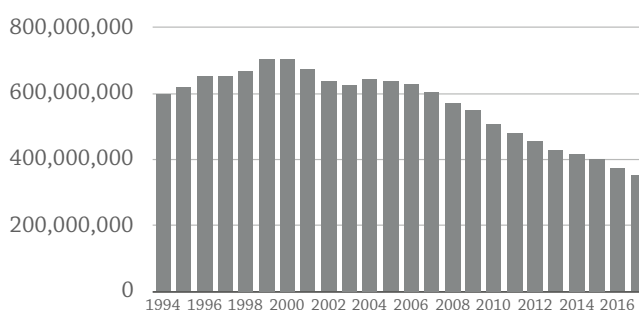
Local leaders are working to begin developing strategies to ensure the creation of new jobs to replace those lost. Current strategies focus on economic diversification as well as developing new energy sector assets (including construction of a new gas-fired plant, solar field or wind turbines, or the sale for continued use of the San Juan Generating Station) and establishing a transition fund for economic development.

Exhibit 4-8 Oil Production (BBL) Production in San Juan County



Source: NM EMNRD Oil Conservation Division, 2018 and Oil Conservation Division as of February 19, 2018

Exhibit 4-9 Natural Gas Production in San Juan County



Source: NM EMNRD Oil Conservation Division, 2018 and Oil Conservation Division as of February 19, 2018

Production

San Juan County has significant natural gas and coal and some oil resources. In 2016, the county accounted for 29% of all natural gas produced in the state and 2.9% of oil produced in New Mexico. (Source: NM Energy, Minerals, and Natural Resources Department. Oil Conservation Division [ENMRD]) Those shares have, historically, been representative of San Juan production’s portion of overall New Mexico production, with gas production hovering around 30% and oil production hovering around 2%.

Oil production has seen a major spike in the county, as well as in the state as a whole. In San Juan County, oil production grew from just under 1.5 million barrels in 2013 to just under 5 million in 2017.

Natural gas production, on the other hand, has steadily declined in San Juan County from a peak in 2000 of 706,343,704 MCF (thousand cubic feet) to 334,199,348 MCF in 2017.

While the natural gas rig count for the state reached an all-time high of 103 in 2018, the Midland Reporter-Telegram reported that “... 101 are in the state’s portion of the Permian Basin ... and two are in the San Juan Basin.” The Farmington Times reported that before the recession, San Juan’s rig count was “about 40.”

Impacts

Long-term downward trends in the region’s energy sectors have and are expected to continue to have a significant impact on jobs in the region. The 2018 Northwest New Mexico Comprehensive Economic Development Strategy, developed by Northwest New Mexico Council of Governments (NWNMCOG), reports that between 2008 and 2010, the San Juan Basin lost about 5,000 jobs related to contraction in the oil and gas industries, and the outlook is stark for the future of energy sector jobs in San Juan County and the San Juan Basin.

Projections are that natural gas prices will remain low going into 2019, according to the U.S. Energy Information Administration. The low natural gas prices are linked to a glut in the

market following technological advances in the industry that have opened up vast new natural gas deposits in other states. They represent a fundamental shift in the San Juan Basin’s relationship to the natural gas market.

Exacerbating natural gas price stagnation, the region is experiencing fundamental shifts in well technology as well as in its coal and power production sectors.

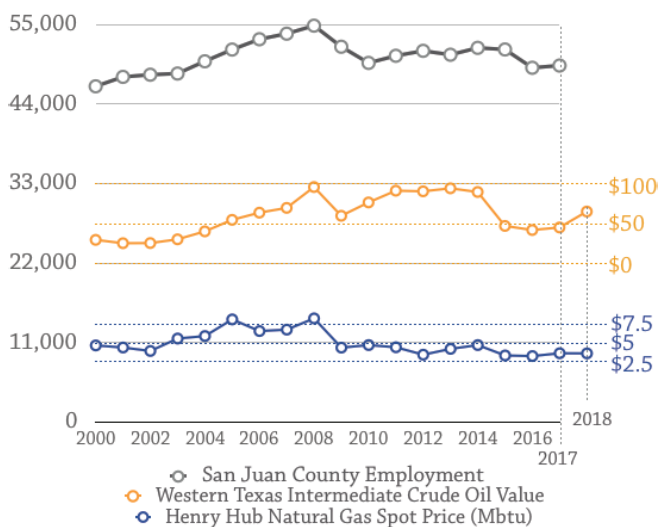
Well operations, both oil and gas, have become much more efficient in recent years, requiring significantly less manpower and fewer local managers. The impact can be seen across the economy from hotel occupancy rates which have fallen to near 60% as fewer temporary employees book rooms, to a drop in convention center use as fewer energy companies hold conferences in the area.

In 2013, PNM began its long-term plan to close its San Juan Generating Station by shutting down three of the station’s generating units. It followed the shutdown in 2017 with the closure of two of the station’s four remaining units. PNM plans to close the facility entirely by 2022.

With the draw down and expected complete closure of the generating station, the coal mining operations associated with it are also contracting. The San Juan Mine, which supplies the San Juan Generating Station’s coal, is planned to close with the generating station, which is currently the mine’s only customer.

The mine and generating station combined supported a workforce of 900 and worker pay and benefits totaling an estimated \$120 million in 2013. In 2016, jobs were down to 650, and by 2017 were down further to just 550. According to the Regional Economic Assessment & Strategy for the Coal- Impacted Four Corners Region published in 2017, the generating station’s planned shutdown coupled with a general decline in regional coal mining is projected to cause the loss of 930 direct jobs and \$122 million in annual income. Counting indirect employment and induced ripple effects, the region could lose up to 3,180 jobs and \$213.3 million in annual income, cutting annual tax receipts for local, tribal and state government by \$43.3 million.

Exhibit 4-10 Jobs and Prices of Crude Oil and Natural Gas



Source: NM EMNRD Oil Conservation Division, US Energy Information Administration, and Economic Research & Analysis, New Mexico Department of Labor, Table A - Civilian Labor Force

C. Economic Planning

Significant effort has gone into beginning an economic pivot in preparation for the expected changes in the regional energy sector. Efforts include legislative action, local initiatives and economic planning. Following is an overview of recent significant economic planning in the San Juan Basin region.

Stronger Economies Together, 2015 (SET)

Strategic goal areas:

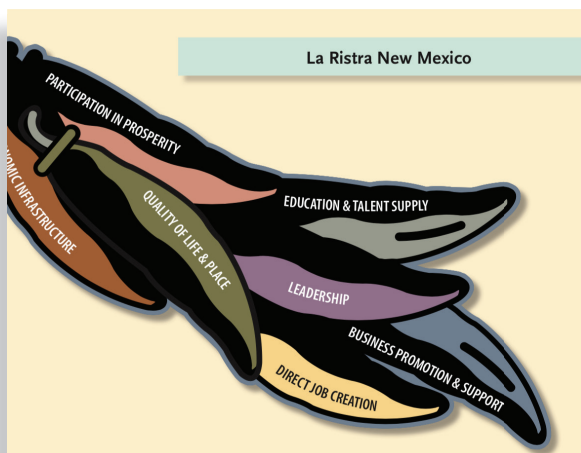
- Agriculture and food systems
- Tourism and artisan enterprises
- Manufacturing
- Workforce development and entrepreneurship

The plan offers strategies for expanding each “goal area,” including parties responsible for implementing strategies, timelines and target outcomes.

Strategies include education, marketing, business development programs, coordination with regional and state entities, market analyses, and outreach.

La Ristra Northwest 2014-2018 Comprehensive Economic Development Strategy (CEDS), Spring Update 2018

Exhibit 4-11 La Ristra Strategic Goals



Source: NWNMCOG CEDS 2014-2018

The plan contains contextual and background information on the regional economy, including a “SWOT” (strengths, weaknesses, opportunities and threats) analysis and strategy for moving forward focused on empowering people, building community, and creating jobs and enterprise. The goals outlined in the plan are based on the statewide “La Ristra” economic development model that “... serves as a blueprint for strategic planning, collaborative action and shared accountability in fostering economic prosperity for all New Mexican citizens.”

For each topic identified in the La Ristra strategy, the plan contains the following:

- Strategy
- Objectives
- Tactics
- Contributors and stakeholders
- Metrics and performance measures

The plan identified the following clusters as having the most potential for development in northwest New Mexico:

- Energy, logistics and manufacturing
- Agriculture and regional food systems
- Tourism, the arts and outdoor recreation
- Downtown revitalization

The plan then outlined the following with steps for promoting growth in each cluster:

- Project / initiative
- Goal / intent / outcomes
- Leadership / resources
- Status / next steps / support seeded

Regional Economic Assessment & Strategy for the Coal-Impacted Four Corners Region (POWER Report), 2017

This comprehensive economic analysis and plan quantifies the projected economic impact of downturns in the energy sector in the region and outlines strategies for mitigating the impact.

Target industries:

- Petrochemical manufacturing
- Tourism
- Crop production
- Large-scale food production

Strategies:

- Meeting immediate- and longer-term needs through workforce development, including technical skills training and small business skills
- Enhancing quality of life through investments in downtown redevelopment and other infrastructure, services and amenities to attract businesses, residents and visitors
- Nurturing local regional networks and state partnerships, and leveraging them to obtain funds and support
- Investing in regional branding initiatives to market regional products and regional strengths to benefit local businesses and/or attract visitors and residents
- Engaging the community and developing a shared vision for the path forward

The plan also outlines economic strategies in the energy sector (focus on solar, energy storage, and potentially a natural gas combined cycle power plant, and continued support for natural gas) and assesses potential sectors for future development.

For San Juan County, the plan recommends "... large-scale food processing, petrochemical manufacturing, tourism, and crop production." To develop these industries, the plan lays out steps for each to follow for marketing, investment, and partnerships.

Four Corners Economic Development (4CED)

4CED's primary mission is to grow and diversify the economy in the Four Corners region of New Mexico. The group had previously identified six industry targets. These targets were based

on factors such as location, existing business climate, and local workforce knowledge. They are:

- Health services
- Agriculture
- Location neutral (i.e., remote employment)
- Education
- Tourism
- Energy and manufacturing

The Four Corners Economic Development board recently updated their target sectors to the following:

- Outdoor recreation
- Petrochemicals
- Retirement developments
- Agriculture

4CED's goal is to explore and expand these industries in the Farmington MSA and San Juan County.

The group is actively involved in developing the agriculture, energy and manufacturing, and tourism targets. The education, health services and location-neutral sectors will naturally develop as the quality of life and economy expand in the area.

4CED attends international conferences pertaining to the target industries. It employs state incentives such as the job training incentive program (JTIP), and partners with regional players on workforce training, and business incubation and retention.

Four Corners Regional Economic Consortium

Four Corners Regional Economic Consortium is a coalition of economic development leaders from New Mexico, Colorado, Arizona, and Utah that are working together to create dynamic and shared data resources, cooperative initiatives, new investments and partnerships that bolster the region's economy.

The consortium held a forum (Four Corners

Future Forum) in 2017 and are planning a second event for 2018.

This group is a truly four-state and multi-tribal contingent that works to establish priority economic focuses for the Four Corners region. A regional survey concluded in August of this year determined the top six focus areas (taken from an initial list of 20 common themes listed in area CEDS documents) for the region:

- Quality health care
- Workforce
- Connectivity and technology infrastructure
- Local foods system
- Four Corners marketing
- Regional transportation

Local Foods, Local Places Community Action Plan

The Local Foods, Local Places Community Action Plan launched in October, 2018. The goals of this program are to create:

- More economic opportunities for local farmers and businesses
- Better access to healthy, local food, especially among disadvantaged groups
- Revitalized downtowns, main streets and neighborhoods

Following a two-day public workshop, the group established the following goals:

- Improve coordination and communication
- Dream big: create a common vision for food, health and agriculture for Farmington and the Four Corners region
- Realize revitalization opportunities for downtown (Farmington)
- Evaluate and enhance the local food system and economy

D. Target Industries

Several themes run through the economic development analysis and planning efforts conducted so far in the region, and certain key strategies have emerged to target industries that would be an appropriate fit for the San Juan Basin.

This plan will not attempt to replicate the in-depth analyses presented in previous planning efforts, but will discuss the issues and opportunities of several of the major target industries.

Manufacturing

Distribution

One major impediment to developing manufacturing in the county is distribution. No rail or interstate highway runs through the county, and the airport cannot currently handle commercial flights.

The region has long worked to develop rail, and the effort is ongoing. 4CED recently conducted a feasibility study to determine whether demand is sufficient for rail service. It found that the viability of rail is contingent on uncertain inputs and outputs largely related to coal, therefore, the question unanswerable for now.

The City of Farmington is expanding runways and improving safety features at the Four Corners Regional Airport to accommodate commercial flights, but this effort represents only limited expansion of distribution options overall.

Energy and Petrochemicals

The region has a significant asset in its energy and fossil fuel distribution network, including pipelines for crude oil, petroleum, hydrocarbon gas liquids, and natural gas and transmission lines.

However, there are some significant limitations to the extent to which this infrastructure will

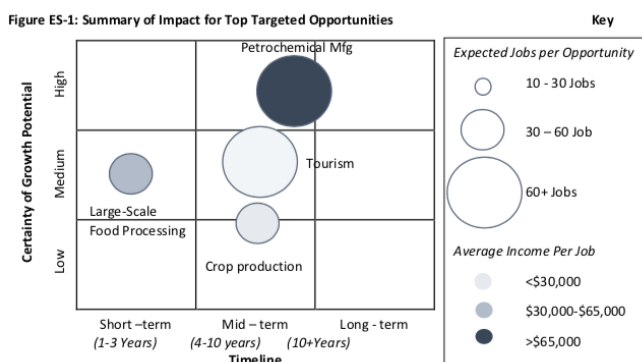
generate base economic jobs. To take advantage of the electric transmission lines, the county will need to develop an alternate power source from the coal-burning energy that is currently distributed by the transmission network. Retooling the coal burning plant to burn natural gas would require a complete overhaul of the plant and in the end, would only employ about one-fifth the number the coal burning plant employed at its peak. Developing solar fields is an option, and a field being pursued, but it would employ significantly fewer workers than do current energy production operations.

While the County continues to use the oil and natural gas infrastructure, the issues with the price of natural gas and improved efficiency of well operations discussed above will continue to limit the economic impact of those operations.

Businesses are considering using the pipe network to distribute petrochemical products. Using locally available natural gas and crude, petrochemicals could be manufactured in the county and distributed using the pipeline network. Additional assets include the educational infrastructure in place in the county to train a petrochemical manufacturing workforce, and the fact that firms that manufacture petrochemicals are already operating in the county.

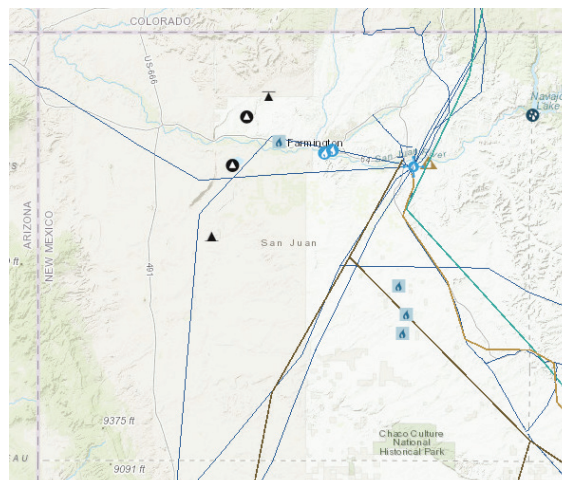
Of the four target industries identified in the 2017 Regional Economic Assessment and Strategy for the Coal-Impacted Four Corners Region Report, petrochemical manufacturing had the greatest certainty of growth, the highest average income per job and the potential to create over 60 jobs.

Exhibit 4-12 Target Industry Impact Analysis



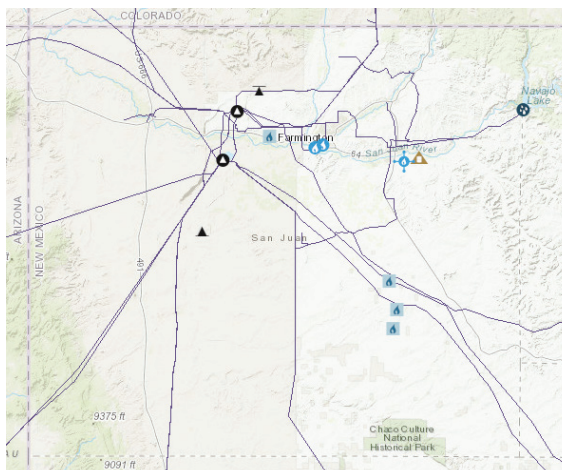
Source: Regional Economic Assessment & Strategy for the Coal-Impacted Four Corners Region, 2017

Exhibit 4-13 Electric Transmission Lines in San Juan County



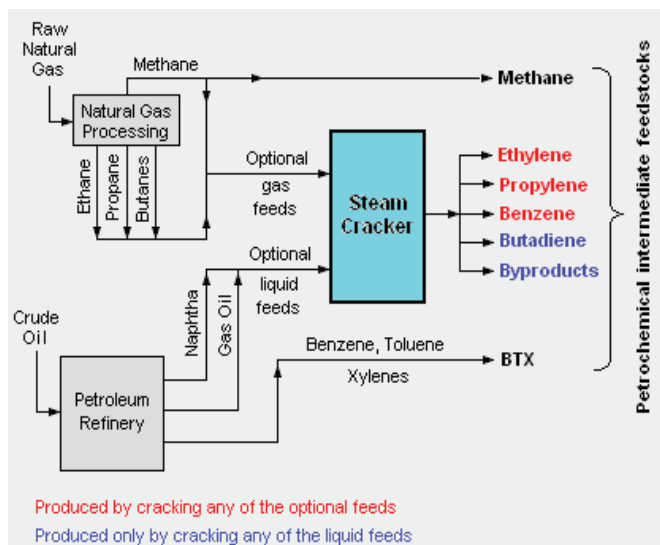
Source: US Energy Information Administration

Exhibit 4-14 Oil and Natural Gas Lines in San Juan County



Source: US Energy Information Administration

Exhibit 4-15 Petrochemical Manufacturing Process Chart



Source: Wikipedia

Recreational Manufacturing and Tourism

Outdoor Recreational Manufacturing

“Nature’s Playground,
Nature’s Proving Ground.”
-ORII Tagline

Another important manufacturing target industry identified by the County is outdoor recreation products. To develop a strategy for attracting outdoor recreation manufacturers and expanding recreational tourism, the region has launched the Outdoor Recreational Industry Initiative (ORII). ORII’s goal is to bring to the area outdoor manufacturers, retailers and service providers that will attract people who spend recreational dollars and will create jobs for San Juan County.

The region hopes to attract recreational manufacturing to take advantage of infrastructure being vacated by the oil and gas industry, and the existing available recreational opportunities and natural resources to be used as a testing ground for new product development. The group has teamed with the County, City of Farmington, Bureau of Land Management, existing recreational industry businesspeople, San Juan College, and the oil and gas industry to develop a new maker space, identify incentives, revitalize downtowns, develop partnerships, identify funding, and promote recreational entrepreneurship.

Case Studies

Utah

San Juan County’s neighbor, the state of Utah, has successfully targeted outdoor recreation and recreational manufacturing over the last few decades to develop an industry that reportedly saw \$12.3 billion in spending in 2016, and

supported 110,000 jobs directly statewide, more than twice the number of mining and energy jobs in Utah.

However, Utah is still grappling with issues of how to remain attractive to the industry. Most involve balancing the needs of conflicting interests such as preserving outdoor recreational opportunities while endorsing development

“An 84,899 square-mile high-end product testing lab ... or ‘Utah’ for short”
- Utah marketing material

of land for other purposes, such as energy development. The state is also experiencing friction over support for public lands, which is essential for outdoor recreation but considered a government overreach by some Utah politicians. In 2017, the Outdoor Industry Association decided to relocate the nation’s largest outdoor recreation convention out of Utah in protest of political support for rolling back public lands designations. The convention attracted an estimated average 50,000 visitors and \$45 million a year to Salt Lake City. In 2018, the convention was held in Denver, CO.

Wyoming

The 2017 Wyoming Outdoor Recreation Industry Report surveyed existing recreational industry representatives to measure industry concerns and trends. Many also expressed concern over privatization of public land and cited additional issues with the potential to adversely affect the industry:

- Inconsistent state regulations
- Federal limits on work visas
- Trade agreement changes
- Infrastructure funding

Representatives also listed issues with potential to improve the industry:

- Increased military spending
- Easing regulations

- Maintaining multiple uses on public lands

Wyoming's governor formed An Outdoor Recreation Task Force in 2016. Based on the findings of the survey, the task force's priority tasks moving forward will focus on defining an industry vision and strategy, developing workforce, assisting businesses to expand the industry, and developing a "tourism toolkit" for communities that outlines industry priorities such as affordable housing and quality of life improvements.

Moving Forward in San Juan

In San Juan County, the formation of ORII is an essential and exciting first step towards expanding the recreation industry in the county. The County's ongoing support of and participation in the effort will continue moving development forward.

Additional ongoing work should include identifying and developing essential infrastructure needs to serve the developing industry. Ongoing efforts to expand services at the regional airport are a good example of the type of infrastructure project that will be essential to the expansion of the manufacturing industry in San Juan. Reliable access to natural gas and electricity will be an asset for the County, but the reliability of water and wastewater across the fractured network in the unincorporated county may be a weakness in

recruiting efforts.

Improving transportation options is a long-term and difficult proposition, and continuing to identify and pursue such improvement projects will support future manufacturing development.

Access to a high-quality and highly trained workforce is essential in recruiting manufacturing. The County should continue working with the San Juan College to expand workforce training opportunities beyond the energy sector to diversify the economic options in the county.

The county can begin by identifying potential sites for development as outdoor recreational manufacturing and formalizing and incentivizing its approach to attracting industry.

Outdoor Recreation and Tourism

To round out the region's outdoor recreation targets, improving tourism is another important part of the effort. San Juan County is home to an array of natural and cultural assets including Chaco Canyon (a UNESCO world heritage site), national wildernesses, three rivers and mountains. It is neighbor to at least four native tribal homelands.

The county currently hosts rafting, floating, fishing, boating, camping, hiking and natural arches, ruins, biking, and numerous events, among other attractions.

Exhibit 4-16 Events and Attractions in San Juan County



As the southeast member of the four corners, the county has access to a large and diverse market area. Farmington serves as the retail hub for the Four Corners area and the market base for the county reaches far beyond its borders.

The county attracts a high number of international visitors. Interviews suggest that a majority of lodgers in the county are from abroad.

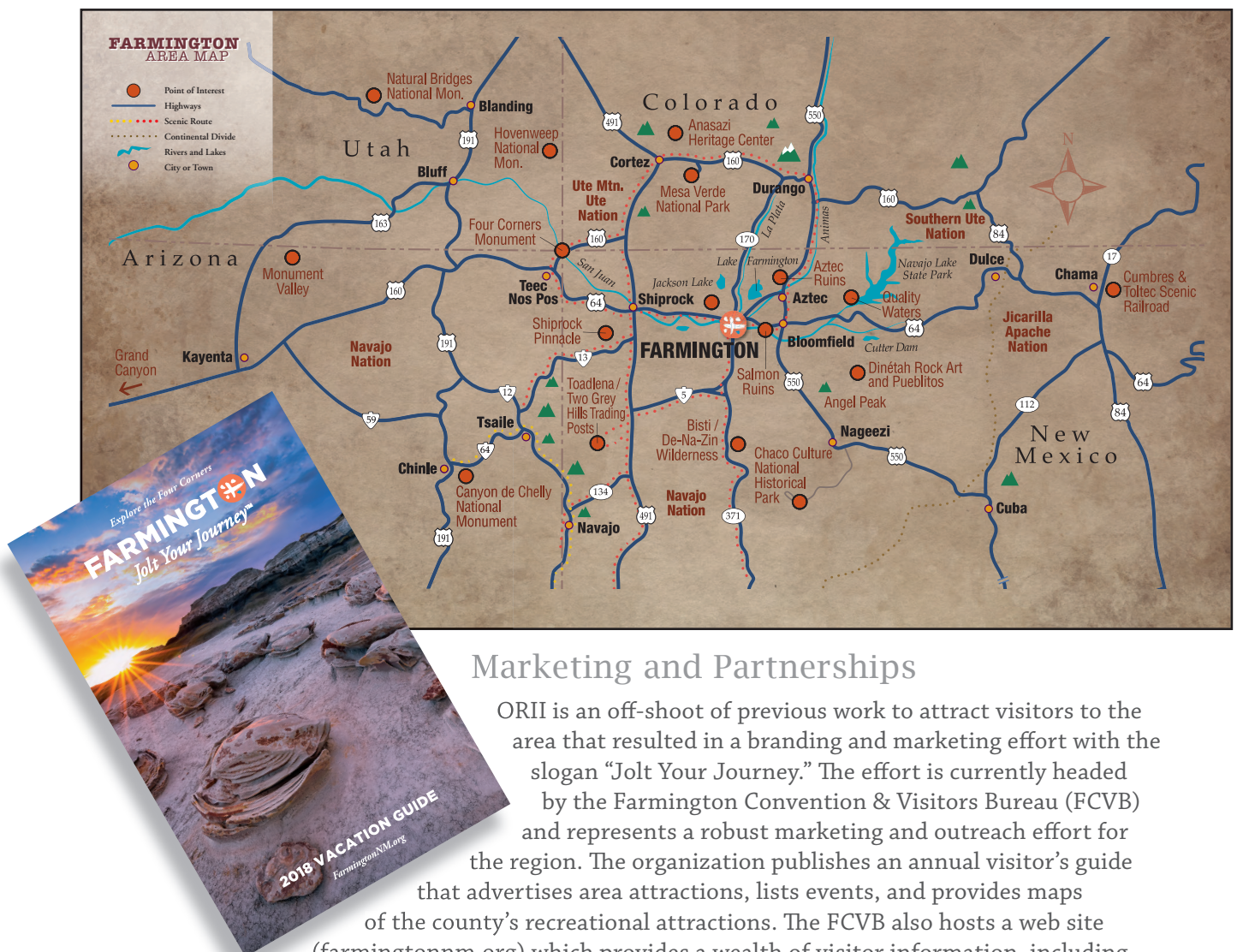
The county would like to capitalize on these resources and work to grow its tourism and outdoor recreation industry in tandem with growing the outdoor recreational manufacturing industry in the county.

Trails

ORII's vision for expanding outdoor recreation and increasing tourism includes developing a connected series of trails. The group will work with the Bureau of Land Management (BLM) in development of a travel management plan to ensure that the plan will include trail linkages. Additional investment by the County will be required to maintain and improve the region's trails, including projects to design and install wayfinding signage, create additional trail features and realign existing trails.

San Juan County is currently using a GIS application to gather trails data from the public in order to inform the BLM travel plan. The inventory will also be an important marketing asset, as no comprehensive trails mapping is available for the county. A professionally designed trails map denoting trail type, difficulty level, hydrology and attractions such as national parks should be developed based on the mapping data and distributed in print at hotels and visitor centers, and online through social media and county promotional sites.

Exhibit 4-17 Farmington Area Sightseeing Map for Visitors



Marketing and Partnerships

ORII is an off-shoot of previous work to attract visitors to the area that resulted in a branding and marketing effort with the slogan "Jolt Your Journey." The effort is currently headed by the Farmington Convention & Visitors Bureau (FCVB) and represents a robust marketing and outreach effort for the region. The organization publishes an annual visitor's guide that advertises area attractions, lists events, and provides maps of the county's recreational attractions. The FCVB also hosts a web site (farmingtonnm.org) which provides a wealth of visitor information, including events calendars and trip planning tools. The County will continue to support and participate in the Jolt Your Journey effort and work with the group to expand its reach and efficacy.

One potential for expanding efforts is the international market. The County can work with the FCVB to contact international travel agents to learn about how different international demographics prioritize attractions and amenities. It would then work with local businesses, organizations and tribes to develop infrastructure and provide travel packages for the international travel agents.

Expanding Attractions

There is ample opportunity to expand services catering to outdoor recreation in the area, including rental and equipment retailers, trail guides and tours, and entertainment. The County can work with San Juan College's Enterprise Center (SJCEC) to develop entrepreneurship programs based on these industries and identify incentives available to promote business development in these areas.

Farmington is working to expand a river rapids attraction to complement the river trail along the San Juan River in downtown Farmington. The County may consider investing in developing similar recreational infrastructure beyond municipal boundaries that would add to the region's recreational opportunity inventory and serve as a business catalyst for area entrepreneurs.

The County should also incentivize and work to attract businesses that would make private investments to expand recreational infrastructure.

Development Planning

The County should work with ORII and local economic development organizations to:

- Outline a vision for outdoor recreational development
- Identify specific recreational opportunities, industries and target markets as areas of focus
- Develop a strategy for attracting businesses and tourists, including developing targeted marketing strategies and incentive packages

Agriculture and Food Production

In 2008, crops grown in San Juan County included corn, winter wheat, dry beans, alfalfa, hay and pasture. According to the 2012 USDA Census of Agriculture¹, from 2008 to 2012, there was a large increase in irrigated acreage and crop diversity, and by 2012, crops included a number of foods such as potatoes, apples, pumpkins and popcorn.

Most farming in San Juan occurs on Navajo Agriculture Products Industry (NAPI) land south of Farmington. NAPI's web site currently lists varieties of livestock feed, beans, flours and corn, as well as green chile, potatoes and melons for sale. The valley floors host significant agriculture as well. All told, in 2012, the area had 2,628 farms accounting for 2.6 million acres, up from 1,897 farms accounting for 1.6 million acres in 2007, according to the USDA agricultural census.

The total market value of agricultural products produced in San Juan County in 2012 was \$71.3 million. Most of that value (\$63 million) was from crops, compared to \$7.9 million from livestock, poultry and their products. Agricultural product value rose for vegetables, potatoes, hay and other crops by a total of \$27.1 million from 2007 to 2012, while the value of cattle and calves fell by \$3.3 million over the same time period.

The growth in agricultural acreage and value indicates that the industry remains strong in San Juan County, and there is opportunity to improve the market of value-added agricultural goods. The County can work with NAPI to develop value-added products and work with SJCEC to develop incubation programming (including a kitchen) for agricultural goods production.

Climate change and continued drought may limit the capacity for growth of the county's agricultural industry in the future. Moving forward, county farmers should be encouraged to transition to arid crops and improve the efficiency of irrigation.

¹The 2017 Census of Agriculture has been conducted but not yet published.

Retirement Community

The temperate climate, natural beauty, existing and developing outdoor recreational opportunities, access to high quality medical care, and relatively low cost of living compared to Durango or Sedona make San Juan County a potentially attractive retirement destination.

The County may wish to work to attract affordable housing or continuum of care development to attract retirees. The County may consider working with municipalities to identify an appropriate location and develop an incentive package for attracting high quality, well-designed retirement community development.

A good location should be in a relatively walkable area with access to transit, retail and services. Quality design should include sidewalks and open space with landscaping, and appropriate massing and frontage to engage the street and suit the surroundings.

Workforce Development and Business Incubation

With untapped opportunities for industry growth, especially in outdoor recreational manufacturing, outdoor recreational activities, petrochemical manufacturing and agriculture, there are ample opportunities to engage and enable residents, especially young people, in successful entrepreneurial enterprises. The county has significant resources already in place to facilitate that.

San Juan College

Enterprise Center

As a certified business incubator, the Enterprise Center is a place for new businesses to develop. By providing turnkey offices and production space in combination with the business resources needed to turn ideas into successful businesses, the Enterprise Center helps guide entrepreneurs step-by-step through the process of starting and growing a business.

The center provides:

- Places from production space to professional offices for new businesses
- Business coaching and counseling
- Free or low-cost workshops and training for business owners at all levels of development
- Access to a wide range of business resources
- Access to financing and loan funds
- Shared office equipment, conference space, and business services
- Incubator resources

The college also has a workforce development center, a small business development center, and Encore retraining programs focused on developing capacity in the community. The County and other local economic development organizations will continue working with the college to expand services and tailor programs for target industries.

Potential Program Expansions

Manufacturing training will likely become paramount, as finding talent and trained workforce frequently tops lists of industry concerns. While already well suited for petrochemical manufacturing training development, the County should begin working to strengthen its outdoor product development training capacity.

Utah State University has developed a “first-of-its-kind” bachelor of science degree program in outdoor product design and development that offers academic, field, and industry-based experience that combines design, engineering, outdoor recreation, sustainability, business, and many other concepts important in outdoor products and business supply chains. This program may serve as a model for potential new programs at San Juan College.

ACT® Work Ready Communities

San Juan County is the only New Mexico county to participate in the ACT® Work Ready Communities initiative. The program enables counties to identify skill gaps and quantify the skill level of their workforce. The tool uses a set of “work keys” to identify skills and weaknesses in areas important for workforce development. This analysis allows industry to gain an accurate picture of the skill set available in a population, and inform education program development and improvements targeted to specific weaknesses.

Additional Topics

Industrial Park

The County has a designated industrial park in a remote area in the northern part of the county. Currently, the park is occupied by two tenants, but one plans to relocate at the end of 2018.

Infrastructure

Further development of the park will require infrastructure investment to establish broadband access, improve power availability, extend natural gas lines, and repair the roadway. The county is not currently focused on completing these projects but would consider improvements given the right tenant.

Municipal Industrial Parks

Farmington, Bloomfield, and Aztec all have municipal industrial parks. 4CED helps direct tenants to them and the County supports continued development of the parks.

Land Use

Land use practices are a significant portion of economic development. In San Juan County, the availability of private land, the potential remediation of brownfields, and infrastructure efficiency all have the potential to deter or attract future development.

Just 6% of land in San Juan County is privately owned, greatly limiting development options.

Tribes and the BLM own much of the county land. Although the process of land acquisition from the BLM for private development is difficult and complex, the County can consider this approach if the right opportunity presents itself.

The area has a number of abandoned energy developments, including well pads and refineries that are potential brownfield sites in the county. Local economic development organizations oversee some brownfield programs, and there are industrial clean-up businesses in the area. The County may consider working with NWNMCOG and 4CED to identify potential brownfields and procure funding for site clean-up. This action would add to the area’s economy by employing local clean-up crews, adding to land available for potential development, and improving the appearance and environmental health of the community by mitigating contaminated eye-sores.

Finally, the ability of a County to direct growth allows it to guide development in a consolidated manner, allowing for efficient infrastructure development. Generally, this means clustering development to minimize the distance that infrastructure must cover to serve developments. San Juan County currently lacks the land-use tools it would need to effectively manage growth and development. The tools currently available are limited, but include offering land through the Local Economic Development Act (LEDA). Zoning would be the most effective solution to the issue.

Population Growth

Youth and Families

The importance of retaining and attracting young people and families cannot be overstated. This population maintains school enrollment, populates the workforce and tax base, and brings innovation and progress. With an increasingly urbanizing population, most rural communities in the U.S. and New Mexico face this challenge. Farmington represents the sole urban hub in a very large, very rural area and could be a collector for rural population looking for urban opportunities.

Education

The face of education is also changing as traditional four-year liberal arts universities are losing enrollment to colleges with workforce development programs such as San Juan College. The college plans to develop housing for 380 students, with construction set to begin in Spring 2019. This development may be an excellent catalyst for attracting youth from the nearby rural communities to the county. The County should continue working with the City of Farmington and San Juan College to promote the college, attract youth and young families, and develop jobs and attractions oriented to youth and families.

Important facets in attracting youth and families include promoting the college as a low-cost, fast-track to stable employment in the region, continuing to ensure that promise is met by linking jobs training programs with jobs at area businesses, improving transportation connections to the campus, and providing subsidized or free child care.

Appearance

Attracting residents also depends, to an extent, on appearance. The patchwork nature of land uses, the junkyards and abandoned industrial sites in the county will detract some potential residents. The Junked Vehicle and Trash ordinances adopted by the County in recent years provide it with some tools to mitigate the situation, but zoning or other land use regulation would be the most effective tools to improve the attractiveness of the county.

Local Economic Development Act (LEDA)

New Mexico's Local Economic Development Act allows counties and municipalities to make public investments in certain economic development projects. To promote economic development, the State adopted LEDA in response to the anti-donation clause in the state constitution.

Since 2002, 83 New Mexico communities have adopted Local Economic Development Act ordinances. By adopting LEDA, a community adopts an ordinance that creates an economic development organization and a strategic plan. The enactment and utilization of LEDA allows public support of economic development to foster, promote, and enhance local economic development efforts while continuing to protect against the unauthorized use of public money and other public resources. San Juan County has enacted its LEDA ordinance, but should review the 2013 update of the state LEDA regulation to ensure the county LEDA ordinance is up to date.

The New Mexico Economic Development Department has a LEDA-Capital Outlay Program, a separate program. State funding for this program was \$50M in 2015. State (through the New Mexico Economic Development Department [NMEDD]), county and local governments may make LEDA investments and local jurisdictions may enter joint powers agreements to develop regional plans.

Qualifying Entities

The following entities may qualify for LEDA funds:

- Manufacturing / assembly of manufactured or agricultural goods
- Commercial storage, warehousing, distribution of agricultural, mining or industry; does not include goods to the public or most utilities
- Business that supply services to the public, government or specific industry or customer, except retail
- Indian nation, tribe or pueblo
- Telecom whose majority of customers are out of state
- Farmer's markets
- MRA project developer
 - Cultural facility — defined as an entity that is publicly owned or owned by qualifying entity, and that:

- » Preserves, educates and promotes local arts and culture
- » Includes theaters, museums, libraries, galleries, cultural compounds, educational organizations, performing and fine arts venues and organizations, studio and media labs
- » Includes live-work housing
- Retail business (in municipalities with a population under 10,000)

LEDA in San Juan County

Although the County has enacted a LEDA ordinance, it has not made use of it. The County has administered state LEDA projects.

The County may consider working with regional planning and economic development organizations to identify potential LEDA projects to submit for state LEDA funding.

Funding for LEDA Projects

Economic development expenditure is limited to 10% of governing entity's annual general fund expenditures, with some exceptions. They include the value of land or buildings, local gross receipts tax option, and proceeds of revenue bonds and funds donated by private entities.

Project Participation Agreement

Local governing bodies enter into Project Participation Agreements (PPA) with qualified, approved projects. These agreements outline each party's respective contributions, security provisions for public investments, provisions for regular performance audits, goal benchmarks against which the project can be evaluated, and a schedule of project development and evaluation. The PPA outlines claw-back provisions.

LEDA Qualified Uses

- Purchase, lease, grant, construction, improvement or conveyance of land, buildings or other infrastructure
- Public works improvements
- Payments for professional services contracts
- Direct loans or grants for land, buildings or technical assistance to cultural facilities for infrastructure
- Loan guarantees
- Incentives

Goals and Policies

1. Diversify San Juan’s economy to improve resiliency and minimize the impacts of changes in the energy industry

- a. Prioritize alternative energy, manufacturing, technology, retirement communities, and outdoor recreation sectors for recruitment and retention
- b. Support the Outdoor Recreation Industry Initiative (ORII) to develop manufacturing and attractions based on outdoor recreation
 - i. Conduct a market study to identify trends and target audiences for outdoor recreation and recreational product manufacturing, identify existing and required infrastructure and assets, and outline step-by-step plan for achieving goals
 - ii. Develop a clear strategy for attracting desired businesses and visitors, and develop travel and incentive packages to offer
 - iii. Expand trail network in the county
 - Collaborate with the BLM to conduct a study to develop a “future trails” map
 - Identify trail locations and incentives to promote the development of those trails
 - Work with the BLM to ensure that it includes trail linkages in the bureau’s future transportation management plans
 - Improve wayfinding throughout the county, including on trails and multi-modal pathways
 - Engage graphic design professionals to develop a trails map based on county GIS data that will include trail type, difficulty level, hydrology and attractions such as national parks
 - Distribute the map in print at hotels and visitor centers, and online through social media and county promotional sites
- c. Collaborate with the Farmington Convention & Visitors Bureau to promote county attractions
 - i. Expand marketing efforts to additional markets and media
 - ii. Conduct outreach to international travel agents to develop international tourism packages and amenities
- d. Continue attending recreation expos to attract businesses, especially tours and equipment rental businesses, as well as recreational manufacturers
- e. Improve manufacturing services and infrastructure (i.e., broadband)
- f. Identify natural and cultural recreational assets for protection, including open space, riparian areas and rivers, geologic formations, ecologically sensitive areas, and historical sites.
 - i. Take appropriate measures to preserve the asset for the future
 - ii. Employ mapping and community involvement in identifying assets

2. Support acquiring additional private land in the county to provide growth opportunities

- 3. Promote industrial parks to attract new tenants and uses**
 - a. Support updating infrastructure for industrial park if demand justifies it
 - b. Consider using a park for low-cost business incubator space
- 4. Support San Juan College's workforce development and business incubator programs**
 - a. Work with the college to develop and expand workforce training programs to meet the needs of target industry development
 - i. Consider collaborating to develop a new outdoor product manufacturing program
 - ii. Collaborate to develop agricultural product incubation tools such as a commercial kitchen
- 5. Support existing energy economy and work to expand economic development opportunities in the industry**
 - a. Consider identifying incentives to encourage local energy companies to locate offices in the county
 - b. Prioritize attracting alternative energy industries to the county
 - c. Conduct a study to learn about the potential for developing a petrochemical manufacturing industry based on existing energy infrastructure
- 6. Work collaboratively to expand economic development opportunities in San Juan County**
 - a. Collaborate with all regional entities — municipalities, Navajo Nation, 4CED, NWNMCOG, NMEDD, BLM, and others — to outline a comprehensive economic development vision for the County
 - i. Continue supporting and updating regional economic development plans
 - b. Continue partnering with Navajo Nation Economic Development to promote projects
 - c. Use statewide economic development resources and incentives
- 7. Develop strategies to retain and attract population, especially youth and young families**
 - a. Consider policies promoting attractive development and continue enforcing policies that promote clean properties to provide future visitors and residents a desirable experience in the county
 - b. Support and promote San Juan College as a low-cost, local option focusing on trades and business development over the traditional, four-year university model
- 8. Continue using local LEDA incentives to attract new development and businesses**
 - a. Conduct a review of potential LEDA incentives available in the county and identify which appropriate industries would be the marketing audience
 - b. Review existing county LEDA ordinance to align with the 2013 state LEDA update
- 9. Target brownfield for cleanup and development**
 - a. Identify potential sites and funding sources
- 10. Prioritize small, local businesses for support and development**
 - a. Collaborate with 4CED to support local small business retention and expansion
- 11. Promote areas of high density for business development to improve infrastructure efficiency**

5. HOUSING

ENSURING QUALITY,
AFFORDABLE HOUSING FOR
SAN JUAN RESIDENTS

A. Introduction

The purpose of the Housing Element is to identify existing and projected future housing needs in San Juan County. It establishes long-range priorities, goals and policies both to guide county efforts and to assist in coordination of various private and nonprofit entities engaged in providing housing in the community. The Housing Element provides guidance to meet demand for new housing and improving housing quality.

B. Existing Conditions

Housing Units

In the two decades from 1990 to 2010, over 15,000 housing units were developed in San Juan County, an increase of nearly 44%. This growth was approximately on pace with population growth over that time, which showed an increase of 42% (from 91,605 in 1990 to 130,044 in 2010).

Since 2010, the U.S. Census estimates that less than 300 new units were developed, a growth of less than 1%. During that time period, county population is estimated to have fallen by 6% (or a decrease of 7,507 people).

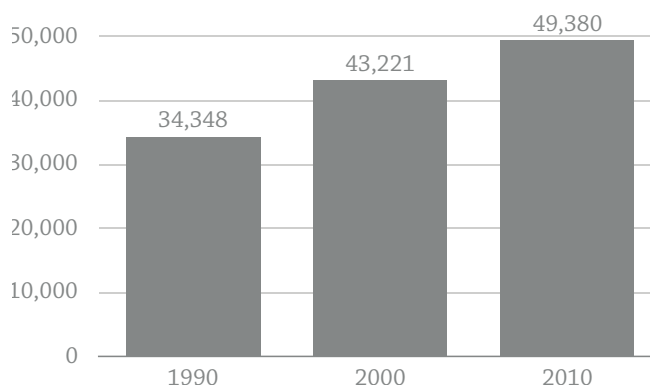
Just under one-fourth (23.3%, or 11,541 units) of all housing units in San Juan County are in the unincorporated area (i.e., not within Farmington, Bloomfield or Aztec).

Vacancy and Household Size

Following the 2008 recession, housing vacancy rose in the county from just under 14% in 2010 to a high of 18% in 2015, before falling slightly to 17.3% in 2016. This rate is just above the state average for 2016 of 16.4%

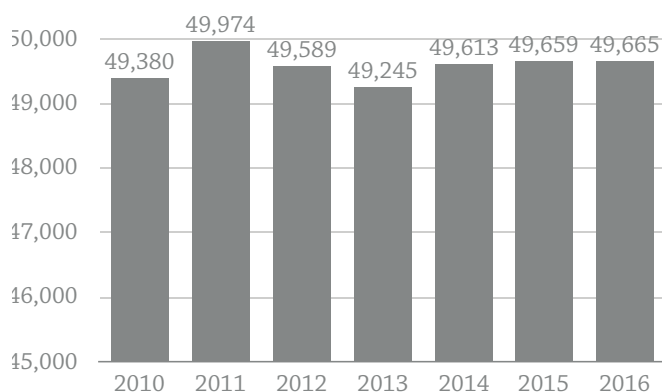
Of the estimated 8,571 vacant units in San Juan County, 25% are for rent or sale, 8% are rented or sold but unoccupied, 23% are seasonal homes and the remaining 44% are categorized as “other” vacant. This category usually indicates abandoned housing and accounts for 3,765 housing units in San Juan County.

Exhibit 5-1 San Juan County Total Housing Units 1990-2000



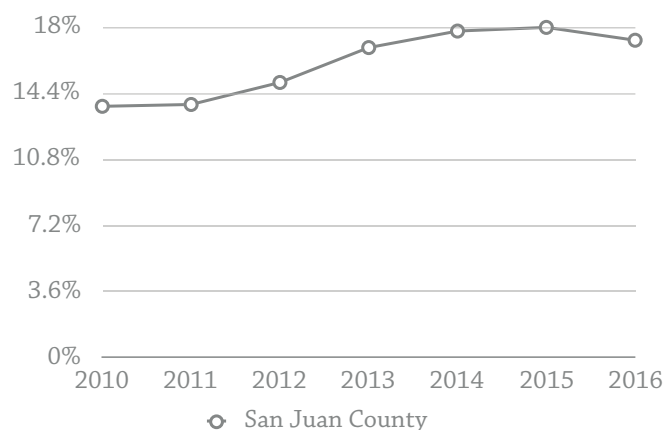
Source: American Community Survey 1-Year Estimates, 2010-2016, Table DP04

Exhibit 5-2 San Juan County Total Housing Units 2010-2016 (estimates)



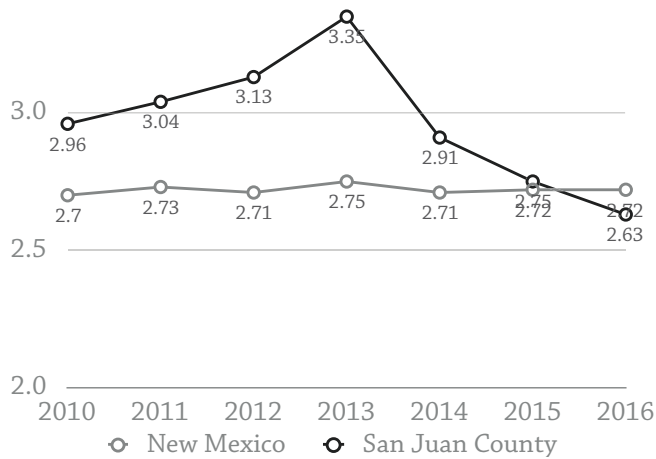
Source: American Community Survey 1-Year Estimates, 2010-2016, Table DP04

Exhibit 5-3 San Juan County Housing Vacancy Rate



Source: American Community Survey 1-Year Estimates, 2010-2016, Table DP04

Exhibit 5-4 Household Size, San Juan County



Source: American Community Survey 5-Year Estimate, 2012-2016

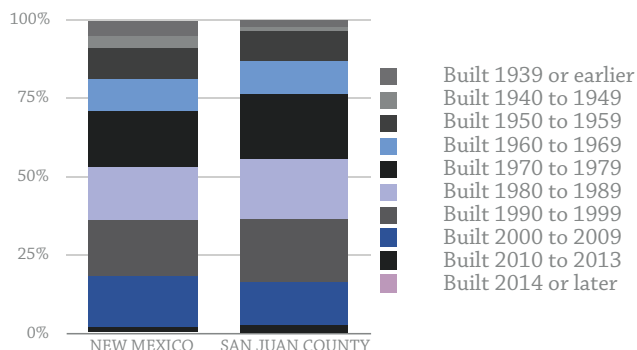
A much higher percentage of homes in the unincorporated county are vacant than in the county's municipalities.

- Aztec: 10.6% vacancy
- Bloomfield: 18.2% vacancy
- Farmington: 14.5% vacancy
- Unincorporated County: 27.7 vacancy%

In the unincorporated county, 36.7% of vacant housing are seasonal and 54.5% are classified as "other vacant."

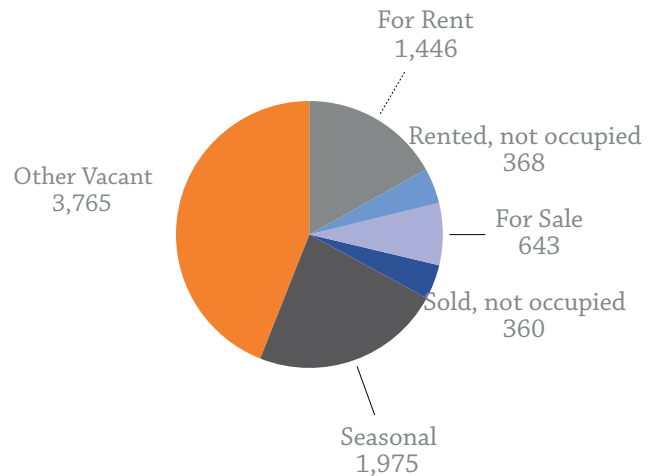
Despite a falling population and rising vacancy, household size spiked in 2013. This increase could be the result of several factors, including household consolidation, or people sharing living quarters to save on housing costs. Other reasons could be the result of oil field workers, representing single-member households, moving out while families remain, causing the overall average household size to rise. However, the

Exhibit 5-5 Comparative Age of Housing, San Juan County



Source: American Community Survey 5-Year Estimate, 2012-2016

Exhibit 5-6 Vacancy Status, San Juan County



Source: American Community Survey 5-Year Estimate, 2012-2016

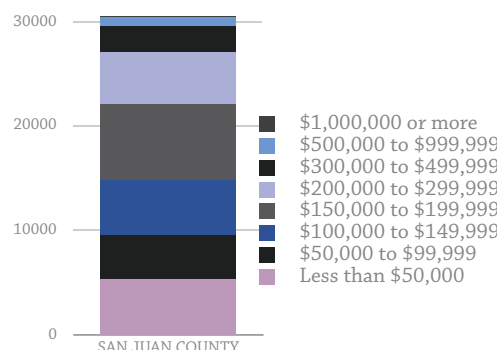
increase is most likely due to a combination of all factors. Household size has since fallen precipitously to below the state average of 2.72 persons in 2016.

Home Value and Age

Home value in the county is fairly evenly spread between less than \$50,000 and \$299,999, with the largest segment of housing (24%) falling between \$150,000 and \$199,999.

The age of housing in San Juan is similarly fairly evenly spread across homes built in each decade from 1970 to 2010. Housing ages are similar to state averages, with two exceptions: more housing in San Juan County was built in the 1990s than in the state as a whole and fewer homes in San Juan County are older than 1960 than in the state as a whole.

Exhibit 5-7 Home Values in San Juan County



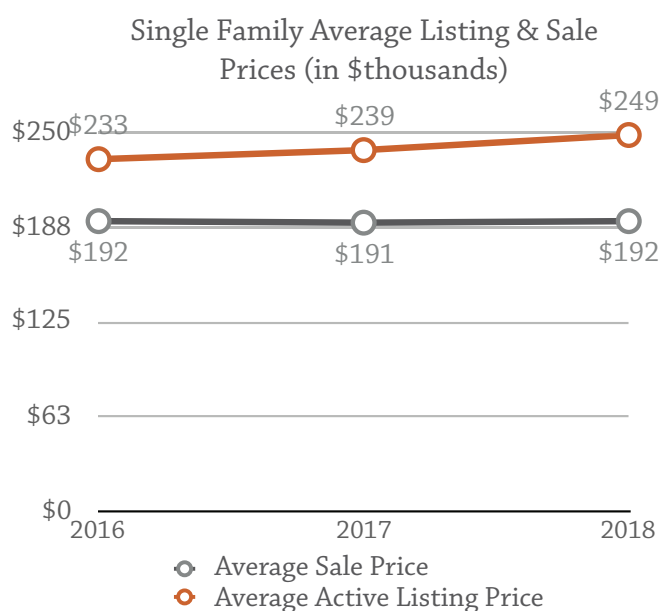
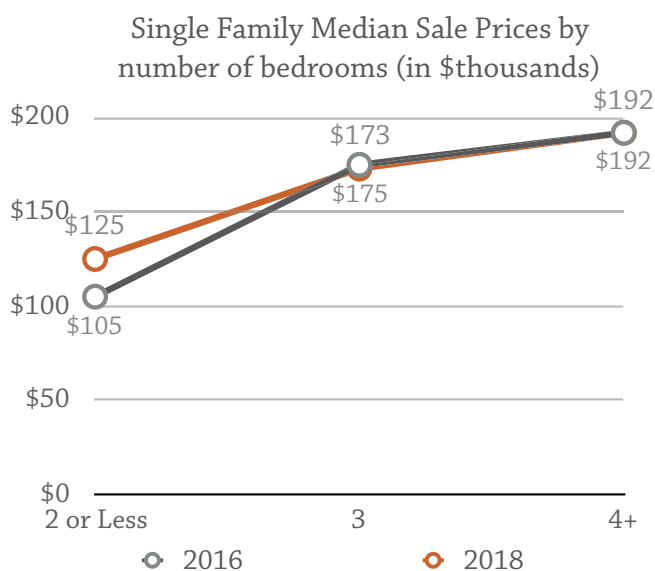
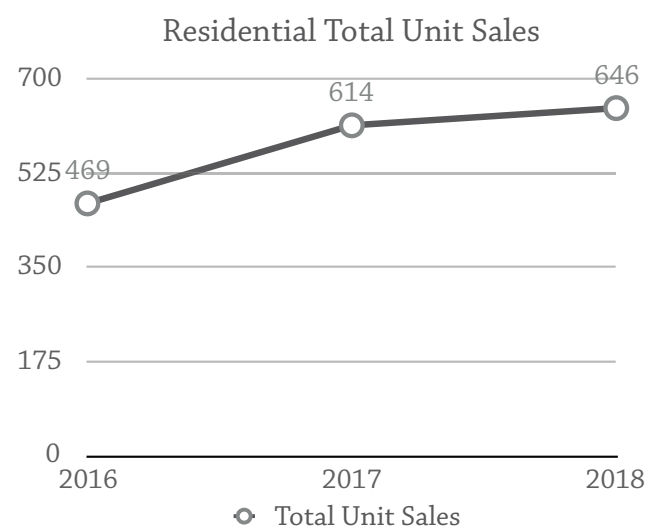
Source: American Community Survey 5-Year Estimate, 2012-2016

Residential Real Estate Sales

Multiple Listing Service (MLS) reports from January through August in 2016, 2017, and 2018 illustrate some trends in residential sales and pricing. Overall, both the total number of units sold and total value volume of those sales have risen since 2016. Total units sold rose from 469 in 2016 to 646 in 2018, while total volume of residential real estate sales rose from \$92 million in 2016 to \$126 million in 2018.

Over the same period, the average sale price of single family residential units remained flat at \$192,000, with a slight dip in 2017 to \$191,000, while the average active listing price rose from \$233,000 in 2016 to \$249,000 in 2018. The average sale price for single family units with three or more bedrooms has remained quite steady, but since 2016, the sales price for single family units with two or fewer bedrooms has risen significantly from \$105,000 in 2016 to \$125,000 in 2018.

Exhibit 5-8 Residential Data for Total Unit Sales, Volume, Number of Bedrooms and Price



Source: Sam R. Todd, CRS, Re/Max Real Estate reporting MLS and FBS data

Cost of Housing

The median monthly cost of housing in San Juan County is estimated at \$675 for 2016. The county supports a relatively even spread of monthly housing costs from less than \$300 to between \$1,000 to \$1,499 a month, with slightly heavier representation at either end of that spectrum, and between \$500 and \$799. The range between \$800 and \$999 has slightly lower representation. Median rental housing costs were \$760, compared to \$293 for owner-occupied homes without a mortgage and \$1,204 for owner-occupied homes with a mortgage.

Apartment Survey

UNM's Bureau of Business and Economic Analysis (BBER) conducts annual surveys of multi-unit apartments in the state to determine vacancy and cost. In San Juan County in 2017, the group surveyed a total of 19 properties representing 889 units. Of those, the majority, 463 were two-bedroom units. Weighted for size, the overall average monthly rent for those units in San Juan County was \$602, tenth highest in the state and just above the state average of \$581 in 2017. Apartment vacancy in San Juan measured sixth highest in the state at 7.3%, beating out the state average of 5.6%.

Cost Burden

Housing cost burden is defined as spending 30% or more of total household income on housing costs. The U.S. Census estimated that in 2016, 22% of San Juan County households were cost-burdened, compared to 28.1% of New Mexico households; 37% of cost-burdened households earn \$20,000 or less.

The majority of homeowners are not housing cost-burdened. Monthly housing costs for 75.1% of homeowners with a mortgage and 89.1% of homeowners without a mortgage are below 30% of household income. On the other hand, 45.4% of renters are housing cost-burdened.

Department of Housing and Urban Development (HUD) Income Limits

HUD estimates San Juan County's 2018 median family income (MFI) at \$60,100. HUD sets income limits for families to qualify for housing assistance, including affordable housing based on median family income and fair market rents (FMR), which HUD determines annually. For 2019 and 2018, HUD has determined the following ranges of FMRs for San Juan County:

Exhibit 5-9 Fair Market Rents

Year	Efficiency	1-BR	2-BR	3-BR	4-BR
2019 FMR	\$667	\$674	\$784	\$1,021	\$1,061
2018 FMR	\$652	\$656	\$770	\$979	\$1,049

Based on this information, HUD determines household income limits for assistance qualification by family size. It establishes three tiers of assistance qualification: extremely low income (30% of the MFI), very low income (50% of the MFI), and low income (80% of the MFI). Families with incomes at or below the HUD income limits qualify for housing assistance.

Exhibit 5-10 HUD Income Limit Categories

HUD Income Limit Category	Persons in Family			
	1	2	3	4
Extremely Low	\$12,650	\$16,460	\$20,780	\$25,100
Very Low	\$21,050	\$24,050	\$27,050	\$30,050
Low	\$33,700	\$38,500	\$43,300	\$48,100

These limits also determine affordable housing requirements for housing developments. To qualify for public funding such as Local Economic Development Act (LEDA) incentives, housing developments must include a certain percentage of affordable units. For example, a development receiving a tax credit may be required to designate 20% of the units in the

development as affordable housing for ten years. Tools like this enable a community to offer incentives to improve housing stock for market-rate and low-income residents.

Affordable Housing Plan

To use incentive tools like LEDA, a community must have an affordable housing plan adopted by ordinance and the New Mexico Mortgage Finance Authority (MFA) must approve the plan. San Juan County developed an affordable housing plan in 2011 in conjunction with the City of Farmington.

A county or municipality may provide housing assistance grants pursuant to Article 9, Section 14 of the constitution of New Mexico after enactment by its governing body of an ordinance authorizing grants stating the requirements of and purposes of the grants,... (Chapter 6, Article 27 NMSA 1978, may be cited as the Affordable Housing Act.)

The plan provides an in-depth study of existing housing and housing needs in San Juan County and outlines specific housing needs by type, population and number. The most pressing need identified in the plan is for affordable rental housing, including accessible units in consideration of the aging population.

The plan also identified the following barriers to affordable housing in San Juan:

- High land and construction costs
- Height restrictions and minimum lot sizes
- Limited construction financing
- Resistance to affordable and multi-unit developments

The plan recommends the following actions for the county:

- Adopt an affordable housing ordinance
- Identify land to make available for developers
- Ensure the subdivision regulations facilitate affordable housing development in appropriate locations
- Provide incentives for development of affordable and accessible housing

Affordable Housing

San Juan County Housing Authority administers 365 vouchers for HUD Section 8 Housing, but currently does not have funding to fill all of them. Currently, the Authority has funding to issue 263 vouchers to assist families, but another 526 families are on the waiting list. Moving to the top of the waiting list for eligibility review takes about a year. The responsibilities of the Housing Authority are:

- Establishing local policies
- Determining family eligibility and reexamining family income
- Maintaining the waiting list and selecting families for admission
- Calculating family share of rent and amount of housing assistance payment
- Establishing utility allowances
- Conducting outreach to owners, with special attention to those with units outside of areas of poverty or minority concentration
- Assisting persons with disabilities in finding satisfactory housing
- Approving units, including assuring compliance with housing quality standards and determining the reasonableness of rent
- Making housing assistance payment to owners
- Conducting informal reviews and hearings at the request of applicants and participants when challenging housing authority's administrative decisions
- Complying with fair housing and equal opportunity requirements, HUD regulations

and requirements, HUD-approved applications for program funding, the Housing Authority's administrative plan, and federal, state and local laws.

The County does not offer outreach or education programs for potential homeowners, but local groups such as the Economic Council Helping Others, Inc. (ECHO), Habitat for Humanity, and U.S. Department of Agriculture provide some homeownership assistance, including down payment assistance and low-cost mortgages.

Housing Stock

The majority of homes in San Juan County as a whole are single family (61%), with mobile homes making up the second largest portion of housing types (31%). In Aztec and Bloomfield, single-family housing barely constitutes the majority of housing at just over 50%, with mobile homes making up 44% of housing in each community. All geographies in the county have higher percentages of mobile home stock than the state average, but the unincorporated area of the county has the second lowest

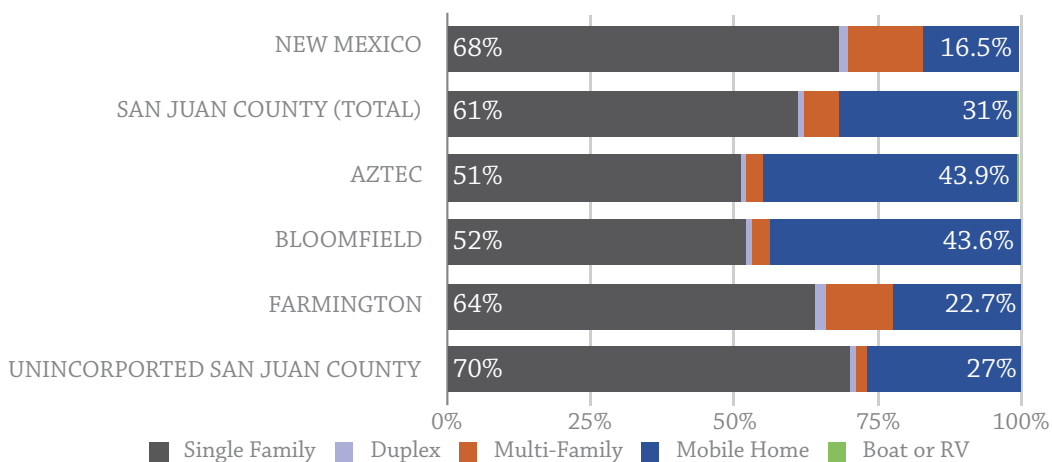
of any geography in the county at 27%. Because counties generally have less land use regulation than municipalities, it is unusual for unincorporated areas to have a lower percentage of mobile homes than municipalities. However, Aztec and Bloomfield do have unusually high percentages of mobile homes. Farmington has the lowest percentage of mobile homes at 22%.

Manufactured Home and RV Regulation

San Juan County has a manufactured home parks and recreational vehicles parks ordinance that regulates properties with three or more manufactured homes or recreational vehicles. New parking spaces, sites or pads in parks and spaces that have been vacant for more than 12 months must apply for a license, be compliant with HUD standards (established in 1977), be approved for septic and comply with floodplain management.

The ordinance also regulates density, setback, buffers, screening, access, utilities and services.

Exhibit 5-11 Housing Type



Source: American Community Survey 5-Year Estimate, 2012-2016

Goals and Policies

1. Work to ensure the availability of safe and affordable housing for all San Juan County residents

- a. Support diverse housing options for a range of incomes and densities, both within municipal limits and in the unincorporated areas of the county
- b. Regularly update the Affordable Housing Plan for Northeast San Juan County, NM
- c. Collaborate with housing groups such as the Affordable Housing Alliance, San Juan County Partnership, and San Juan Safe Communities Initiative to expand affordable housing options
- d. Adopt an affordable housing ordinance to enable resource donation for affordable housing projects

2. Work to preserve and maintain housing stock in the county

- a. Identify programs and partners to help rehabilitate and maintain homes, especially for the elderly (weatherization, water and energy efficiency)
- b. Work with utility providers to develop efficiency incentives and rebates

3. Efficiently manage new housing development to streamline infrastructure costs to the extent possible

- a. Concentrate new development for efficient provision of infrastructure and services
- b. Encourage infill development and cluster development that shares utility infrastructure
- c. Develop density guidelines to promote higher density ,and coordinated or focused development to reduce sprawl and maximize the use of private land

6. TRANSPORTATION

IMPROVING AND EXPANDING
SAN JUAN COUNTY'S
TRANSPORTATION SYSTEM

A. Introduction

The purpose of the Transportation Element is to guide improvements and any expansion of the transportation system needed to meet the demands generated by the existing population as well as future growth over the next 20 years.

The future economic and social health of San Juan County will depend to a large extent on how effectively its transportation system can accommodate both personal mobility and the movement of goods under a wide variety of changing circumstances. As well, the transportation system affects other community needs.

Land use and transportation are intertwined systems. Land development places demand on transportation systems, and modifications to the transportation network can incentivize (or discourage) development. Thus, the County's transportation system has a powerful influence on where growth occurs and whom it benefits.

Roads should serve land use. For instance, greater dispersal of population requires a wider network of roads and more vehicle miles traveled per capita. On the other hand, more concentrated development in cities or county growth centers allows for more efficient transit service, walking and bicycle trips.

Sensible and strategic future development of the transportation system is critical to San Juan County's growth. Decisions made about the transportation network determine the extent to which maintenance of the system over time will burden county taxpayers. They affect the affordability of living in the county, in terms of wear and tear on vehicles and roadways, as well as lost productivity due to time spent driving. They affect the health and well-being of residents, from air quality concerns to vehicle crashes.

B. Planning Context

The Farmington Metropolitan Planning Organization (MPO) is a regional planning entity responsible for providing guidance

on transportation issues in northeastern San Juan County (see Exhibit 6-1 for the MPO boundaries). The 2040 Metropolitan Transportation Plan (MTP), adopted in 2015, identifies services and infrastructure projects that regional decision makers determined are required to meet the transportation needs of the region through 2040.

The Northwest New Mexico Council of Governments (NWNMCOG) acts as a regional planning organization, addressing broader geographic coverage in its Regional Long Range Transportation Plan that focuses mainly on rural systems and the broader network of federal and state highways. Note that NWNMCOG is currently in the process of assuming control of operations of the Farmington MPO from the City of Farmington.

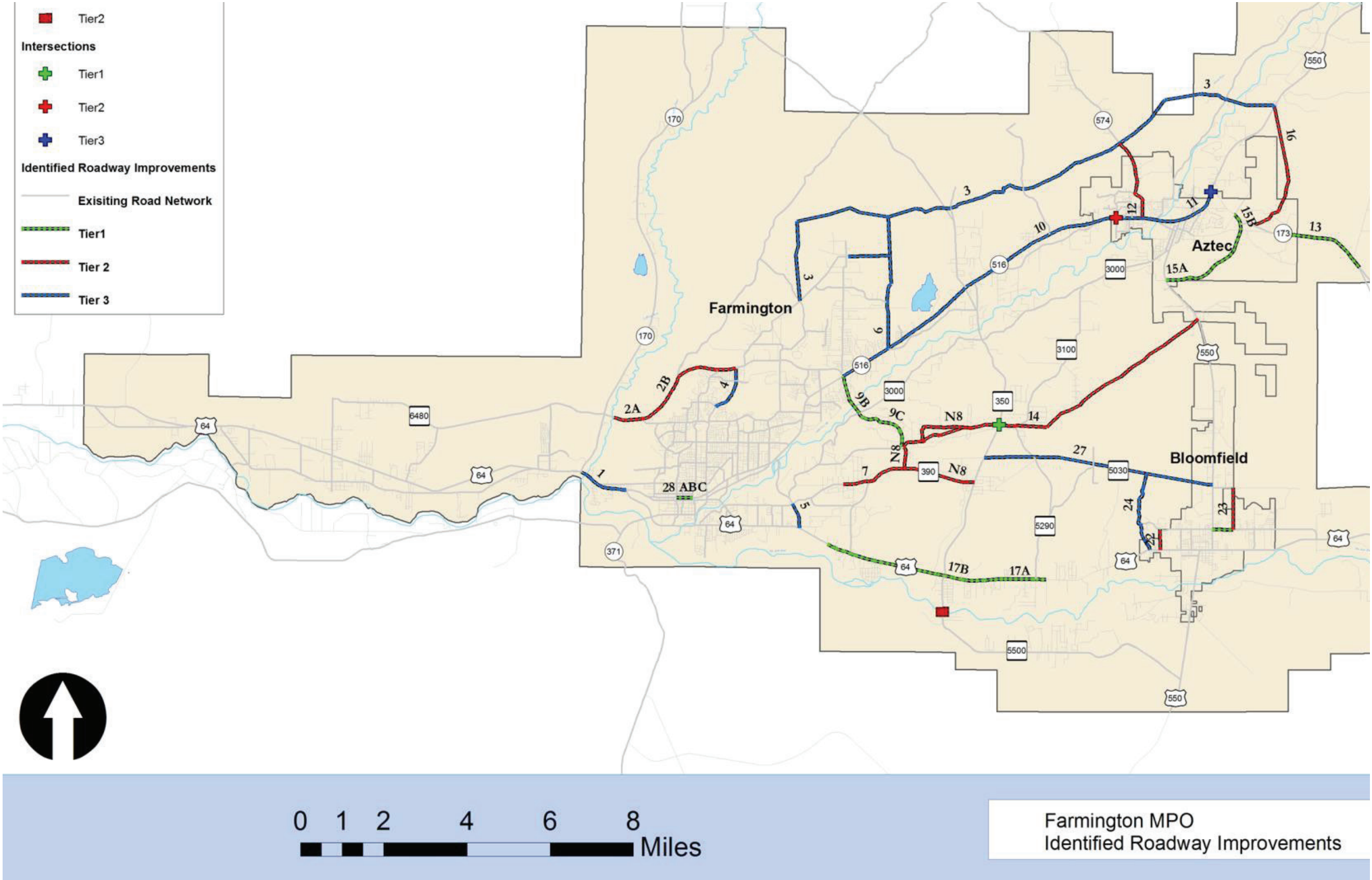
The San Juan County Public Works Department is responsible for planning, programming and maintaining the extensive county road system. The department maintains approximately 750 miles of roadways, about 230 of which are paved. Public Works also coordinates with municipalities, the U.S. Department of Transportation, the Navajo Nation, and other governmental entities to plan roadway improvements in a strategic and collaborative fashion.

C. Roadway System

Existing Roadways

The roadway system in San Juan County includes a combination of state highways, county arterial and local roadways, streets within municipalities, Navajo Nation and Bureau of Indian Affairs (BIA)-maintained roads, Bureau of Land Management (BLM) roads, and private roadways serving oil and gas wells. Approximately 747 miles are maintained by San Juan County government. The county road system consists of 232 miles of paved roads, 437 miles of unpaved roads, and 79 miles of roads that are classified as "lesser maintained."

Exhibit 6-1 Roadway Improvements Identified in the Farmington MPO 2040 Metropolitan Transportation Plan



Source: Farmington MPO 2040 Metropolitan Transportation Plan, 2015

Exhibit 6-2 Roadway Improvements Identified in the 2018 Statewide Transportation Improvement Program

PROJECT TITLE	LEAD AGENCY	PROJECT TYPE	TOTAL COST
East Aztec Arterial Phase II	City of Aztec	Road - New Construction	\$9,000,000
East Blanco Bridge	City of Bloomfield	Bridge - Replace	\$2,503,624
Red Apple Transit	City of Farmington	Transit	\$3,811,384
Farmington 20th Street Phase III	City of Farmington	Bicycle and Pedestrian	\$886,448
Foothills Drive Enhancement Phase II	City of Farmington	Road - Other Improvement	\$1,237,465
Anesi Trail and Pedestrian Bridge	City of Farmington	Bicycle and Pedestrian	\$1,070,000
EAST PIÑON HILLS BLVD EXTENSION PHASE II	City of Farmington	Road - New Construction	\$18,250,000
EAST PIÑON HILLS BOULEVARD EXTENSION PHASE I	City of Farmington	Road - New Construction	\$4,000,000
Kirtland Schools Walk Path System	County of San Juan	Bicycle and Pedestrian	\$775,000
Glade Run Recreation Area Trails	County of San Juan	Bicycle and Pedestrian	\$700,000
CR 5500 Bridge Replacement	County of San Juan	Bridge - Replace	\$5,000,000
EAST PIÑON HILLS BOULEVARD EXTENSION PHASE III	County of San Juan	Road - New Construction	\$12,800,000
NM 173 Safety Improvements	NMDOT	Safety	\$4,270,000
IN FRONT OF SHIPROCK HIGH SCHOOL, MID-SCHOOL, AND DINÉ COLLEGE	NMDOT	Safety	\$3,207,000
US 64- Phase I	NMDOT	Road - Other Improvement	\$7,000,000
US 64- widening Phase VI	NMDOT	Road - Add Capacity/Widening	\$20,996,285
US 64- Widening Phase V	NMDOT	Road - Add Capacity/Widening	\$17,705,578
US 491 FDR	NMDOT	Road - Recons/Rehab	\$11,600,000
NM 170	NMDOT	Road - Recons/Rehab	\$5,304,323
US 64/N 5031 Intersection	NMDOT	Safety	\$800,000
US 64 ADA Requirements	NMDOT	ADA Improvements	\$250,000
US 64- Shiprock	NMDOT	Road - Recons/Rehab	\$1,140,369
US 64- Phase II	NMDOT	Road - Other Improvement	\$6,000,000
La Plata Bridge	NMDOT	Bridge - Replace	\$2,999,737
NM 371	NMDOT	Road - Recons/Rehab	\$4,000,000
FARMINGTON, AZTEC, BLOOMFIELD, AND SURROUNDING AREAS	NMDOT - Planning Division	Study/Planning	\$465,181

Source: New Mexico Department of Transportation, Statewide Transportation Improvement Program

Exhibit 6-3 Roadway Improvements Identified in the 2040 Metropolitan Transportation Plan

PROJECT TITLE	LEAD AGENCY	TOTAL COST
East Piñon Hills Blvd Extension (Phase I)	Farmington	\$3,950,000
East Piñon Hills Blvd Extension (Phase II)	Farmington, County	\$13,265,454
East Piñon Hills Blvd Extension (Phase III)	County	\$8,000,000
NM 173	NMDOT	\$2,110,000
East Arterial Route Phase 1B	Aztec	\$3,500,000
East Arterial Route Phase 2	Aztec	\$7,319,750
US 64 Phase IV	NMDOT	\$15,600,000
US 64 Phase V	NMDOT	\$17,655,750
US 64 Phase VI	NMDOT	\$9,000,000
"CR 350/ CR 390 Intersection"	NMDOT	\$650,000
East Blanco	Bloomfield	\$2,000,000
"Bridge Preservation: US 550 #9178 & #9179"	NMDOT	C260,000
"Downtown Main Street Complete Streets Project (Phase I)"	Farmington	\$2,029,920
"Downtown Main Street Complete Streets Project (Phase II)"	Farmington	\$1,522,440
"Downtown Main Street Complete Streets Project (Phase III)"	Farmington	\$1,522,440

Source: Farmington MPO 2040 Metropolitan Transportation Plan, 2015

Loopholes in land use regulation (see the Land Use Element) have resulted in a great number of private roadways. San Juan County Public Works Department does not maintain these roads; maintenance responsibilities fall to the land owner of each parcel. The County also does not oversee the design and construction of private roads. It does not require that roads meet county standards for construction, drainage, or placement. Roads may have inadequate substructure to accommodate high traffic volumes, heavy vehicles or emergency response vehicles.

Public Works representatives attested to the fact that some private roads that access these parcels — in effect, driveways — have not been built to county specifications and have washed away in floods, stranding residents and requiring costly and occasionally perilous intervention at public expense.

San Juan County has a memorandum of understanding (MOU) with the Navajo Nation that has enabled a number of successful maintenance and construction projects.

Planned Future Roadways

The 2040 MTP identifies 15 “Tier 1” roadway projects — critical, short-term projects with full or partial funding planned for completion over the five-year period between 2015 and 2020 (see Exhibit 6-3). Note that per county staff, significant funding gaps exist in all tiers; it is unlikely that the County will complete all Tier 1 projects within this time frame. These projects, totaling about \$88.4 million, include plans to widen highways, repair bridges, and improve safety. Of these projects, NMDOT is responsible for six, San Juan County is responsible for two (one of which is a collaborative effort with the City of Farmington), Farmington is independently responsible for four, the City of Aztec is responsible for two and Bloomfield is responsible for one.

Multi-phase plans to widen US 64 from four to six lanes comprise almost half of all Tier 1 project costs.

The 2040 MTP also identifies 12 Tier 2 projects (total cost: \$59.5 million) and nine Tier 3 projects (total cost: \$206.2 million) as long-term projects.

The New Mexico Department of Transportation (NMDOT) maintains the Statewide Transportation Improvement Program (STIP), which identifies current and long-term transportation needs, including roadways, bridges, public transit, ADA improvements, safety improvements, and bicycle and pedestrian projects. The 2018 STIP calls for over \$145 million in transportation improvements, only \$200,000 of which has been funded.

D. Public Transportation

Public transportation in San Juan County includes service provided by several agencies and organizations, including Red Apple Transit, Navajo Transit and TNM&O (Greyhound) Bus Lines.

Red Apple Transit

Red Apple Transit is the public transit bus system for the City of Farmington. The system has five bus lines that serve the city. It also provides limited service between Farmington and Aztec, Kirtland and other areas within San Juan County Red Apple Transit, but no longer provides service to Bloomfield. It does provide on-call paratransit services.

Navajo Transit System

The Navajo Transit System, operated by the Navajo Nation, provides intercity service to communities throughout the Navajo Nation and its surroundings. San Juan County destinations include Shiprock, Newcomb and Farmington.

North Central Regional Transit District

The North Central Regional Transit District (NCRTD) provides service to the cities of Farmington and Bloomfield; communities in Los Alamos, Taos, Santa Fe and Rio Arriba counties; and eight pueblos in the area.

E. Non-Motorized Transportation System

The non-motorized transportation system in unincorporated San Juan County includes a very limited number of pedestrian facilities and bikeways. The pedestrian facilities (sidewalks, crosswalks and other pathways) exist mostly within the incorporated areas of the county. Bikeways are mostly on-street shoulders or routes, and are located mostly within the incorporated areas.

San Juan County is in the process of documenting the trail network in the county, some of which consists of “informal” trails built or traversed without permission from land owners. The patchwork of land ownership (see the Land Use Element) complicates establishing and maintaining trails.

To improve pedestrian mobility and safety, the Metropolitan Transportation Plan emphasizes improvements within pedestrian districts (e.g., downtown areas), commercial centers along arterial roadways and near schools, including providing access to bus stops. Few of these improvements are located in the unincorporated parts of the county, although the City of Farmington will break ground on a Complete Streets project to improve walkability on Main Street in the city’s downtown core.

Bikeways

The 2040 MTP recognizes a need for improved bicycle and pedestrian amenities, and has identified 23 projects, totaling \$13.1 million in cost, as Tier 1 priorities (see Exhibit 6-4).

Five of these projects are in the unincorporated county:

- Multi-use path on Wildflower Parkway
- Bike lanes on County Road 350
- A multi-use path parallel to US 64 between Bloomfield and Farmington
- Two sidewalk and multi-modal path projects in Kirtland (note that this project may now be within the incorporated boundaries of the city of Kirtland)

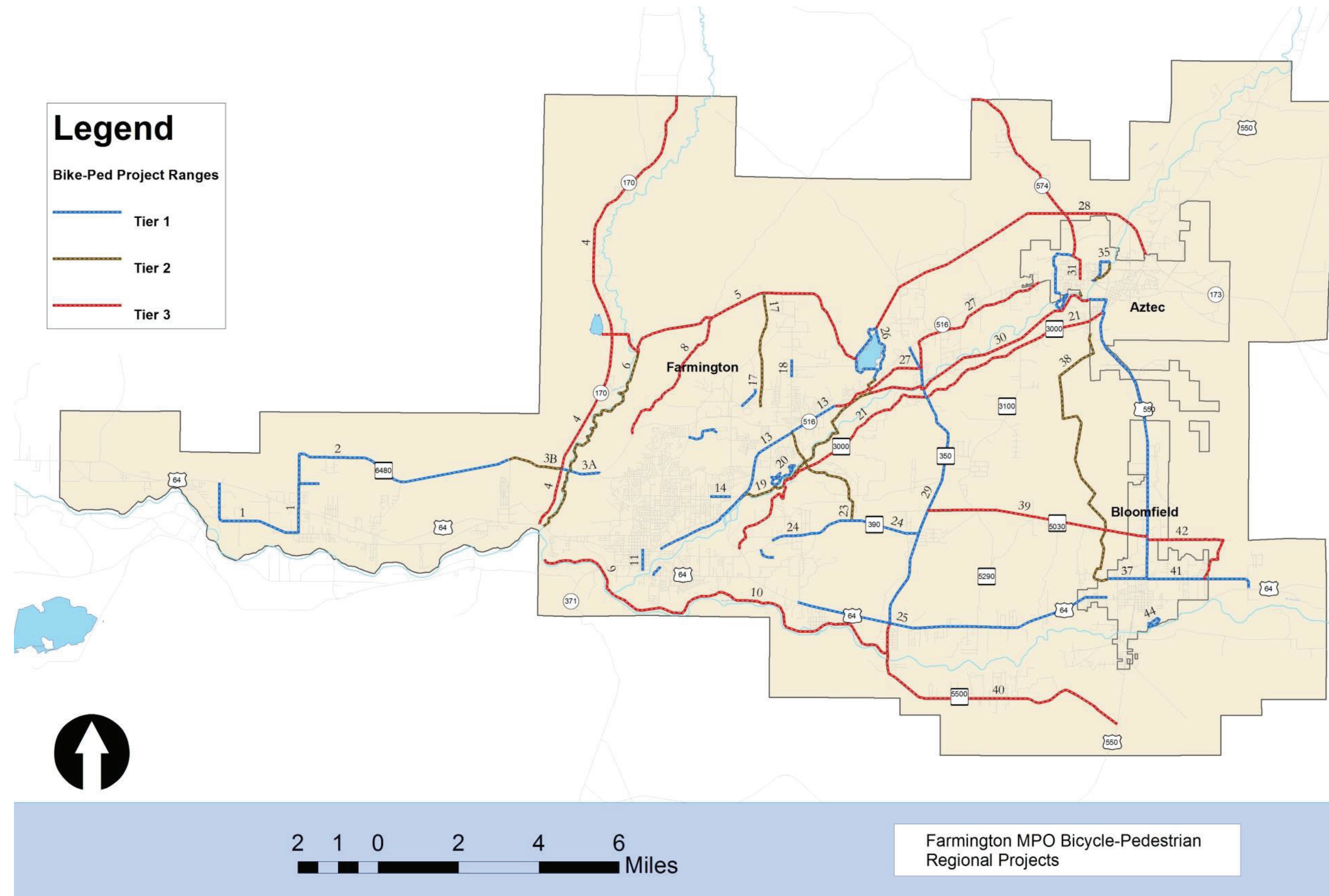
Connecting major population centers in the county via bikeways would expand intercity transportation options and support the Outdoor Recreation Industry Initiative, although doing so would require overcoming some significant hurdles. Establishing a designated route would require substantial interjurisdictional cooperation to navigate the patchwork of land ownership. Converting rural roads into bikeways requires wide shoulders, and not many rural roads in San Juan County have shoulders consistently wide enough to accommodate bicycles.

NMDOT is in the process of finalizing the New Mexico Prioritized Statewide Bicycle Network Plan. This plan primarily identifies existing routes on state and federal highways and assesses their condition, but once published, the plan might highlight key opportunities in San Juan County to improve the regional bicycle network.

F. Railroads

Historically, the Denver & Rio Grande Western Railroad system provided narrow-gauge railroad service in San Juan County via a branch from Durango through Aztec to Farmington, but it abandoned this branch in 1968. Since that date, there has been no intercity rail service to the area.

County administrators, economic development experts, and members of the public have cited the lack of rail service as an impediment to attracting industry to the county.

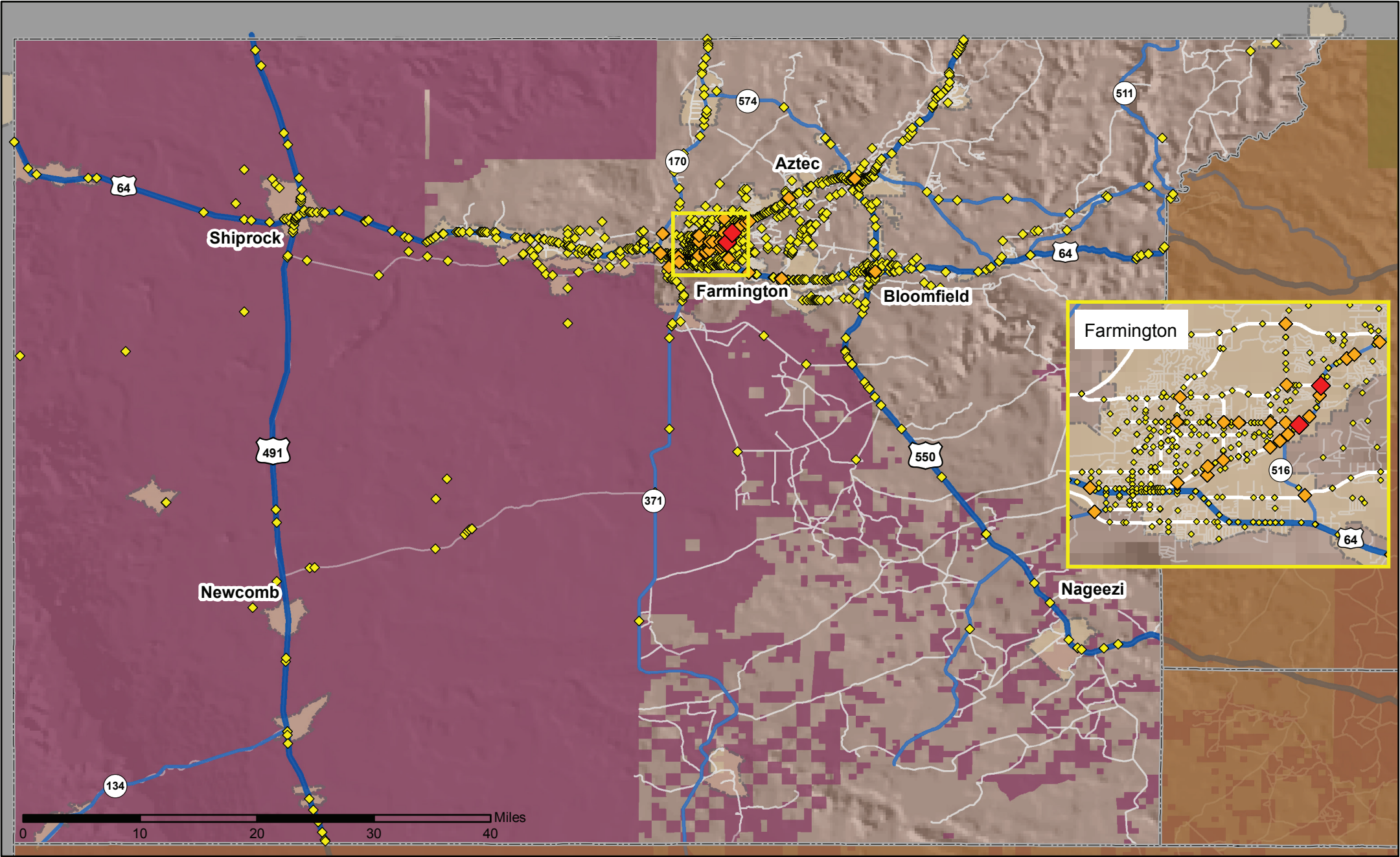


Source: Farmington MPO 2040 Metropolitan Transportation Plan, 2015



Crashes in San Juan County, New Mexico, 2016

Map created by the Traffic Research Unit, Geospatial & Population Studies at UNM



Legend

Data Source: NMDOT Crash File 2016
<http://tru.unm.edu> CO#5801 tru@unm.edu

- Forest & Wildlife Areas
- Reservations & Pueblos
- County Boundaries
- City Boundaries

- Interstate Highways
- U.S. Highways
- State Highways
- Streets & Roadways

Crashes 2016

- 1 - 8 Crashes
- 9 - 23 Crashes
- 24 - 31 Crashes

Source: UNM Geospatial and Population Studies, Traffic Research Unit, 2016 Community Report: San Juan County

The ability to cost-effectively import raw materials and export finished goods would benefit the manufacturing, chemical processing and construction industries, to name a few. Current but still unpublished studies have determined the costs and benefits of reestablishing a rail link to the Gallup area or to Utah. The viability of such a project is contingent upon certain inputs and outputs largely related to the coal industry, the future of which is at present uncertain.

G. Air Transportation

The San Juan County area has two competing major airports: Four Corners Regional Airport in Farmington and Durango-La Plata Airport outside of Durango, Colorado.

Four Corners Regional Airport is owned by the City of Farmington. It has two runways, one 6,700' in length and the other 6,500' long. The runways lie at an elevation of 5,506'. Direct commercial passenger airline service is available to Denver via Great Lakes Airlines; airlines that previously provided service to Albuquerque and Phoenix have ceased that service. The airport offers free short- and long-term parking immediately in front of the terminal. Farmington is conducting the upgrades required to provide national service to larger planes, expanding the airport runway to handle larger commercial service and installing an Engineered Materials Arrestor System (EMAS), a key piece of emergency equipment.

La Plata County and the City of Durango jointly operate the Durango-La Plata Airport. It is located approximately 15 miles southeast of Durango at an elevation of approximately 6,700' and has a 9,200'-long runway. Direct commercial passenger airline service is available to Denver via United Express and to Phoenix via America West Express (US Airways).

H. Transportation Safety

The Traffic Research Unit of the University of New Mexico's Geospatial and Population Studies provides crash data reports to NMDOT. Its 2016 Community Report for San Juan County identified a total of 1,971 crashes in the county in 2016. Of those, 27 were fatal and 635 resulted in an injury.

The report listed 163 crashes as "alcohol-involved." Law enforcement made 1,201 DWI arrests — nearly one-half of which were for repeat offenders — comprising 11.6% of all DWI arrests statewide.

The three most commonly cited factors contributing to an accident are driver inattention (792 crashes), failure to yield right-of-way (330 crashes), and following too closely (323).

Exhibit 6-5 shows a map of crashes in San Juan County. Most crashes take place along the major state highways — especially between cities — and within city limits.

Goals and Policies

1. Promote safe and orderly transportation systems

- a. Encourage new development to form a gridded street network to improve connections and options
- b. Discourage long, dead-end streets. Support multiple connections between proposed subdivisions and existing roadways.
- c. Through enhanced land use regulations, ensure that private road development accommodates emergency vehicles and meets minimum standards (see Land Use Element)

2. Prioritize multi-modal projects to support outdoor recreation and improve quality of life

- a. Expand the bicycle network with lanes, paths, routes, and trails
- b. Develop an intercity trail network with bikeable connections between cities in conjunction with the cities, other government agencies, and non-governmental organizations
- c. Advocate for complete streets projects
- d. Continue to collaborate with planning organizations such as the Farmington Metropolitan Planning Organization, New Mexico Department of Transportation, the Federal Highway Administration, the Federal Transit Administration, the Navajo Nation, municipal governments, the Northwest New Mexico Council of Governments and others

3. Maintain and develop county roads as needed

- a. Update the county's long-range transportation plan
- b. Develop a more comprehensive asset management plan (see Facilities Element) that includes county-maintained roadways
- c. Build on the success of the memorandum of understanding between San Juan County and the Navajo Nation. Encourage further collaboration between the County and other road managers.

7. FACILITIES

PROTECTING SAN JUAN COUNTY'S
CAPITAL ASSETS

A. Introduction

The purpose of the Facilities Element is to provide an inventory of existing county buildings and properties, and establish long-range priorities, goals and policies that promote efficiencies and best practices for facilities investments. Infrastructure includes community facilities owned by the County and other public and quasi-public facilities serving county residents. Please refer to the Water and Wastewater Element for discussion of rural water districts and irrigation ditches, and the Transportation Element for a discussion of roads, sidewalks, transit and bicycle facilities.

One of the objectives of preparing the Growth Management Plan is to develop an integrated long-range planning document that supports planning for infrastructure funding and requests. The Infrastructure Element ties directly into the five-year Infrastructure Capital Improvements Plan (ICIP) promoted by the New Mexico Department of Finance and Administration. This plan element is also associated with the Land Use Element because it considers the long-range direction and volume of growth. These factors determine where new facilities and services will be needed.

B. Existing Conditions

San Juan County takes a proactive role in maintaining its facility inventory. Using bond funding, county government is conducting major building systems upgrades to many of its facilities — including the county administration building, the juvenile detention center, the sheriff's office, and the district court, among others — with the understanding that these upgrades may greatly extend the life of the facilities regardless of the future state of county finances. These projects include HVAC system upgrades, roof repairs, and ADA compliance projects, among others.

The County plans to expand its administration building in 2019, adding approximately 3,000 square feet to accommodate the Human Resources and Risk Management Departments.

It will then renovate the current Human Resources building for use by the Public Works Department.

Facilities Inventory

The County's facility inventory has undergone some changes since the publication of the 2009 Growth Management Plan. It has acquired a new District Attorney's Office in Farmington, constructed two new fire stations (Center Point / First Divide and Lee Acres), and acquired the Pepsi building. A recent expansion to the Sheriff's Office has approximately doubled its size.

The County has also divested certain properties, such as the Kirtland Youth Association facility (which it transferred to the newly incorporated City of Kirtland), Tally Park (which it deeded to the Upper La Plata Water Users Association), Halverson House (which is now the property of the City of Farmington), the Sobering Center (to the City of Farmington), and a mobile home (to the Shiprock Chapter).

The four cities in the county are expanding their parks, amenities, and services to enhance the quality of life for their residents, but this is not a focus for the county.

County administrators have expressed their desire to focus on providing quality service, being both strategic and tactical about maintaining or — if necessary — divesting itself of facilities. It does not seek to acquire additional facilities at this time.

San Juan County owns and operates over 100 individual facilities. The following tables show the inventory of county facilities serving the residents of San Juan County.

Exhibit 7-1 Inventory of County Facilities

AZTEC COMPLEX - 100 SERIES		
100	COUNTY ADMINISTRATION	100 S OLIVER DRIVE AZTEC, NM 87410
101	DISTRICT COURT	103 S OLIVER DRIVE AZTEC, NM 87410
102	COMMUNICATIONS CENTER	207 S OLIVER DRIVE AZTEC, NM 87410
103	VOTING MACHINE BLDG	112 1/2 S OLIVER DRIVE AZTEC, NM 87410
104	CENTRAL PURCHASING	213 S OLIVER DRIVE AZTEC, NM 87410
105	EMS FACILITY	212 S OLIVER DRIVE AZTEC, NM 87410
106	MULTI-SERVICE BLDG (HR/PW/ SHOP)	305 S OLIVER DRIVE AZTEC, NM 87410

MCGEE PARK - 200 SERIES		
200	MULTI-USE BLDG	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
201	CONVENTION CENTER	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
203	PIG BARN	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
204	COVERED PAVILION	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
205	GOAT BARN	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
206	FAR WEST CONCESSION	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
207	LAMB BARN	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
209	MEMORIAL COLISEUM	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
210	POULTRY BARN	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
211	RABBIT BARN	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
212	BEEF BARN/RIDING ARENA	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
213	BEEF BARN/RIDING ARENA RESTROOMS	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
214	HORSE STALLS	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
215	CARPENTRY/WELDING BLDG	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
216	MAINTENANCE SHOP	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
218	TRES RIOS/STORAGE	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
218	TRIPLE WIDE MOBILE HOME	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
219	GUARD SHACK	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
220	WASTE WATER TREATMENT PLANT	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
222	PONY PENS	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401
226	BRIEFING BUILDING	#41 ROAD 5568, MCGEE PARK FARMINGTON, NM 87401

SUNRAY - 300 SERIES		
300	SUNRAY PARK CASINO	#39 SUNRAY PARKS CASINO, FARMINGTON, NM 87401
301	JOCKEY ROOM	#39 SUNRAY PARKS CASINO, FARMINGTON, NM 87401
302	SUNRAY PARK CASINO-OFFICE/ KITCHEN	#39 SUNRAY PARKS CASINO, FARMINGTON, NM 87401
303	TEST BARN/VET OFFICE SUN RAY	#39 SUNRAY PARKS CASINO, FARMINGTON, NM 87401
303	MOBILE HOME RACING OFFICE	#39 SUNRAY PARKS CASINO, FARMINGTON, NM 87401
304	SUNRAY PARK CASINO-STORAGE BLDG	#39 SUNRAY PARKS CASINO, FARMINGTON, NM 87401
305	SUNRAY PARK CASINO-HORSE STALLS	#39 SUNRAY PARKS CASINO, FARMINGTON, NM 87401
306	GUARD SHACK FAIRGROUND	#39 SUNRAY PARKS CASINO, FARMINGTON, NM 87401
306	TOTE BOARD BLDG	#39 SUNRAY PARKS CASINO, FARMINGTON, NM 87401
307	METAL BLDG & RIVER (PUMP HOUSE)	#39 SUNRAY PARKS CASINO, FARMINGTON, NM 87401

SHERIFF'S DEPARTMENT - 400 SERIES		
400	SHERIFF'S OFFICE	211 S OLIVER DRIVE AZTEC NM 87410
401	STORAGE BLDG	211 S OLIVER DRIVE AZTEC NM 87410
402	HELICOPTER STORAGE	103 S OLIVER DRIVE AZTEC, NM 87410
403	SHERIFF'S OFFICE EVIDENCE STORAGE	211 S OLIVER DRIVE AZTEC NM 87410
404	LEE ACRES SUBSTATION SO	#21 ROAD 5500 FARMINGTON, NM 87401
406	MOBILE HOME	#13 ROAD 7165 BLOOMFIELD, NM 87413
407	SHERIFF'S SUBSTATION	12670 HWY 550 BLOOMFIELD, NM 87413
408	TRAINING MOBILE HOME	#21 ROAD 5500 FARMINGTON, NM 87401
409	SAFETY CITY TRAINING MOBILE	#428 ROAD 6480 KIRTLAND, NM 87417
410	SAFETY CITY TRAINING MOBILE	#428 ROAD 6480 KIRTLAND, NM 87417

FIRE DEPARTMENT - 500 SERIES		
500	FIRE OPERATIONS	209 S OLIVER DRIVE AZTEC NM 87410
501	FIRE OPERATIONS PARKING CANOPY	209 S OLIVER DRIVE AZTEC NM 87410
502	BLANCO FIRE STATION #1	7372 HWY 64 BLANCO, NM 87412
503	BLANCO FIRE STATION #2-NAVAJO DAM	815 HWY 511 NAVAJO DAM, NM 87419
504	VOLUNTEER FIREMEN MOBILE HOME	#20A ROAD 4267 NAVAJO DAM, NM 87419
506	CEDAR HILL FIRE STATION #1	#4 ROAD 2343 AZTEC, NM 87410
507	CEDAR HILL FIRE STATION #2	#294 ROAD 2900 AZTEC, NM 87410
508	CENTER POINT FIRE STATION #1	#16 ROAD 2755 AZTEC, NM 87410
509	FLORA VISTA FIRE STATION #1	#2 ROAD 3275 FLORA VISTA, NM 87415
510	FLORA VISTA FIRE STATION #2	790 HWY 516 FLORA VISTA, NM 87415
511	FLORA VISTA FIRE STATION #3	1029 HWY 574 AZTEC, NM 87410
512	HART VALLEY FIRE STATION #1	#100 ROAD 3100 AZTEC, NM 87410
513	HART VALLEY FIRE STATION #2	#76 ROAD 3950 FARMINGTON, NM 87401
514	SULLIVAN ROAD FIRE STATION #1	#305 CR 4900 BLOOMFIELD, NM 87413
515	HUERFANO FIRE STATION DZ #1	12670 HWY 550 BLOOMFIELD, NM 87413
516	LEE ACRES FIRE STATION #1	#29 ROAD 550 FARMINGTON, NM 87401
518	LA PLATA FIRE STATION #1	1457 HWY 170 LA PLATA, NM 87418
519	LA PLATA FIRE STATION #2	679 HWY 170 LA PLATA, NM 87418
520	VALLEY FIRE STATION #2	#532 ROAD 6100 KIRTLAND, NM 87417
521	VALLEY FIRE STATION #4	#4 ROAD 6200 KIRTLAND, NM 87417
522	FIRE TRAIN TOWER	4105 HWY 64 KIRTLAND, NM 87417
523	VALLEY FIRE STATION #1	4105 HWY 64 KIRTLAND, NM 87417
524	VALLEY #3 FIRE STATION	3524 HWY 64 WATERFLOW, NM 87421
526	MODULAR FIREFIGHTER'S HOME	US HWY 491 SHIPROCK, NM 87420
530	CENTER POINT FIRE STATION #2	430 NM HWY 173 AZTEC, NM 87410
531	LEE ACRES FIRE STATION #2	#433 CR 5500, BLOOMFIELD, NM 87413
532	FLORA VISTA FIRE STATION #4	326 S OLIVER DRIVE AZTEC, NM 87410

PUBLIC WORKS - 600 SERIES		
601	TIRE/WELDING/TRAFFIC/SIGN SHOP	315 S OLIVER DRIVE AZTEC, NM 87410
602	VECTOR CONTROL	305 S OLIVER DRIVE AZTEC, NM 87410
604	BLANCO TRANSFER STATION	#35 ROAD 4469 BLANCO, NM 87412
605	HUERFANO TRANSFER STATION	12574 HWY 550 BLOOMFIELD, NM 87413
605	HILL TOP TRANSFER STATION	#28 ROAD 7100 BLOOMFIELD, NM 87413
606	CEDAR HILL TRANSFER STATION	#25 ROAD 2391 AZTEC, NM 87410
607	CROUCH MESA LANDFILL	#78 ROAD 3140 AZTEC, NM 87410
608	LEE ACRES TRANSFER STATION	#31 ROAD 5500 FARMINGTON, NM 87410
609	LA PLATA TRANSFER STATION	#5 RD 1330 LA PLATA, NM 87418
610	KIRTLAND TRANSFER STATION	#141 ROAD 6500 KIRTLAND, NM 87417
611	UPPER FRUITLAND TRANSFER STATION	3 MI SOUTH OF NENAHNEZAD SCHOOL, FRUITLAND, NM 87416
612	WATERFLOW TRANSFER STATION	3574 HWY 64 WATERFLOW, NM 87421
613	SHIPROCK TRANSFER STATION	NE CORTEZ HIGHWAY SHIPROCK, NM 87420
614	SAND SPRINGS TRANSFER STATION	CORNER OF N5 @ HWY 491, NEWCOMB, NM 87455
615	LAKE VALLEY TRANSFER STATION	#57 ROAD 7760 AZTEC, NM 87410

CORRECTIONS - 700 SERIES		
700	ADULT DETENTION CENTER	871 ANDREA FARMINGTON, NM 87401
701	ADC TRAINING MOBILE	871 ANDREA FARMINGTON, NM 87401
702	JUVENILE DETENTION CENTER	851 ANDREA FARMINGTON, NM 87401
703	RESIDENCE-AT RISK CHILDREN	855 ANDREA BUILDING E FARMINGTON, NM 87401
704	ADMINISTRATION OFFICE (DWI)	1006 MUNICIPAL FARMINGTON, NM 87401
705	DWI/STORAGE/MAINTENANCE	1006 MUNICIPAL FARMINGTON, NM 87401
706	AXIS FACILITY	1010 MUNICIPAL FARMINGTON, NM 87401
707	COMPLIANCE OFFICE	3838 E MAIN FARMINGTON, NM 87401
708	DWI/AXIS FACILITY	1006 MUNICIPAL FARMINGTON, NM 87401

MISCELLANEOUS - 800 SERIES		
800	BLANCO SENIOR CITIZEN CENTER	7338 HWY 64 BLANCO, NM 87412
801	HEADSTART	805 MADDOX AZTEC, NM 87410
802	BLOOMFIELD HEALTH BUILDING	903 W BROADWAY BLOOMFIELD, NM 87413
803	SALMON RUINS MUSEUM	6131 HWY 550 BLOOMFIELD, NM 87413
804	MULTI AGENCY BLDG (WATER/ HOUSING)	7450 E MAIN FARMINGTON, NM 87401
806	DISTRICT ATTORNEY'S OFFICE	335 S MILLER FARMINGTON, NM 87401
807	FARMINGTON PUBLIC HEALTH BUILDING	355 S MILLER FARMINGTON, NM 87401
809	LOWER VALLEY SENIOR CITIZENS	#17 ROAD 6668 KIRTLAND, NM 87417
810	SAN JUAN COUNTY INDUSTRIAL BUILDING	#161 ROAD 1130 LA PLATA, NM 87418
811	FIRE STATION/AMBULANCE STATION	#17 ROAD 3720 FARMINGTON, NM 87401
817	LIONS PARK	#65 ROAD 6255 KIRTLAND, NM 87417

RIVERVIEW GOLF COURSE - 900 SERIES		
900	RVGC-CLUBHOUSE/GRILL	#583 ROAD 6100 RIVERVIEW GOLF COURSE KIRTLAND, NM 87417
901	RVGC-GOLF CART STORAGE BARN	#583 ROAD 6100 RIVERVIEW GOLF COURSE KIRTLAND, NM 87417
902	RVGC-FIRST TEE BLDG RESTROOMS	#583 ROAD 6100 RIVERVIEW GOLF COURSE KIRTLAND, NM 87417
903	RVGC-MAINTENANCE	#583 ROAD 6100 RIVERVIEW GOLF COURSE KIRTLAND, NM 87417
904	RVGC-WHITE STORAGE BLDG	#583 ROAD 6100 RIVERVIEW GOLF COURSE KIRTLAND, NM 87417
905	RVGC-STORAGE SKID	#583 ROAD 6100 RIVERVIEW GOLF COURSE KIRTLAND, NM 87417
906	RVGC-EQUIPMENT CANOPY	#583 ROAD 6100 RIVERVIEW GOLF COURSE KIRTLAND, NM 87417

C. Issues and Opportunities

The County has a robust tracking system for facility maintenance and upkeep, and promptly conducts regularly scheduled maintenance. The County relies on a 2009 maintenance plan.

Staff expressed interest in updating the County's Asset Management / Risk Management Plan to guide its investment, insurance, and property management activities.

Per county staff, a lack of key infrastructure dissuades potential tenants from locating in the San Juan County Industrial Park; one current tenant may vacate its space for a new location elsewhere in the county. The County has recently repaved the roadway to the park, but the road may require reconstruction to handle heavier loads and possibly expansion to accommodate more traffic. Internet is available only via a wireless system which cannot handle the bandwidth necessary for significant business development. A lack of natural gas forces tenants to rely on liquid propane for heat, which is considerably more expensive.

Goals and Policies

1. Improve and maintain facilities that house basic county functions

- a. Continue to engage in proactive scheduled maintenance and strategic facility upgrades
- b. Update the Asset Management / Risk Management Plan to inform county decisions to invest in or divest existing facilities
- c. Update detailed assessments of facilities as needed, including architectural and engineering studies to determine approaches to facility needs and cost estimates

2. Maintain the quality of services that the County provides to its residents

- a. Continue to provide key amenities critical to life safety and quality of life, including fire fighting, law enforcement, solid waste management, and county governance
- b. Where applicable, divest properties that do not support the mission of San Juan County to entities with greater capacity and obligation to operate them, namely municipalities

3. Seek collaborative efforts with the county's municipalities and with the State to provide capital facilities that meet residents' needs

- a. Avoid investment in redundant or overlapping services

8. WATER AND WASTEWATER

CONSERVING AN
IMPORTANT ASSET

A. Introduction

The purpose of the Water and Wastewater Element is to describe existing features of natural and man-made systems of water and water treatment in San Juan County and establish long-range priorities, goals and policies regarding the types and coordination of services in the unincorporated county. Water and wastewater represent more than just infrastructure, since water is a major natural resource and essential for sustaining the community and supporting growth potential. The county's surface water is also a key element in its outdoor recreation initiatives (refer to the Economic Development Element). This Element is integrally related to population projections in the Existing Conditions Element, designation of growth areas in the Land Use Element, preservation of natural assets in the Environment Element, and policies for

rural community facilities and services in the Facilities Element.

B. Natural Conditions

Low precipitation and high evaporation in San Juan County is characteristic of the general aridity of the Southwest. However, the rivers with headwaters in the San Juan Mountains of Colorado flowing through San Juan County carry two-thirds of the total surface water in the state of New Mexico. While water flow in the Animas, San Juan, and La Plata Rivers passes through the county, only a small share is legally available for local use. The Mancos River passes through a very small portion of New Mexico, traveling only about three miles through the Four Corners area.

Naturally occurring selenium presents a water quality issue for the Animas and the San Juan Rivers. Although levels exceed two parts per

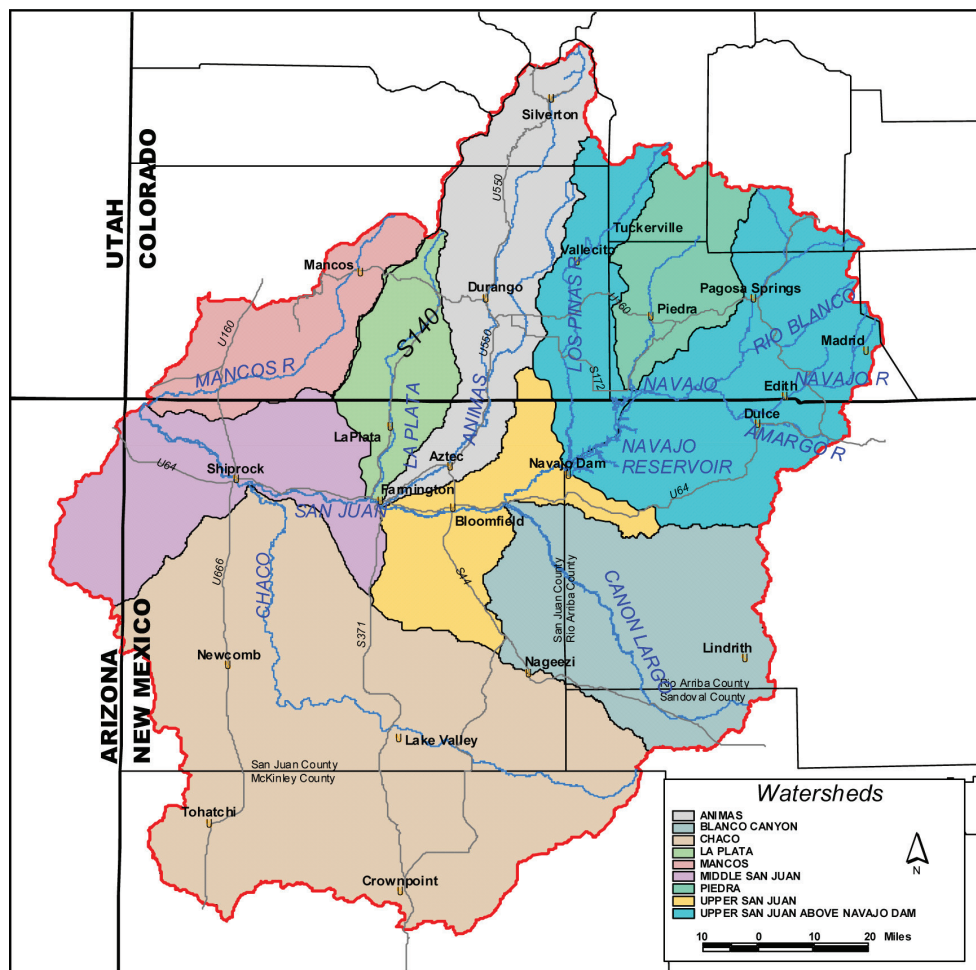


Exhibit 8-1 Map of Watersheds in San Juan County

billion, they do not exceed the current allowable maximum standard of five parts per billion.

Climate change will likely result in higher temperatures and a higher ratio of rain to snow in New Mexico as a whole, and within the San Juan River watershed. Some climate projections indicate that climate change will also result in less precipitation in the arid West. The New Mexico Office of the State Engineer commissioned a study¹ to identify impacts of climate change on to the state's water supply. In summary, the expected impacts are:

- Continuing temperature increases in the state
- Changes in snow pack elevations and water equivalency
- Changes in available water volumes and the timing of water availability
- Increasing precipitation in the form of rain rather than snow, due to increasing temperatures, smaller spring runoff volumes and/or earlier runoff that will impact water availability for irrigation and sensitive species
- Milder winters and hotter summers, resulting in longer growing seasons and increased plant and human water use
- Increased evaporative losses from reservoirs, stream flows and soils due to hotter, drier conditions
- Increased evapotranspiration by agricultural and riparian plants
- An increase in extreme events, including both drought and floods

C. Water Supply and Demand

Water demand analysis in this section uses data from the San Juan Basin Regional Water Plan published by the New Mexico Office of the State Engineer in 2016, available at http://www.ose.state.nm.us/Planning/RWP/region_02.php.

¹ The Impact of Climate Change on New Mexico's Water Supply and Ability to Manage Water Resources, New Mexico Office of State Engineer, 2005.

Water Supply for Domestic Use

San Juan County depletes approximately 27,700 acre-feet of water per year for domestic use. The Regional Water Plan developed forecasts through 2060, with projected demand in 2060 of between 52,900 (nearly double current demand) and 88,800 acre-feet (more than triple).

Surface water supplies nearly all water for domestic use. The Animas and San Juan Rivers are the source of water for most communities.

Several community systems have wells, although the water pumped from these community wells is hydrologically connected to the rivers. Effectively, all groundwater in northern San Juan County depends on surface water systems for replenishment, rather than hydrologically separate aquifers.

The San Juan Hydrologic Unit Regional Water Plan (2003) (Regional Water Plan) established a "water budget" to balance available water supply and water demand. The Regional Water Plan shows that there should be sufficient water for approximately 45 years of growth. After that time, conservation, greater efficiencies of use and additional storage will be necessary to meet future demands.

Domestic Water Providers

Approximately 80% of the water used for domestic use in San Juan County is from the Animas River. The following table shows the public water providers in San Juan County for domestic and industrial uses. The service areas of some of these providers appear on the map on the next page (some provider boundaries are unavailable).

Many of the rural water associations struggle with aging, undersized infrastructures. Infrastructure is difficult to maintain and may be inadequate for fire flow. Under standards generally promoted by the now defunct Farmers Home Administration of the U.S. Development of Agriculture, the early funding source for

Exhibit 8-2 Table of Active Water Systems in San Juan County

Active Water Systems in San Juan County	Population Served	System Capacity (Gallons/Day)	Average Production (Gallons/Day)	Gallons/Day Per Capita	Recent Water Quality Issues
Aztec Domestic Water System	11,320	4,000,000	1,200,000	106.0	1
Bloomfield Water Supply System	8,690	1,800,000	1,500,000	172.6	
Farmington Water System	38,000	30,000,000	10,600,000	278.9	3
Apple Orchard MDWCA	460	100,800	20,000	43.5	1
Blanco MDWCA	1,140		56,000	49.1	
Flora Vista Mutual Domestic	3,742	288,000	270,000	72.2	1
Hydropure Technology Inc.	25		35,000	1400.0	
La Vida Mission Community Water Supply	42	28,800	12,000	285.7	
Lee Acres Water Users Association	5,078		282,000	55.5	
Lee/Hammond Water Treatment Plant Co-Op	8,656	1,500,000	800,000	92.4	
Lower Valley Water Users Association	10,912	5,000,000	1,150,000	105.4	4
Morningstar Water Supply System	6,423	1,728,000	720,000	112.1	3
Navajo Dam Domestic Water Consumers, Inc.	458	73,000	29,449	64.3	
North Star MDWCA	3,602		300,000	83.3	
Pine River MDWCA	44	41,760	20,880	474.5	
Rosa Joint Ventures Water System	249	55,000	3,700	14.9	
Southside Mutual Domestic Water Association	1,593	122,400	84,429	53.0	
Upper La Plata Water Users Association	2,265				
West Hammond MDWCA	3,578				1

Source: New Mexico Environment Department, Drinking Water Watch. "Recent Water Issues" refers to the number of positive Total Coliform Rule (TCR) sample results from the past two years.

Note that the Lee/Hammond Water Treatment Plant provides water to the Lee Acres Water Users Association and the West Hammond MDWCA, and may be over-representing water users. Morningstar Water Supply System has recently changed its name to Animas Valley Water System.

many rural water system improvements, 1"-diameter pipes were common and 4" pipes were considered large. Some rural water systems only have 2"- and 6"-diameter pipes, where current water providers' standards would require 8" pipes.

Rural water associations are self-governing. They are responsible for their own funding, management, and policies. They play an important role in the county as the water purveyors serving unincorporated county residents. The relationships between rural water

associations, the county and cities are complex in that the associations typically provide service to extraterritorial planning and platting areas, and sometimes continue to serve annexed areas, regardless of whether they meet municipal water standards.

Planners recommend a full inventory and analysis for in-the-ground water infrastructure, storage capacity and other elements of the various water systems in the county.

Fire Protection

Rural fire districts generally have the capability through the use of tanker systems to supply 250 gallons per minute for a duration of 2½ hours. Firefighting is usually achieved through the mutual aid of nearby districts.

Fire protection also depends on the size of water storage tanks to provide sufficient water flow in each pressure zone. Rural water associations are responsible for planning, financing and constructing water tanks, often negotiated with developers to serve new developments. For example, if a developer wants to build 80 homes, the rural water association serving the development may require the developer to pay for a new water tank in addition to installing water lines at specified diameter sizes.

Reportedly, developers in some areas of New Mexico have installed dry fire hydrants to give

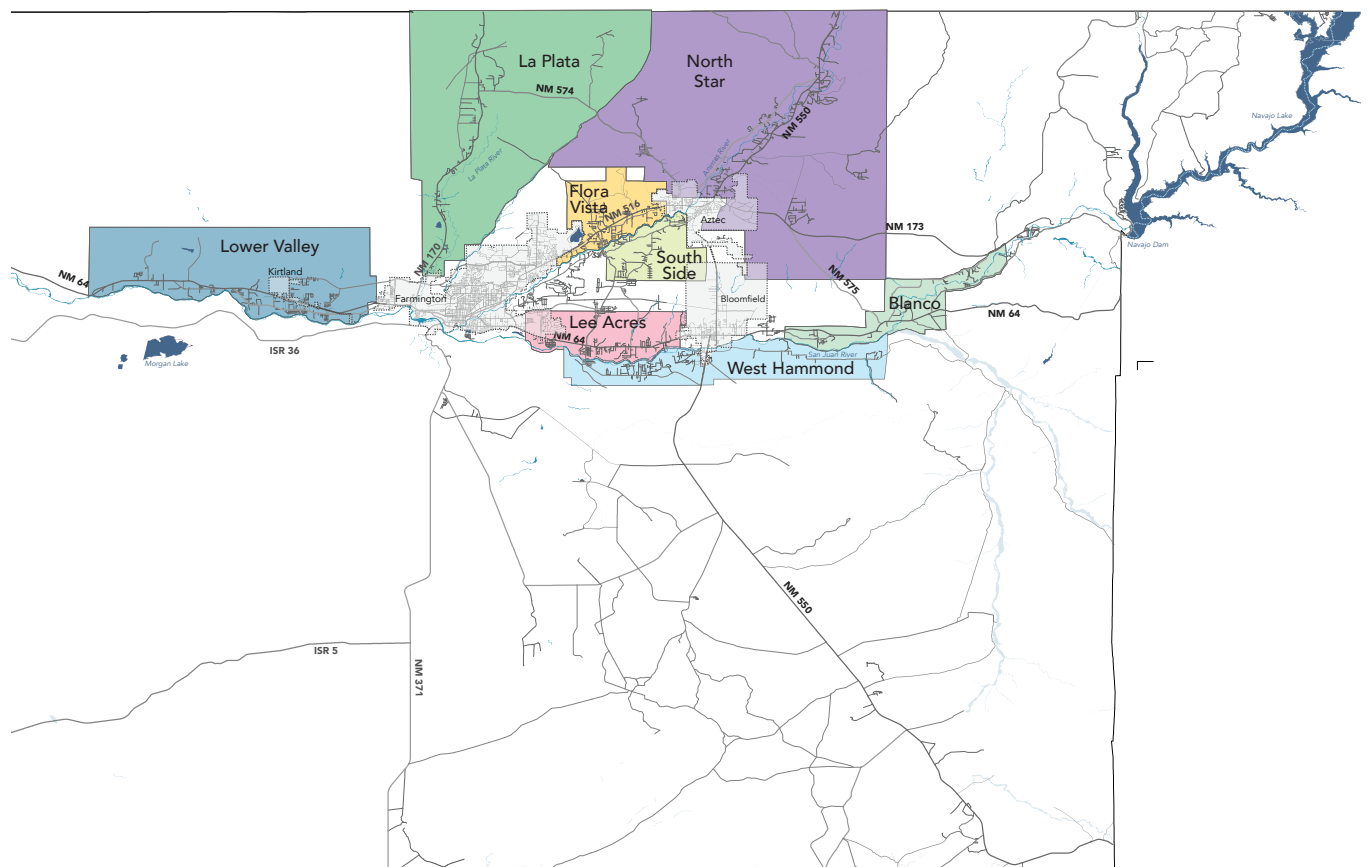
the appearance of water protection. While this practice has not necessarily affected San Juan County, it is dangerous and should be avoided. Testing of hydrants would assure that they provide adequate fire flow. If not, those hydrants could be fixed, or, in the worst case, removed.

Fire insurance rates are based on ISO ratings. Those ratings should be updated on a regular basis to consider upgrades and improvements made to water systems. It is possible that some rural property owners' fire insurance rates will decrease with upgraded water systems.

Irrigation Water and Livestock

The Navajo Indian Irrigation Project (NIIP) diverts about 234,300 acre-feet per year, and the Fruitland and Hogback irrigation projects divert about 114,600 acre-feet per year. Non-Navajo

Exhibit 8-3 Map of Selected Active Water Systems in San Juan County



irrigation uses average approximately 291,000 acre-feet per year, including ditch diversions.

Residents divert about 4,400 acre-feet per year for livestock uses, although only 700 acre-feet is for livestock watering; the remainder replaces reservoir evaporation.

Industrial and Power Uses

Industrial uses divert about 400 acre-feet per year, although according to the regional water plan this number "... excludes industrial uses supplied from municipal or domestic public water supply systems."

The San Juan Generating Station, a coal-fired power plant, diverts about 24,800 acre-feet per year, including water for use in its mining operations. Public Service Company of New Mexico (PNM), which operates the plant, has announced plans to shutter it as early as 2020.

Arizona Public Service Electric Company (APS) operates the Four Corners Power Plant, which has an estimated diversion of 26,500 acre-feet per year.

These data do not include water that the City of Farmington diverted for use in power generation, either from its own municipal water use or through hydroelectric power generation.

Processes involving mineral extraction (including oil, natural gas, gravel, water, or metals) divert about 1,600 acre-feet per year.

Reservoir Evaporation

Users divert about 29,900 acre-feet from the San Juan River Basin to replace reservoir evaporation, primarily for the Navajo Lake reservoir.

D. Wastewater Collection and Treatment

The cities of Farmington, Aztec, Kirtland and Bloomfield each provide wastewater collection and treatment for most of the areas inside their city limits. Municipalities are not allowed to extend lines outside their boundaries, unless they are required in order to remedy health issues. Flora Vista recently established a connection to the Farmington municipal sewage system.

Should growth in numbers and density resume in the San Juan Basin, new development will require a joint effort to preserve the health and well-being of the population and environment. This effort would require developing a strategy to collect and treat effluent now treated by septic systems and similar technology.

The New Mexico Environment Department established a standard minimum lot size of 0.75-acre in its Liquid Waste Disposal Regulations for septic systems. Based on this standard, the dominant lot size in the county is 0.75 acre. This land requirement leads to low density development, which may be appropriate in rural settings, but creates complications and inefficiencies in providing services and utilities. The County should consider developing standards for alternatives to individual septic systems in its rural areas, such as small-batch wastewater systems or connections between municipal sewage systems and nearby unincorporated areas.

Health and safety concerns have been raised regarding the proliferation of individual septic systems throughout northern San Juan County and particularly in the alluvial valley. Studies have documented high fecal coliform bacteria levels in rivers and surfacing of seepage in certain areas. While agricultural run-off contributes to water quality problems, failing septic systems are likely greater sources of water pollution. A two-year study by the San Juan

Soil & Water Conservation District concluded in 2015 that human feces bacteria was the most common bacterium found in the San Juan and Animas Rivers.

E. Coordination of Water and Wastewater

Water is a critical regional resource, needed for ecological systems as well as for human uses, and highly interrelated among users and communities. Many issues regarding water and wastewater in San Juan County should require a focus from the perspective of the entire metropolitan area rather than from that of individual communities.

Some entities provide a regional perspective of water use, such as the San Juan Basin Watershed Association, the San Juan Soil & Water Conservation District, and the San Juan Water Commission.

Rural water associations are important local community organizations in the unincorporated county, having their own governance structures and promoting a common good in the community. However, they also lack the economies of scale found in larger municipal and regional water systems. Water associations should investigate collaborative models to

determine whether it is feasible to create a regional water authority.

At the very least, a regional water authority should pool the resources of the Mutual Domestic Water Consumers Associations (MDWCAs) and municipal systems they serve, including major equipment and capital resources, administrative and operations staff, and/or legal counsel.

Given greater authority, the organization could replace the MDWCA system — and possibly the municipal water systems — with a single entity responsible for providing domestic water to county residents. This entity would:

- Standardize water rates and pricing
- Ensure consistent water quality
- Enact water restrictions during drought conditions
- Maintain, upgrade, and expand water infrastructure
- Consolidate and centralize staffing and operations

Stakeholders would need to conduct a cost-benefit analysis to determine the feasibility of such an entity, and outline the process for establishing and operating this authority.

Goals and Policies

1. Ensure that San Juan County citizens have access to reliable, clean drinking water

- a. Encourage cities and MDWCAs to improve their water storage capacity
- b. Support MDWCAs in updating their infrastructure

2. Achieve regional efficiencies and water quality

- a. Coordinate and facilitate efforts to explore the potential for a regional water authority
 - i. Coordinate stakeholder discussions and assess the public desire for such an organization, and determine the scope of its authority
 - ii. Conduct a feasibility study to determine costs and benefits of a regional water authority
 - iii. Identify funding sources
- b. Develop standards for wastewater management in unincorporated areas, including small-batch wastewater systems and connections between municipal sewage systems and nearby unincorporated areas

3. Improve efficiency and promote sustainable water use

- a. Continue to support efforts to improve water efficiency in agricultural and industrial uses
- b. Support low-flow appliance programs to encourage water conservation

4. Improve irrigation and water infrastructure

- c. Work with San Juan Water Commission, acequia/irrigation groups, and the San Juan Water & Soil Conservation District

9. ENVIRONMENT

PROTECTING SAN JUAN'S
NATURAL RESOURCES
FOR ALL USERS

A. Introduction

The purpose of the Environment Element is to identify environmental issues related to future development activities and to determine county roles to protect the sensitive environmental assets in San Juan County. Since the environment ties to all aspects of physical planning, this element deals with subjects common to land use, economic development, water and wastewater, and transportation.

This analysis examines some of the environmental issues and challenges facing San Juan County. These issues are complex and will require further research and planning by the county and other organizations, such as The River Reach Project and the Bureau of Land Management. The County should consult various plans and studies for further understanding of policy directions affecting the environment, such as the Lower Animas Watershed Based Plan and the San Juan Basin Watershed Management Plan. Coordination with other entities is vital in the implementation of several of the recommended policies.

San Juan County is located in an area of unique natural beauty with an abundance of natural resources. As the population of the county has grown and become more urbanized, people regard environmental issues in the area as quality-of-life issues. While many recognize the important role that energy-related industries (oil and gas, and power plants) play in the local economy, county residents expect these companies to protect the region's air and water as much as they can from environmental harm that can be caused by their operations. There is also an expectation that county government will also take an active role in protecting the local environment, using various means at its disposal.

B. Existing Conditions

Threatened and Endangered Species

As a result of its geography and geology, San Juan County is host to a number of rare plants and animals. Many of the threatened and endangered species are found only in the county or Four Corners area. The federal government, Navajo Nation and State of New Mexico all list threatened, endangered, proposed and candidate species. The following chart shows federally listed species. Federal designation provides the strongest legal protection of any of the listings because it is governed by the Endangered Species Act.

While there are various reasons why species become endangered, human activity is the most common cause. For instance, the New Mexico Department of Game and Fish poisoned native species such as the Colorado pikeminnow and the razorback sucker when the Navajo Dam was completed in 1962. The department then stocked the lake with trout for sport fishing. Ironically, there is now an effort to restore these fish in the San Juan River.

The presence of endangered species is sometimes perceived as an impediment to development or an interference with a way of life. Maps of specific locations of endangered and threatened species are usually unavailable to the general public because of the danger of destruction. Detailed location information is usually only made available when there is a demonstrated legitimate need for this information.

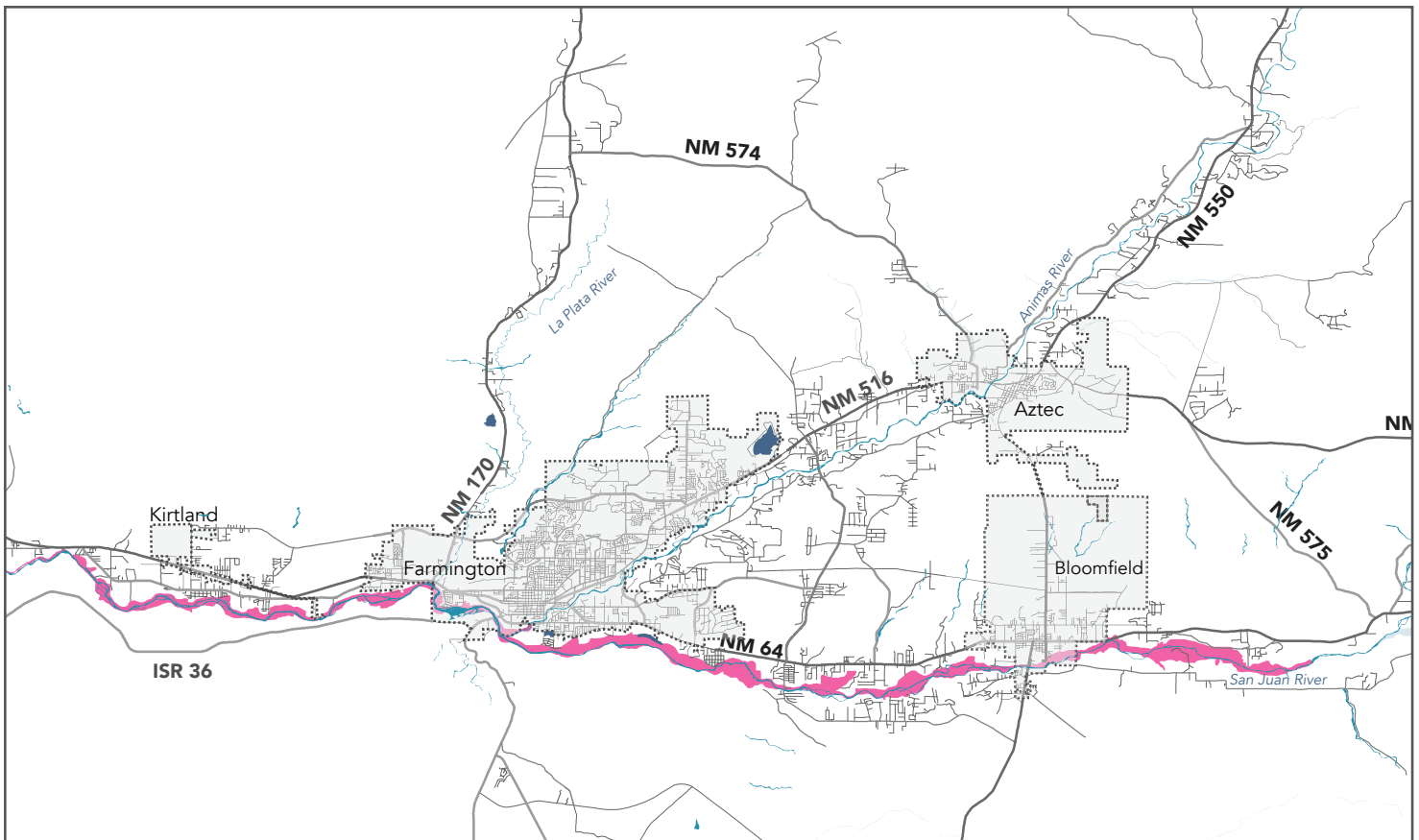
The following map shows habitat established as "critical habitat" (in pink) by the U.S. Fish and Wildlife Service. This map highlights the importance of the river corridors as habitat for rare plants and animals, and the consequent need for protection of these areas.

Exhibit 9-1 Threatened and Endangered Species Listed for San Juan County

Group	Common Name	Scientific Name	Status
Birds	Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Threatened
Birds	Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	Endangered
Fishes	Colorado pikeminnow (=squawfish)	<i>Ptychocheilus lucius</i>	Endangered
Fishes	Razorback sucker	<i>Xyrauchen texanus</i>	Endangered
Fishes	Zuni bluehead sucker	<i>Catostomus discobolus yarrowi</i>	Endangered
Flowering Plants	Mancos milk-vetch	<i>Astragalus humillimus</i>	Endangered
Flowering Plants	Knowlton's cactus	<i>Pediocactus knowltonii</i>	Endangered
Flowering Plants	Mesa Verde cactus	<i>Sclerocactus mesae-verdae</i>	Threatened
Mammals	Canada lynx	<i>Lynx canadensis</i>	Threatened

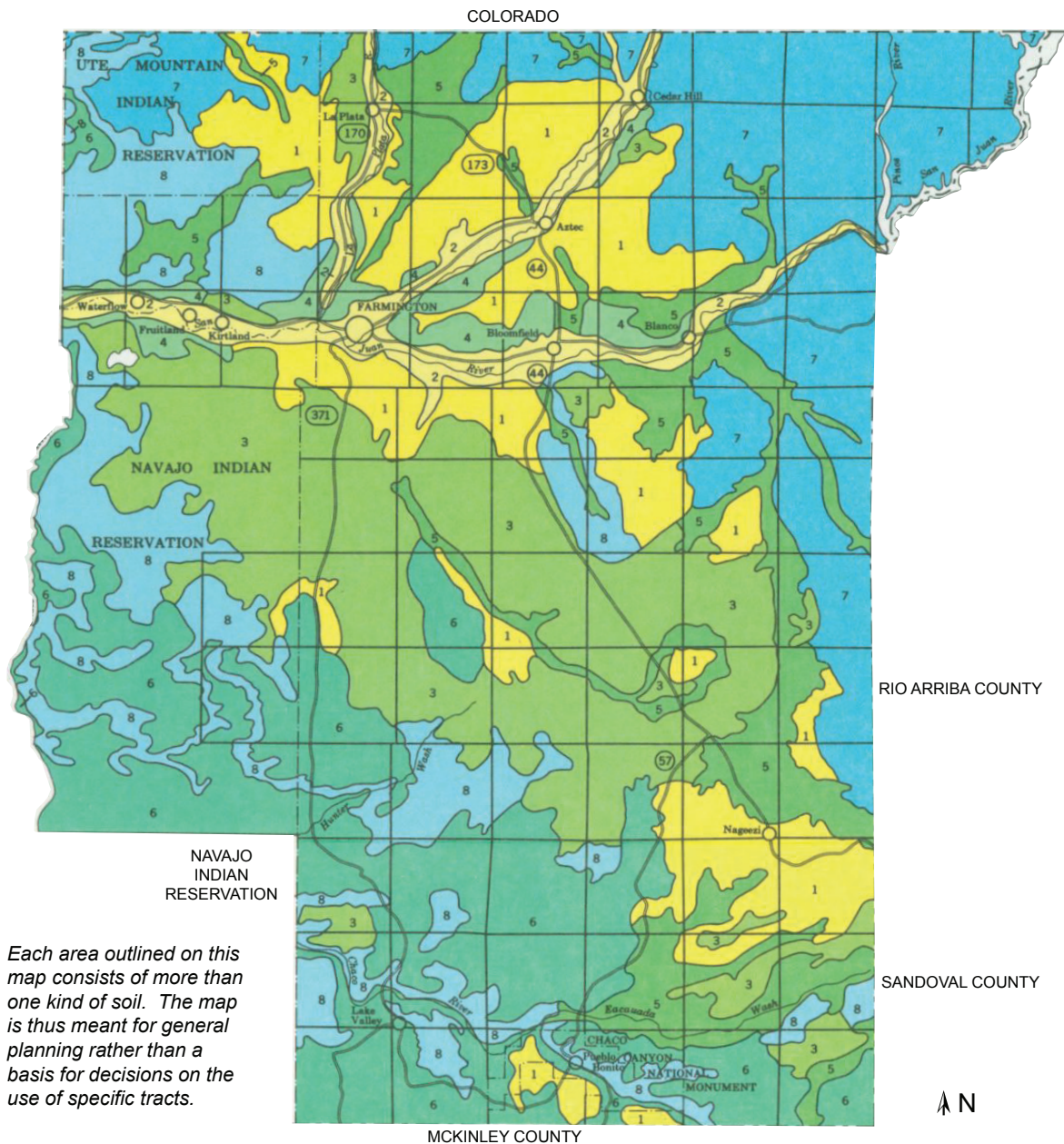
Source: US Fish & Wildlife Department

Exhibit 9-2 Critical Habitat in San Juan County



Source: US Fish & Wildlife Department

GENERAL SOIL MAP SAN JUAN COUNTY, NEW MEXICO EASTERN PART



- | | |
|---|---|
| <ul style="list-style-type: none"> 1: Persayo-Fruitland-Shepard 2: Fruitland-Riverwash-Stumble 3: Shiprock-Sheppard-Doak 4: Haplargids-Blackstone-Stumble | <ul style="list-style-type: none"> 5: Blancot-Notal 6: Sheppard-Huerfano-Notal 7: Travessilla-Rock Outcrop-Weska 8: Badland-Rock Outcrop-Monierco |
|---|---|

*Map Source: United States Department of Agriculture - Natural Resources Conservation Service 1979

Source: USDA

General Soils of San Juan County

The U.S. Department of Agriculture, Soil Conservation Service (now known as the Natural Resources Conservation Service) prepared the *Soil Survey of San Juan County, New Mexico: eastern part*, by C. Wesley Keetch, 1980, Washington, D.C. The general soil map from the Soil Survey in Exhibit 9-3 shows broad areas that have distinctive patterns of soils, relief, and drainage categorized into eight units. Each map unit consists of one or more major soils and some minor soils. In some cases, the soils that make up one unit can occur in other units, but in a different pattern. This study can be used as a general guide to land uses and development. However, the *Soils Survey* is not suitable for planning the management of a farm or field, or for selecting sites for roads or buildings.

Generalized recommendations regarding the suitability of building site development are contained for each study unit.

Development constraints apply to three types of development activities:

- *Shallow excavations* affect basements, graves, utility lines, open ditches and other similar purposes.
- *Building developments* are structures built on shallow foundations with a load limit equal to a single-family dwelling and no higher than three stories.
- *Local roads and streets* have an all-weather surface and carry automobile and light truck traffic all year.

Soil character also affects suitability for development, according to the following qualities.

- *Permeability* is the measurement of inches of water soaking into the ground per hour; each soil has a general permeability range. The greater the permeability, the fewer the limitations for development.
- *Shrink-swell* is the shrinking of the soil when dry and the swelling when wet.

Development Limitations

- If the limitations are considered **slight**, the soil properties and site features are generally favorable for development.
- If the limitations are considered **moderate**, the soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance may be needed to overcome or minimize the limitations.
- If the limitations are considered **severe**, the soil properties and/or site features are so unfavorable or so difficult to overcome that they require special design, significant increase in construction costs, and possibly increased maintenance.

Descriptions of Map Units

Further detail about the soils map units is below:

1: Persayo-Fruitland-Shepard

This map unit makes up about 16% of the survey area. It occurs on nearly level fans, plateaus, and valley sides to very steep upland hills. It has very shallow to deep, well-drained to excessively drained soils. This unit ranges from a 0-40% slope. The elevation is 4,800' to 6,400'. The area receives an average of 6" to 10" of annual precipitation. The major soils of this unit are *Persayo*, *Fruitland* and *Shepard* soils. *Some of the patterns of these soils show severe limitations.* There are development limitations due to slopes, but this unit is generally good for development, depending on the slope of the site. Site-specific studies are required to allow for development.

2: Fruitland-Riverwash-Stumble

This map unit makes up about 5% survey area. It has nearly level to moderately steep, well-drained to somewhat excessively drained soils. The slope ranges from 0-20% and elevation is 4,800' to 6,400'. The area receives an average of 6" to 10" of annual precipitation. The major soils in this unit are *Fruitland*, *Riverwash*, and *Stumble* soils. *The patterns of these soils show slight to severe limitations for development.*

Development limitations include slopes and cutbanks cave (the walls of excavations tend to cave in or slough). This unit is generally good for development, depending on the slope of the site and cutbanks cave. Also, riverwash soils are generally in floodplains and are not recommended for development. Site-specific studies are required to allow for development.

3: Shiprock-Sheppard-Doak

This map unit makes up about 19% of the survey area. It is on mesas, plateaus, and terraces. It has deep, nearly level to moderately steep, well-drained to somewhat excessively drained soils. The slope ranges from 0-30%. The elevation is 5,500' to 6,400'. The area receives an average of 6"-10" of annual precipitation. The major soils of this unit are *Shiprock*, *Sheppard*, and *Doak* soils. The patterns of these soils show *slight to severe limitations for development*. Development limitations include the slope, cutbanks cave, shrink-swell, and low strength. This unit is generally good for development. Site-specific studies are required to allow for development.

4: Haplargids-Blackstone-Stumble

This unit makes up about 3% of the study area. It is on terraces, mesas, and plateaus in the northern part of the survey area. It has very shallow to deep, nearly level to steep, well-drained to excessively drained soils. The slope ranges from 0- 50%. The area receives an average of 6"-13" of annual precipitation. The major soils of this unit are *Haplargids*, *Blackstone*, and *Torriorthents* soils. The patterns of these soils vary. This complex of soils contains *mostly Torriorthents soil, which has very slight limitations. Other soils have severe limitations, particularly in the Blackstone areas*. Development limitations include cutbanks cave, low strength, shrink-swell, and extremely clayey conditions. Generally, this unit is not favorable for development. However, site-specific studies may allow for development.

5: Blancot-Notal

This unit makes up about 10% of the study area. It is on valley sides, valley bottoms and fans.

It has deep, nearly level to gently sloping, well-drained to somewhat excessively drained soils. The slope ranges from 0-5%. The elevation is 5,600' to 6,400'. The area receives an average of 6"-10" of annual precipitation. The major soils of this unit are *Blancot* and *Notal* soils. The patterns of these soils show *moderate to severe limitations*. Development limitations include cutbanks cave, low strength, shrink-swell, and extremely clayey conditions. Generally, this unit is not favorable for development, but site-specific studies may allow for development.

6: Sheppard-Huerfano-Notal

This unit makes up about 15% of the study area. It is on uplands, bottomlands, and fans. It has shallow to deep, nearly level to steep, well-drained to somewhat excessively drained soils. The slope ranges from 0-40%. The elevation is 5,500'- 6,400'. The area receives an average of 6"-10" of annual precipitation. The major soils of this unit are *Sheppard*, *Huerfano*, and *Notal* soils. The patterns of these soils show *slight to severe limitations*. Development limitations include cutbanks cave, depth to rock, shrink-swell, and extremely clayey conditions. Much of the areas in this map unit has severe limitations, however, there are other areas in this unit that can be developed with only slight limitations. Site-specific studies are required to allow for development.

7: Travessilla-Rock Outcrop-Weska

This unit makes up about 16% of the study area. It is on hills, mesas, and plateaus. It has very shallow to deep, nearly level to extremely steep and well-drained soils. The slope ranges from 0-100%. The elevation is 4,800'-7,200'. The area receives an average of 6"-13" of annual precipitation. The major soils of this unit are *Travessilla*, *Rock Outcrop*, and *Weska*. The patterns of these soils show *severe limitations*, including depth to rock and slope. This unit is generally not good for development, but site-specific studies may allow for development.

8: Badland-Rock Outcrop-Monierco

This unit makes up about 16% of the study

area. This area is on uplands. It has shallow, nearly level to gently sloping, well-drained soils. The slope ranges from 0-100%. The elevation is 4,800'- 7,200'. The area receives an average of 6"-10" of annual precipitation. The major soils of this unit are *Badland*, *Rock Outcrop*, and *Monierco* soils. The patterns of these soils show *moderate to severe limitations*. Development limitations include depth to rock and low strength. Generally, these areas are not good for development, but site-specific studies may allow for development.

Riparian and Rivers

Portions of this section have been adapted from the New Mexico Environment Department's Description of the San Juan Watershed

Surface Water

San Juan County's water supply is 99% surface water. One presence in San Juan surface waters that could affect threatened and endangered species is polycyclic aromatic hydrocarbons (PAH). A range of state and federal agencies have collaborated to develop a monitoring plan to quantify the contamination and identify its source, although it is suspected that PAH contamination originates from oil and gas activities. Another monitored element is weed control herbicides used by the oil industry.

The U.S. Bureau of Land Management's Riparian and Wetlands Program has also created a demonstration project of its implementation efforts in the Pump Canyon watershed. The project is about 8 miles west of Navajo Dam.

One goal of the project is improving water quality and vegetative diversity through development and implementation of best management practices on existing uses. Accomplishments in the watershed have included initiating surface water monitoring, several dozen acres of salt cedar treatment, riparian plantings, creating of riparian fencing, implementing a moratorium on livestock grazing, developing 150-acre upland

vegetative treatment project, and overseeing gas development mitigation efforts. The San Juan River Basin has 129.4 assessed river miles that are listed as nonsupporting or partially supporting their designated uses.

Toxins associated with those uses include metals, turbidity, nutrients, pathogens, dissolved oxygen and total ammonia, dissolved solids, salinity, temperature, total phosphorus, habitat alteration, grazing and flow alteration. Among the probable causes are resource extraction, hydromodification, agriculture and overall watershed condition. No toxins are listed at acute levels in the San Juan River Basin. Chronic levels of toxins have been listed for aluminum, mercury and selenium.

San Juan Watershed Group

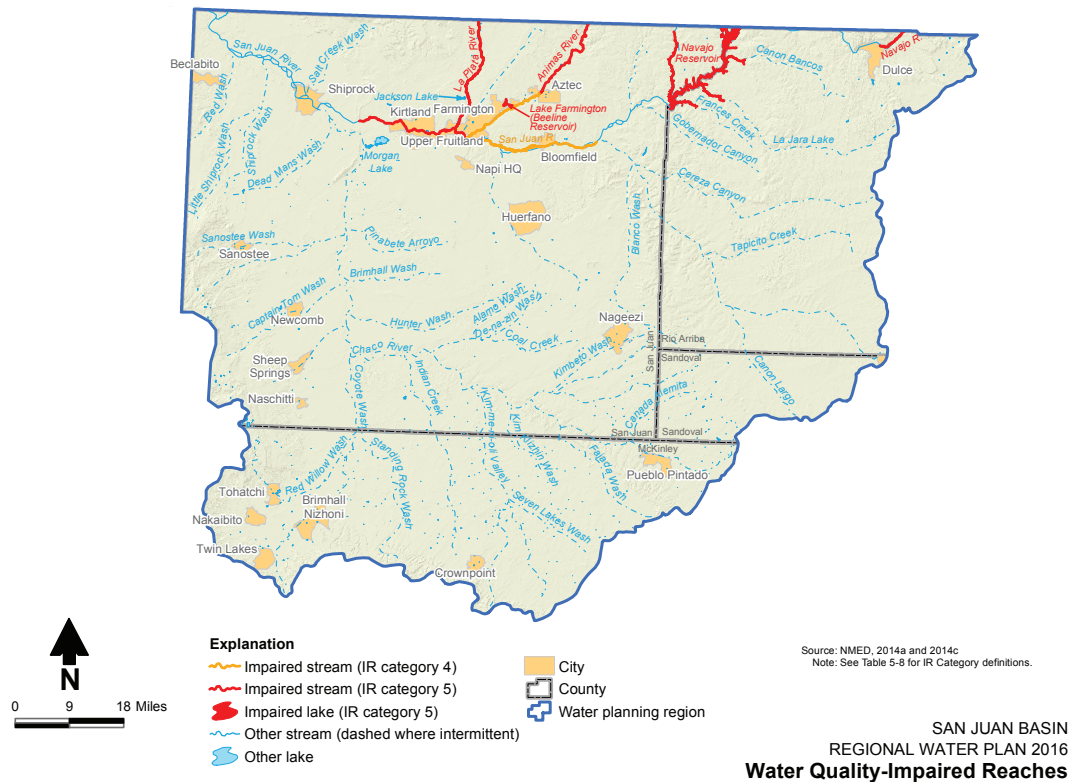
The San Juan Watershed Group (SJWG) is a collaborative organization of regional and local stakeholders who work to improve water quality and watershed health in the San Juan Basin in New Mexico.

SJWG formed in 2001 in response to algal blooms resulting from nutrient loading and today, continues to work in several capacities to improve watershed conditions in San Juan County. Efforts include water quality monitoring, agricultural best practices, erosion remediation, irrigation efficiency and run-off management, stormwater management and septic system management.

Lower Animas Watershed Based Plan

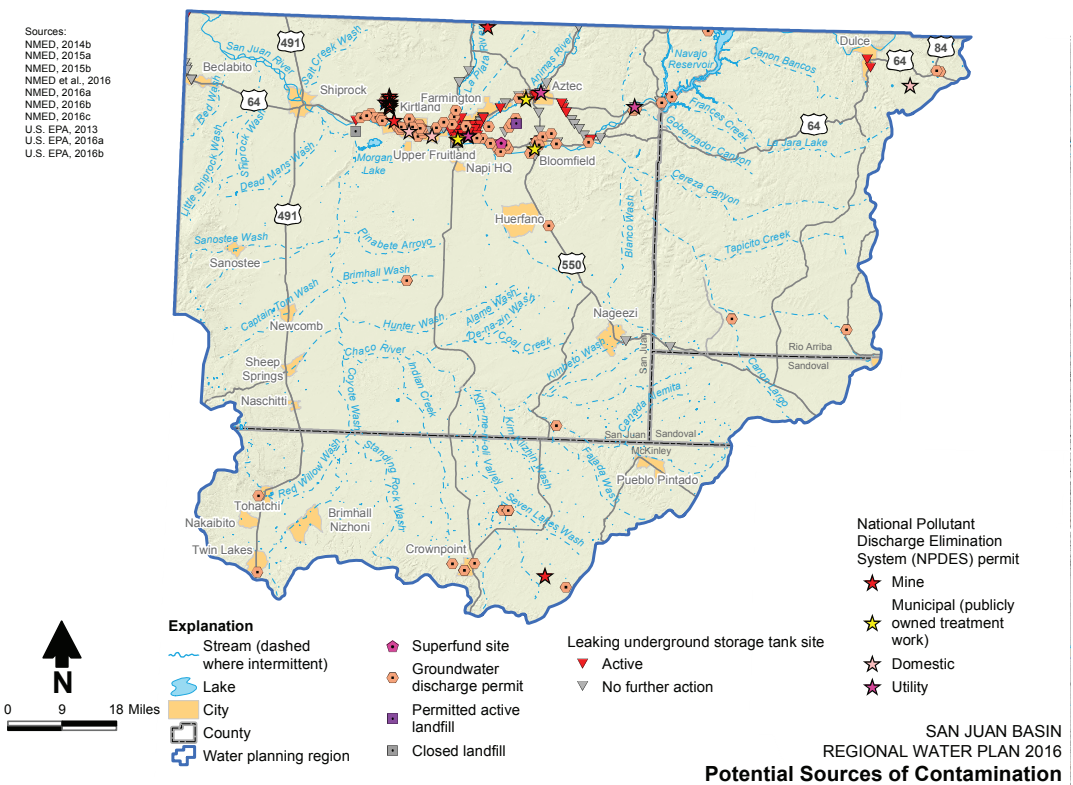
San Juan Watershed Group completed the Lower Animas Watershed Based Plan (LAWBP) in 2016. The plan focused on the section of the Animas River from the Colorado state line to the Animas' confluence with the San Juan River in Farmington, NM. (See SJWG's GIS map for LAWBP boundaries and test sites on the following page.) The plan uses data from SJWG's 2013-14 Microbial Source Tracking and 2014 Lower Animas Targeted Sampling studies to recommend management strategies for landowners and public lands in the Lower

Exhibit 9-4 Impaired Waterways, San Juan County



Source: San Juan Basin Regional Water Plan, 2016

Exhibit 9-5 Potential Sources of Water Contamination, San Juan County



Source: San Juan Basin Regional Water Plan, 2016

Animas Watershed. The LAWBP recommends a holistic approach to improving water quality in the lower Animas River. It proposes an array of projects and outreach efforts that will address a variety of pollution sources. The categories proposed are:

- Septic, sewer, and wastewater management
- Agricultural best management practices (BMPs)
- Upland restoration and upland BMPs
- Urban stormwater projects
- Riparian restoration
- Streambank, floodplain, and wetland restoration
- Irrigation infrastructure improvements

The LAWBP outlines management measures, implementation strategies and schedules, and possible funding sources for each of these proposed efforts.

Ground Water

San Juan County has residential and industrial water wells, and shallow aquifers interact to a considerable extent with surface water. Potential groundwater contamination sources include groundwater discharge sites, leaking underground storage tanks, landfills, septic tanks and the Lee Acres Landfill Superfund Site. According to the New Mexico Environment Department, there are currently over 60 actively leaking storage tanks in the county that are being investigated or cleaned up by the State or a responsible party. They should be monitored for their potential impact on water resources.

Gold King Mine Spill

In August, 2015, U.S. Environmental Protection Agency (EPA) site investigators disturbed a soil “plug” at the abandoned Gold King Mine in Silverton, CO, which unleashed three million gallons of acid mine drainage into the Animas River. The waste material turned the water bright yellow and took about a week to wash through before the water returned to its normal color.

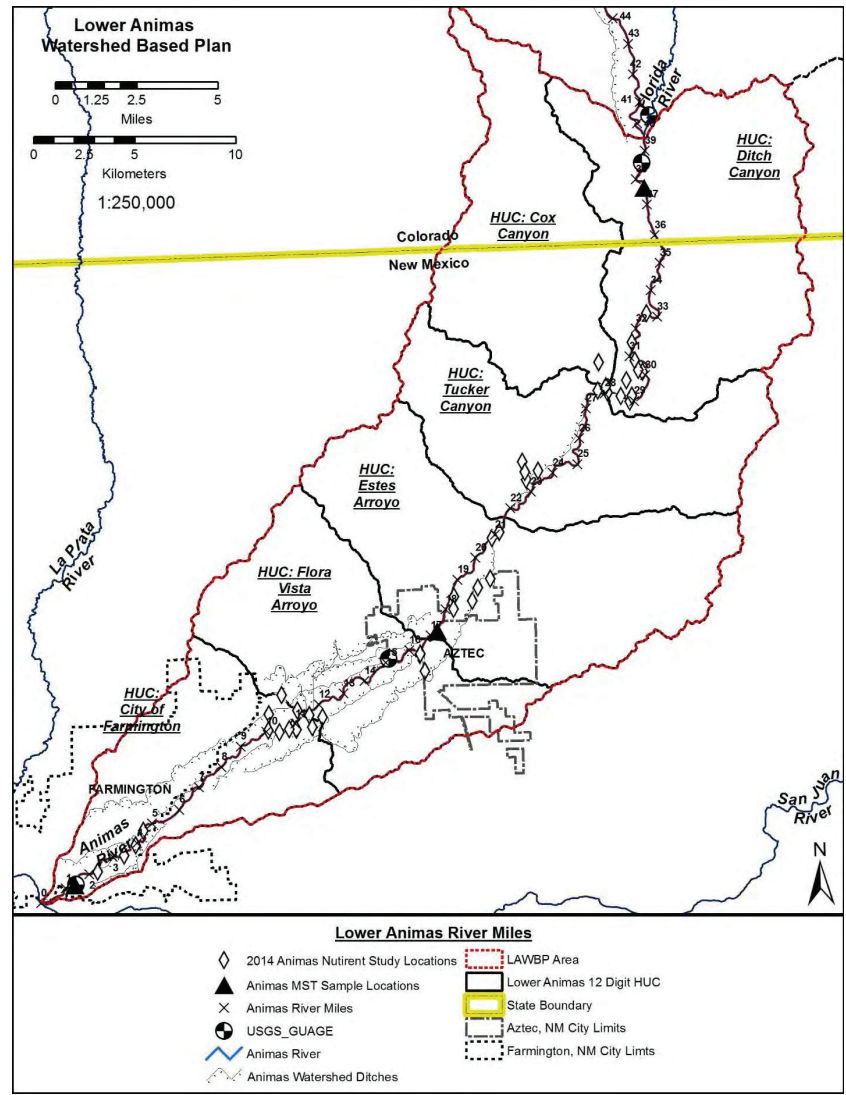
The spill contained a number of metals and salts totaling about 190 tons of solids, including several forms of toxic metals such as lead, arsenic, mercury and cadmium.

The University of Arizona Superfund Research Program reported that due to historic continuous, slow releases of acid mine drainage into the Animas River, the river had a limited number of fish before the spill and no fish kills were observed. To date, no effects have been seen in ducks or land mammals along the river.

Although there appear to be no short-term effects on health or the environment, water and soil conditions continue to be monitored by local, state, tribal, and federal agencies, including the EPA.

Exhibit 9-6 LAWBP Boundaries and Test Sites

Lower Animas Watershed Based Plan



Map 16 - Location of 2014 Sample Locations.

Source: Lower Animas Watershed Based Plan

Goals and Policies

1. Work to protect water resources in the county

- a. Work with local watershed groups to improve water quality and ecology of the rivers in the county
 - i. Support river restoration projects and consult with ecologists to develop ecologically appropriate approaches for county projects that affect the river
- b. Encourage agriculture practices the limit runoff and improve water use efficiency
- c. Support New Mexico Environment Department's septic regulations and inspections
- d. Discourage construction projects and roads that cause erosion
 - i. Develop a permit requirement for earthworks projects

2. Continue to work with and support the San Juan Drought Commission to improve water shortage resiliency in the county

- a. Encourage local mutual domestic authorities to adopt drought restrictions
- b. Encourage local water providers to continue improving storage capacity

3. Improve the ecological footprint of the oil and gas industry in San Juan County

- a. Prioritize developing alternative and renewable energy projects
- b. Continue working with local energy producers to limit and minimize environmental damage resulting from extractive industries, including pollution and ecological fracturing
- c. Encourage ecological reclamation of oil and gas well sites

4. Continue enforcing trash and refuse, junked vehicle, and mobile home ordinances, and conducting clean-up efforts to improve the cleanliness of San Juan County

5. Continue increasing recycling in the county

- a. Consider adding additional collection sites or working with the County's Waste Management to implement curb-side pick up
- b. Consider working with municipalities to develop a consolidated solid waste services bid

10. HAZARDS MITIGATION

PROTECTING THE PUBLIC AND
PUBLIC INVESTMENT

A. Introduction

Hazards mitigation is defined as “... any action taken to reduce or eliminate the long-term risk to human life and property from natural and man-made hazards....” The emphasis on long-term risk distinguishes mitigation from actions geared primarily to emergency preparedness and short-term recovery. Examples of mitigating hazards are forest thinning to reduce wildfire intensity, or drainage improvements to mitigate damage from flooding. Since some hazards are ongoing, hazards mitigation often focuses on reducing repetitive loss.

B. Hazards Mitigation Planning

Background

Purpose of Hazards Mitigation Planning

- Enhance public awareness and understanding
Help residents of the county to better understand the natural and human-caused hazards that threaten public health, safety and welfare, economic vitality, and the operational capability of important institutions
- Create a decision tool for management
Provide information that managers and leaders of county government and other key institutions and organizations need to take action to address vulnerabilities to future disasters
- Promote compliance with grant and program requirements
Ensure that the county can take full advantage of state and federal grant programs, policies, and regulations that encourage or mandate that local governments develop comprehensive hazard mitigation plans
- Enhance local policies for hazard mitigation capability

Provide the policy basis for mitigation actions that the City should promote to create a more disaster-resistant future

Benefits of Mitigation Planning

- Saves lives and reduces property damage
- Protects critical facilities and services
- Reduces long-term hazard vulnerability
- Contributes to the sustainability of the county
- Fosters San Juan County as an environmentally sound, economically viable and disaster-resistant area

Federal Requirements for Hazard Mitigation

In 2000, the U.S. Congress passed the Disaster Mitigation Act, which requires local communities to have mitigation plans in place in order to receive federal hazard mitigation grants. Protection of utilities began at that point. After the terrorist attacks of September 11, 2001, federal requirements for the increased security of some government buildings were added as protective measures required on the part of communities, even local governments serving small populations. Funds are available to the county to update detailed plans and other mitigation requirements.

Examples of Hazard Combinations

Hazard types are not always separate from each other. Several examples of cause and effect are:

- Flooding — can cause property damage, collapse of steep slopes, and/or flotation of underground storage tanks that might leach fuel into groundwater.
- Drought — can make flooding more severe because soils can no longer absorb heavy rains
- Wildfires — threaten lives and property and also exacerbate the risk of flooding and landslides

- Road accidents — can negatively affect the city’s internal transportation access and residents’ health and safety because of issues such as hazardous spills

Relationship between Hazard Mitigation Planning and Emergency Preparedness

Hazards mitigation planning establishes sustained actions to reduce or eliminate long-term risk to life and property from hazard events.

Emergency preparedness typically involves emergency operation manuals and procedures, and coordination designed to prevent, respond to and recover from a potential hazard.

San Juan County Hazards Plans

Hazard Mitigation Plan

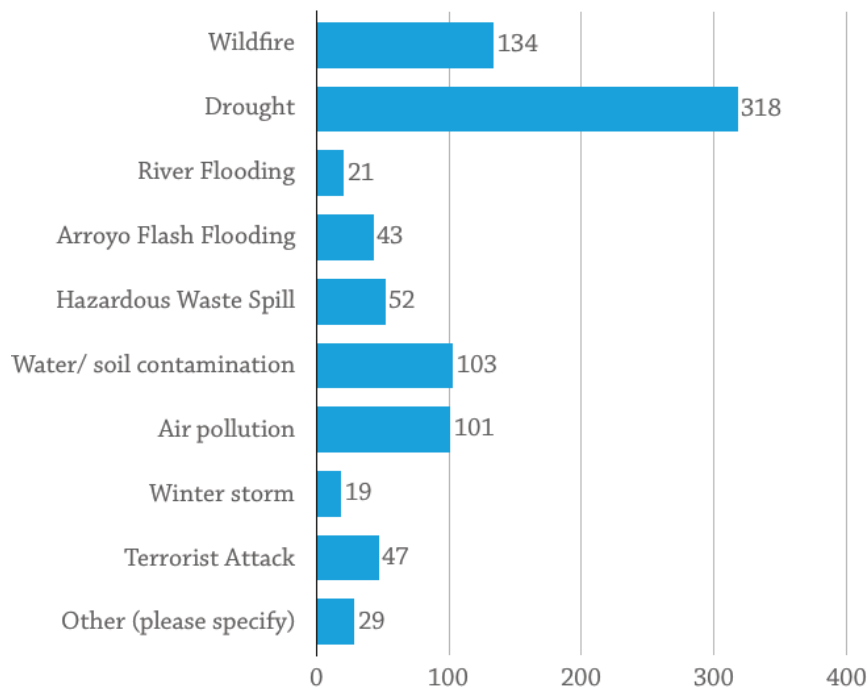
San Juan County updated its Multi-Jurisdictional Natural Hazard Mitigation Plan, which provides a comprehensive resource for risk assessment, hazards mitigation and resource identification.

Community Wildfire Protection Plan

Title I of the Healthy Forests Restoration Act (HFRA) authorizes and defines community wildfire protection plans (CWPPs). Federal and state funding for hazardous fuel reduction projects depends on whether a county or community has a signed and approved a CWPP. San Juan County has a CWPP, published in 2006.

Exhibit 10-1 Ranking of County Resident Concerns about Hazards

Which of the following natural or man-made hazards are you very concerned about?



Survey respondents reported that drought is their biggest hazard concern, followed by wildfire.

The survey was conducted during the summer of 2018 during a period of extreme drought.

C. Existing Conditions

The 2013 Multi-Jurisdictional Natural Hazard Mitigation Plan for San Juan County (HMP) served as the main source of information in the following discussion.

The 2013 Multi-Jurisdictional Natural Hazard Mitigation Plan for San Juan County identifies the following hazards for the county (in order of priority):

- Drought
- Flooding
- Wildfires/ Wildfire Urban Interface (WUI)
- Hazardous materials transportation

The plan identifies the magnitude / severity, probability / frequency and risk of each hazard as high / medium or no/nuisance, indicating the potential for loss of critical facilities and services from one to three weeks (medium) to more than three weeks (high).

- Drought - As the entire Southwest continues to feel the effects of a reduction in rain and snowfall, the demands for water put a strain on this limited resource. Presently the extent and duration of this drought remain unknown. Speculation varies concerning the severity of this drought from a ten-year drought cycle to a two thousand-year drought cycle. No matter what drought cycle this is, two facts remain: (1) there is a drought at this time that is straining the water resources within San Juan County, and (2) the county's water needs will continue to climb as its population increases. Mitigation strategy concerning drought cannot eliminate its existence. However, it can help ease the demands on the limited water supply in order to create continuation of sustainable growth within the county and the affected jurisdictions
- Floods/Flash Floods – Flooding continues to plague San Juan County

and the Cities of Aztec, Bloomfield and Farmington. The Animas River runs through Aztec and the San Juan River runs through Bloomfield. Farmington sits at the confluence of these two rivers and the confluence of the La Plata River and the San Juan River. In addition to the potential flooding caused by these rivers, there are also possible dangers of dam failure or flash floods. Further, severe rainstorms can create localized flooding due to runoff and overwhelm the present storm drainage systems.

- Wildfire/Wildland Urban Interface – The amount of fuel accumulating along the river bottoms in San Juan County combined with the present drought conditions throughout the southwest has created a very dangerous environment. As seen during the Albuquerque Bosque fires in the summer of 2003, the threat to structures in the area is high, and increases with arid conditions, wind events, and the area's overgrowth. Unlike the Bosque surrounding the Rio Grande River in the Albuquerque metropolitan area, San Juan County has three rivers coming together in one location, which also happens to be the county's largest population center. In addition, while the Bosque area in Albuquerque mostly consists of public recreational lands, the river bottom lands in San Juan County are for the most part privately owned.
- Hazardous Materials Transportation – As the amount of hazardous material transported through San Juan County continues to increase, the potential for an accidental hazardous material release also increases. The only possible way to eliminate this potential hazard would be to ban the transport of all hazardous materials within the county. Since this is not a practical solution, the county must take all other reasonable measures to reduce this risk.

(HMP pages XIV-XV)

Flood

The HMP identified flash flooding and riverine flooding as the types of flooding of most concern in San Juan County. Flash flooding occurs in arroyos and other drainages as a result of heavy rainfall. Riverine flooding can be caused by heavy rains and/or snow pack melt. With three rivers running through it, riverine flooding is a risk to a large segment of the San Juan population.

Snowmelt has resulted in riverine flooding in seven years since 1909 in San Juan County, and the National Weather Service reports an average of four flash flood warnings in the monitored portions of the county annually.

Flood History

2006

- An arroyo overtook NM 170 at the 3 mile mark, destroying the highway and one residence.

2007

- Flash flooding occurred on CR 350 at the intersection of CR 390, stopping traffic and inundating several manufactured homes in the area.

2008

- Sullivan Arroyo overtook CR 4990 damaging the roadway, major water lines, and residences on RD 4996.
- Sullivan Arroyo washed out part of County Road 4990, destroying the local water users water line, a hay field and several private homes North-East of the wash out.

2010

- Flash flooding on Kiffin Creek Arroyo catastrophically damaged the bridge crossing at CR 2900.
- A flash flood produced over a million dollars in damage to the Country Club area

Human Factors

Some county residents have filled in sections of existing flash flood channels

or arroyos in an effort to maximize the area available for construction. Filling in these sections creates choke points, which will cause higher water levels in the channel. As the water rises, it will have the potential of overflowing its banks, thereby flooding any structure in the area. The choke points also create higher pressure on the new channel banks, which increases the possibility of erosion and undercutting foundations. (HMP page 39)

Instances such as these examples demonstrate the need for more stringent drainage planning requirements in the county.

The Federal Emergency Management Agency (FEMA)

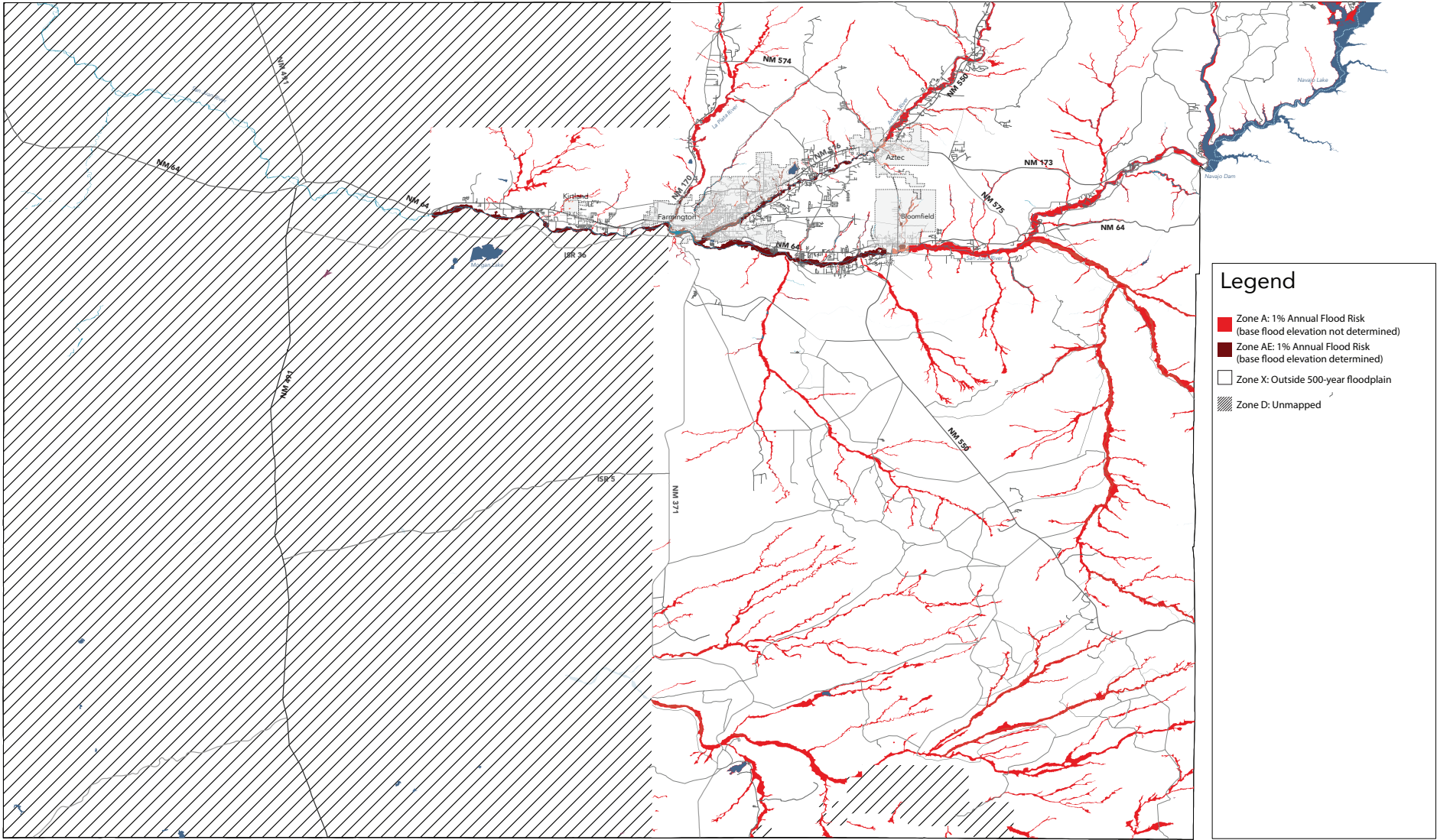
FEMA develops flood risk mapping to help communities guide development and regulate flood insurance requirements through the National Flood Insurance Program (NFIP). San Juan County has been a member of the NFIP since 2003 and 236 policies were in place as of September, 2018; 106 of those policies are located in the unincorporated portion of the county. The map on the following page illustrates areas currently designated by FEMA as flood risk areas.

Extent

The HMP identified approximately 4,596 people in 1,013 homes and 136 small businesses and other structures at risk to flooding in the county. It suggests that mitigation may not reduce the risk to existing structures, but controls on new construction could limit future damage and injury due to flooding.

Due to the large area and rural nature of the county, San Juan should focus mitigation efforts on public properties and high priority risk areas, such as those involving dense and/or at-risk populations.

Exhibit 10-2 FEMA Flood Map



Source: FEMA.

Wildfire

The frequency and severity of wildfires has increased throughout the state. More acreage has burned in recent fires than in the past. Lightning ignitions are common throughout the monsoon season, typically July into September. Depending on fire environment conditions, including aridity, undergrowth and density of timber, wildfires may spread rapidly across a sizable area.

In the state as a whole, the number of wildfires has been trending downward since 1992, although total acreage burned has risen dramatically. Persistent drought along with forest management practices are likely major factors in the trend.

Urban Wildfire Interface (UWI)

The urban wildfire interface describes areas where structures and other human developments meet or intermingle with wildland vegetation-fuels.

The HMP identified 246,491 acres in the Urban Wildfire Interface in unincorporated San Juan County as having several areas at high risk.

In areas at risk of wildfire, including the county's riparian areas, common mitigation measures such as clearing defensible space around structures should be encouraged and practiced.

The County should continue to work with regional emergency managers and others to improve wildfire mitigation and should continue to update the CWPP regularly.

Drought

Drought is defined in several ways based on the type of effects it has. Hydrological drought occurs when water reserves in aquifers, lakes, and reservoirs fall below an established average.

Meteorological drought is a prolonged period of deficient precipitation which causes a natural shortage of available water. *Agricultural drought* occurs when there is not enough moisture to support average crop production or grass production on range land. *Socioeconomic drought* occurs when the water supply is not enough to meet human and environmental needs.

All areas periodically experience drought. During drought, reduced precipitation is usually accompanied by higher temperatures, more wind, more sunshine and low humidity. As a result of climate change, drought that may affect San Juan County is projected to worsen during the century.

For much of 2018, San Juan County has been in extreme drought. The Navajo Lake reservoir dropped 100,000 acre-feet during July, and Farmington put water restrictions in place. Because the County does not provide water utility, it cannot establish use restrictions, but can encourage local water districts to do so.

In response to the severe drought conditions in 2018, the county emergency manager convened a Drought Task Force that is working with municipalities, the New Mexico Office of the State Engineer, New Mexico Department of Agriculture, County Extension Office, and Navajo Nation to address the situation.

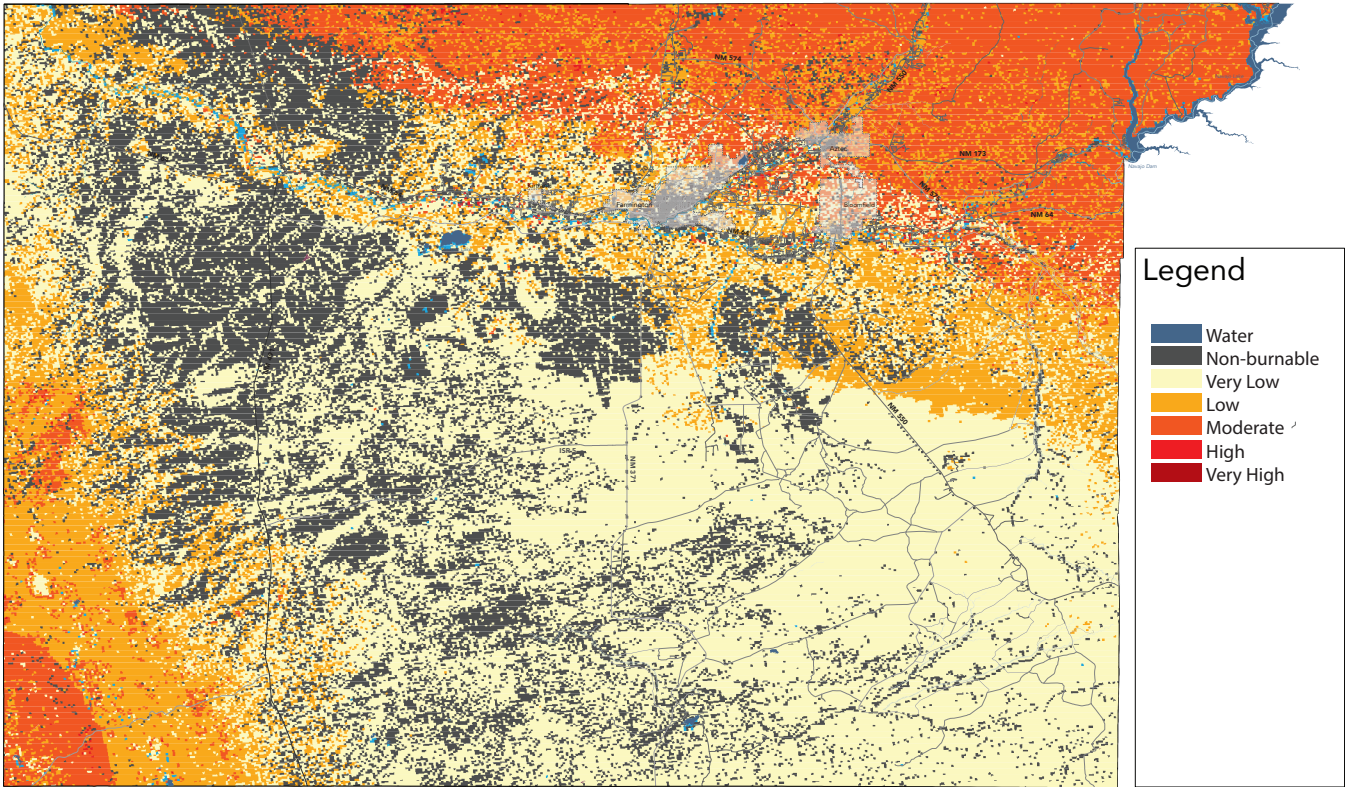
Exhibit 10-3 Fire History: January 2004 to August 2013

Fire Cause	Total Number of Fires	Private Acres Burned	State Acres Burned	Statistical Acres Burned	Total Acres Burned	*Est. State Expenditure
Cause Not Designated	15	0	0	0	1.45	\$18,088.06
Human Caused	152	783.13	17.25	719.37	1,026.32	\$790,250.19
Natural Caused	114	137.83	12.75	145.58	154.68	\$197,415.88
Total	281	920.96	30	864.95	1,182.45	\$1,005,754.13

Source: Multi-Jurisdictional Natural Hazard Mitigation Plan for San Juan County, 2013

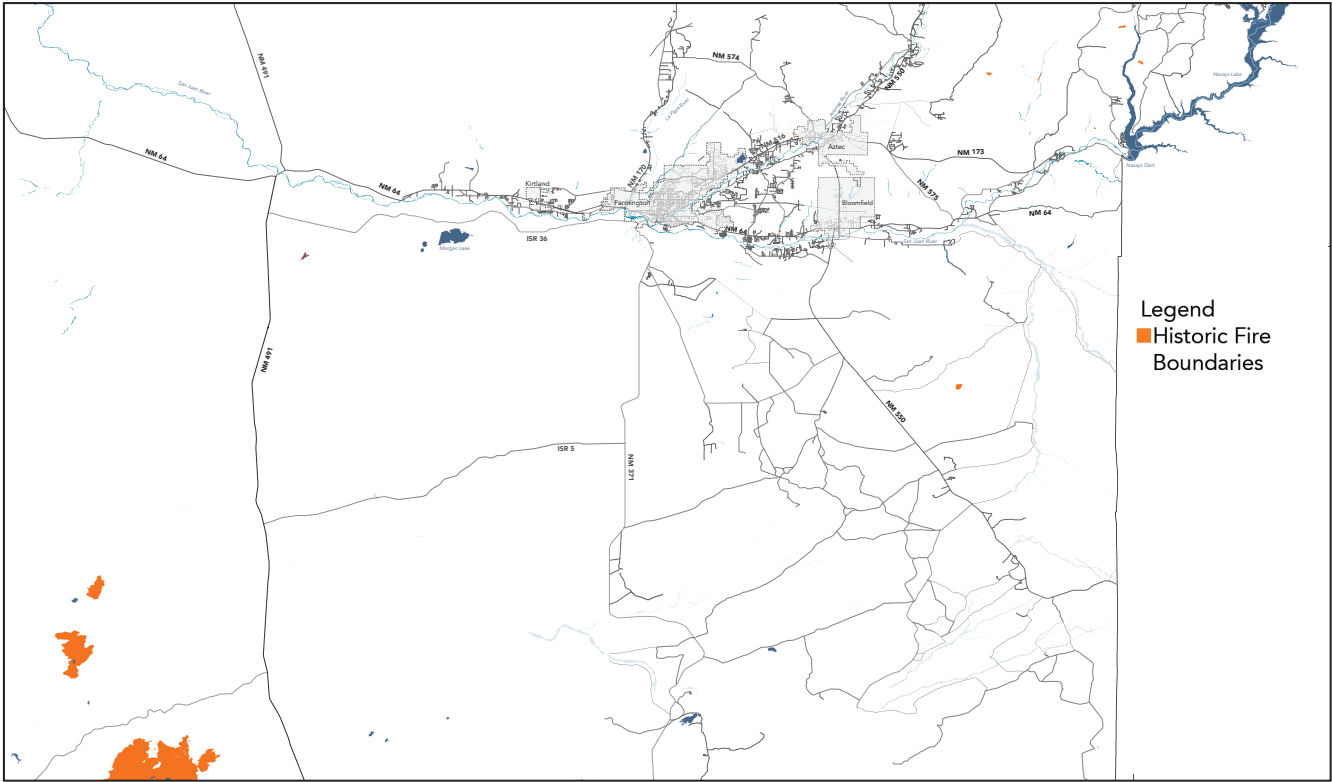
The County should maintain an inventory of public facilities and property at risk of flooding or wildfire, and take steps to mitigate the risk such as improving drainage or creating and maintaining defensible space.

Exhibit 10-4 Fire Risk



Source: US Forest Service

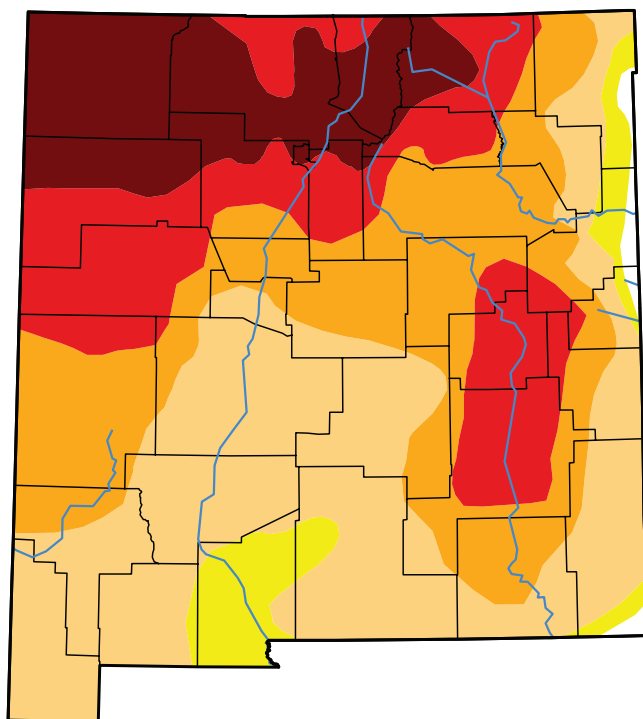
Exhibit 10-5 Fire History: 1911 to 2014



Source: NM RGIS

U.S. Drought Monitor New Mexico

September 4, 2018
(Released Thursday, Sep. 6, 2018)
Valid 8 a.m. EDT



Source: USDA Drought Monitor

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.81	99.19	93.96	60.10	34.07	14.54
Last Week 08-28-2018	0.60	99.40	94.57	64.22	36.04	14.54
3 Months Ago 06-05-2018	0.10	99.90	99.04	88.42	61.99	18.17
Start of Calendar Year 01-02-2018	7.01	92.99	45.97	4.76	0.00	0.00
Start of Water Year 09-26-2017	85.16	14.84	0.00	0.00	0.00	0.00
One Year Ago 09-05-2017	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

■ D0 Abnormally Dry ■ D3 Extreme Drought
■ D1 Moderate Drought ■ D4 Exceptional Drought
■ D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

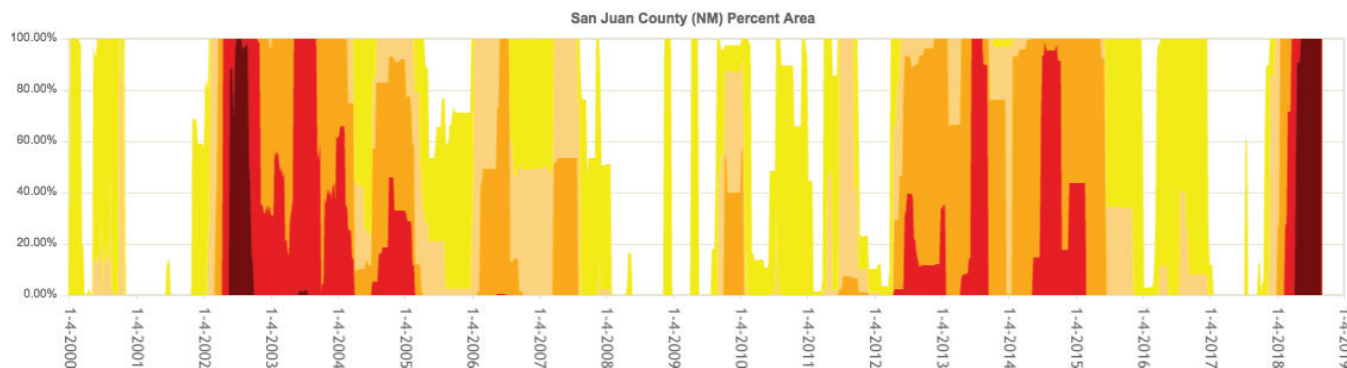
Author:

David Miskus
NOAA/NWS/NCEP/CPC



<http://droughtmonitor.unl.edu/>

Exhibit 10-7 Drought History: 2000 to 2018



Source: USDA Drought Monitor

Drought conditions compound risks from other hazards. Drought conditions result in a reduction of ground vegetation, which reduces the land's ability to slow down runoff and as drought continues, the ground hardens, resulting in a reduction in its ability to absorb moisture. The combination of these two factors increases the chance of potential damage caused by flash flooding throughout the county. Drought conditions also exacerbate wildfire danger which in turn exacerbates the danger of flooding and landslide, which intensifies after wildfires remove vegetation from the land.

Hazardous Materials

The HMP identified several specific concerns about the transportation of hazardous materials in San Juan County, including:

- State highway truck traffic through downtown Aztec
- State highway truck traffic passing the Bloomfield High School and navigating 90-degree turns and traffic congestion
- State highway truck traffic traveling past a hospital and/or on surface streets through downtown Farmington
- The large amount of petroleum production and exploration, and the extensive network of pipelines that transport hazardous material throughout the county

If a spill were to occur near a populated area, the HMP notes, large areas could potentially be evacuated, causing major economic disruption.

In 2010, a large hydrochloric acid spill at a facility on Bloomfield Highway resulted in the evacuation of a large area and took HAZMAT crews over 20 hours to mitigate. During the event, the air in the evacuation area was so toxic that officials reported burning sensation in their mouths.

The HMP notes the difficulty of mitigating the risk of hazardous materials, owing to the difficulty of predicting such events. However, it recommends further study of where hazardous materials are located and transported in the county and research of the dynamics that can lead to accidents. This data would inform mitigation efforts such as redesigning potentially dangerous transportation routes.

Fire Protection

Due to the limited availability of fire hydrants, rural fire departments use tankers or tenders to carry large quantities of water (usually 3,000 gallons) to fire scenes. Most structure fire responses will pull multiple fire apparatus of this sort from nearby districts designated as automatic or mutual aid districts.

Fire departments also depend on the size of water storage tanks to provide sufficient water in each pressure zone to fill the response apparatus. Rural water associations are responsible for planning, financing and constructing water tanks, often negotiated with developers to serve new developments. For example, if a developer proposed to build 80 homes, the rural water association serving the development may require the developer to pay for a new water tank in addition to installing water lines at specified diameter sizes.

Through local ordinances, the fire department may also require that the developer ensure sufficient water for fire protection and request installation of a specific number of fire hydrants in the new housing development.

The National Fire Protection Association requires testing fire hydrants to assure that they function correctly and provide adequate fire flow. If they do not, those hydrants could be repaired, or, in the worst case, removed. Fire insurance rates are based on ISO ratings. Those ratings should be updated on a regular basis to consider upgrades and improvements made to water systems. It is possible that some rural property owners' fire insurance rates will decrease with upgraded water systems.

Resiliency

As natural hazard events become more frequent and severe with climate change, many communities are developing resiliency strategies to improve their ability to cope with and recover from severe weather events and other hazards affected by climate.

The U.S. Climate Resilience Toolkit, developed in partnership with FEMA and the U.S. Department of Energy, recommends the following steps to achieve resilience:

- Explore hazards
 - Gather a team of people who want to protect local assets.
 - Check past weather events and future climate trends.

- List the things you value that could be damaged.
- Assess Vulnerability and Risks
 - Determine which of your assets are exposed to harm.
 - Assess each asset's vulnerability.
 - Estimate the risk to each asset.
- Investigate Options
 - Consider possible solutions for your highest risks.
 - Check how others have responded to similar issues.
 - Reduce your list to feasible actions.
- Prioritize and Plan
 - Evaluate costs, benefits, and your team's capacity to accomplish each action.
 - Rank the expected value of each action.
 - Integrate the highest-value actions into a stepwise plan.
- Take Action
 - Move forward with the stakeholders who accept responsibility and bring resources to take action.
 - Check to see if your actions are increasing your resilience.

Source: <https://toolkit.climate.gov>

Implementing the steps recommended in this plan will improve the County's resiliency to hazard risks in the future.

Goals and Policies

- 1. Create a safe and secure environment, and enhance the capacity to manage natural threats and respond to emergencies in the interest of public safety**
 - a. Employ updated floodplain maps from FEMA
 - b. Identify Wildlife Urban Interface (WUI) areas; discourage development and encourage defensible space maintenance
 - i. Educate residents about creating defensible space around their homes
 - c. Discourage the development of new roads or structures on hillsides and slopes to prevent erosion and water contamination
 - d. Continue to support the drought task force
 - e. Encourage and assist municipalities and river restoration efforts to clear overgrown riparian areas in the county
- 2. Improve hazard resiliency in San Juan County**
 - a. Convene a Hazard Resiliency Task Force to identify risks. Develop strategies for minimizing risk and improving recovery, prioritizing strategies, and monitoring implementation and effectiveness of strategies.
- 3. Minimize risk to county assets from natural and man-made hazards**
 - a. Assess flood and fire risk to county facilities and property
 - b. Create defensible space around county facilities threatened by fire
 - c. Develop drainage plans for facilities with flood risk
- 4. Continue supporting local fire and sheriff's offices and other emergency responders in the region**
- 5. Regularly update the County Hazard Mitigation Plan and Community Wildfire Protection Plan**
- 6. Collaborate with and support local and regional hazards response and mitigation departments and organizations**
- 7. Increase powers of the County to enforce remediation of brownfields and hazardous sites**
 - a. Lobby state representatives to increase daily fines for noncompliant property owners
 - b. Consider adopting a remediation ordinance that requires property owners to remediate brownfield and hazardous sites in the county

Appendix

Meeting and Event Sign-In Sheets

[illegible]

Page 1 of 1

[illegible]

Page 1 of 1

[illegible]

Page 1 of 1

[illegible]

Page 1 of 1

[illegible]

Name	Role / Affiliation	E-Mail
Deborah Abbott	Citizen	abbottdebby@hotmail.com
Charlie Todd	Citizen	charlie.todd77@gmail.com
Kirk Diercke Doug Cade	" "	
Loralleee Camillll	Citizen	charlie.loralleecamilli@yahoo.com
Leslie Wrighte	SSTC	Director@sjoin.org
Jeri Barber	SSTC	jbarber@gsr.org
Dan Johnson	President	
Marcella Martinez	Citizen	danzin3@yahoo.com
Bonnie Adams	Citizen	adams.family2@gmail.com
Melissa McClelland	Citizens	melissamcclelland@hotmail.com
AUL MILLIKAN	✓	(M.G. MARIKOS) @ GMAIL.COM
Ron Price	CITIZEN	RON@PRODUCTIVEOURCOMES.COM

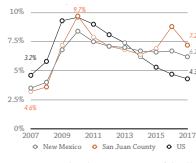
GROWTH MANAGEMENT PLAN A-3

SAN JUAN COUNTY ECONOMIC DEVELOPMENT

EXISTING CONDITIONS

Overall, employment in San Juan County has risen from 47,780 jobs in 2000 to 49,349 in 2017. Jobs in the county fell when the recession hit from a peak of 51,952 in 2009 and have not recovered as of 2017. Since the fall, 2016 saw the lowest jobs number in San Juan County at 49,042 with a slight up-tick in 2017.

Exhibit 1: Unemployment Rate, San Juan County, New Mexico, and US



Source: Economic Research & Analytics, New Mexico Department of Labor, Data & Culture Labor Force

"The boom and bust cycles related to commodity prices of raw materials such as coal, uranium, oil, timber and natural gas can lead to lack of local investment by both private and public entities due to uncertainties regarding future economic conditions."

—Northwest New Mexico Economic Assessment and Strategy, 2017

Changes in Energy Industry:

Between 2008 and 2010 5,000 jobs in energy lost (est.).

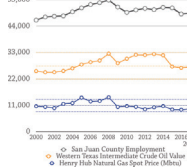
Projected to lose another 930 direct jobs

3,180 indirect jobs

\$213.3M in annual income

Construction, utilities, and mining sectors lost a combined 2,691 jobs in the last decade.

Job & Price of Crude Oil and Natural Gas



Jobs by Industry in San Juan County, 2007-2017

Industry	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change 2007-2017
Health	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0
Education	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	0
Government	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	0
Manufacturing	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	0
Construction	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	0
Transportation	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Information	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Arts, Entertainment, and Recreation	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Accommodation and Food Services	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Retail Trade	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Wholesale Trade	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Finance and Insurance	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Real Estate	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Professional, Scientific, and Technical Services	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Management	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Other Services	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Unemployed	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0
Total	47,780	47,780	47,780	47,780	47,780	47,780	47,780	47,780	47,780	47,780	47,780	0

Just 4 industries experienced growth since 2007:

- agriculture, forestry, fishing, and hunting
- health care and social assistance
- arts, entertainment, and recreation
- accommodation and food services

Heavy losses in construction, utilities, transportation and warehousing, manufacturing, retail, and administrative and waste services

Strategies & Projections

The health care sector is projected to continue to grow by 1,170 jobs by 2026.

Support activities for mining is projected to add 640 jobs.

Projected jobs growth by industry for Farmington MSA

Industry	2014 Employment	2016 Projected Employment	Total Annual Change	Total Jobs 2014-2016
Health Care	2,000	2,000	2,000	2,000
Manufacturing	1,000	1,000	1,000	1,000
Construction	1,000	1,000	1,000	1,000
Transportation and Warehousing	1,000	1,000	1,000	1,000
Information	1,000	1,000	1,000	1,000
Arts, Entertainment, and Recreation	1,000	1,000	1,000	1,000
Accommodation and Food Services	1,000	1,000	1,000	1,000
Retail Trade	1,000	1,000	1,000	1,000
Wholesale Trade	1,000	1,000	1,000	1,000
Finance and Insurance	1,000	1,000	1,000	1,000
Real Estate	1,000	1,000	1,000	1,000
Professional, Scientific, and Technical Services	1,000	1,000	1,000	1,000
Management	1,000	1,000	1,000	1,000
Other Services	1,000	1,000	1,000	1,000
Unemployed	1,000	1,000	1,000	1,000
Total	17,000	17,000	17,000	17,000

Source: New Mexico Department of Workforce Solutions

Plans & Efforts

Stronger Economies Together Plan, 2015 (SET)

- Agriculture & Food Systems
- Tourism & Artisan Enterprises
- Manufacturing
- Workforce Development

Northwest Comprehensive Economic Development Strategy (CEDS), 2018

- Development Clusters: Energy, Logistics & Manufacturing; Agriculture & Regional Food Systems; Tourism, The Arts & Outdoor Rec.
- Downtown Revitalization

4CED

- Target Sectors: Outdoor Recreation; Petrochemicals; Retirement Developments; Agriculture; Health Services; Agriculture; Natural Beauty; Education; Tourism; Energy & Manufacturing

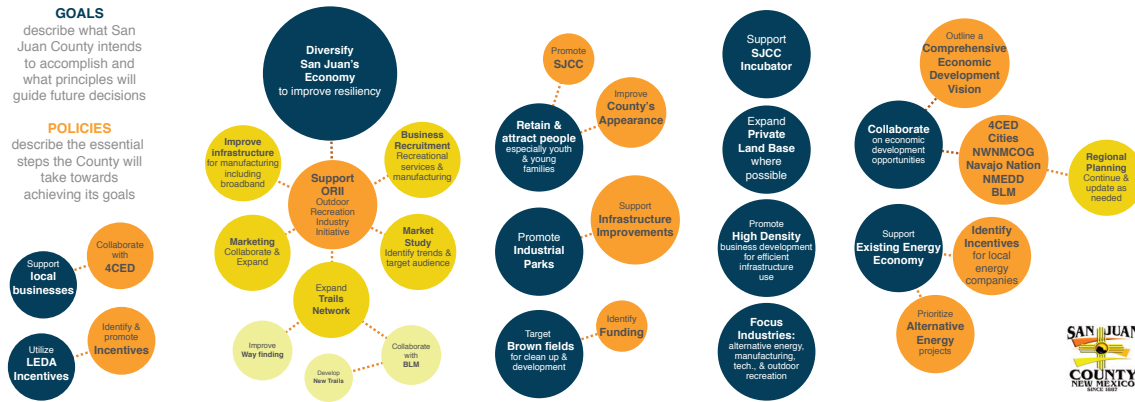
GOALS & POLICIES

GOALS

describe what San Juan County intends to accomplish and what principles will guide future decisions

POLICIES

describe the essential steps the County will take towards achieving its goals



SAN JUAN COUNTY HOUSING AND FACILITIES

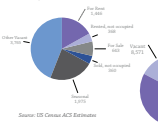
HOUSING: EXISTING CONDITIONS

The number of housing units in San Juan County is estimated to have increased slightly since 2010 from 49,380 to 49,665.

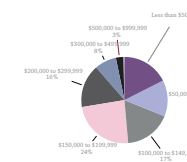


Source: US Census ACS Estimates

Of the 8,571 (17%) vacant units in San Juan County, 3,765, or 44% are categorized as "Other Vacant," a category that often describes abandoned houses. In San Juan, that represents 7.6% of all houses.

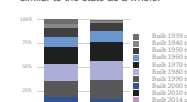


Source: US Census ACS Estimates



Source: US Census ACS Estimates, 2018

Home value in San Juan County is slightly low, with 18% of all homes valued below \$50,000. In the state as a whole, 12% of homes are valued below \$50,000. The age of San Juan County's housing stock is similar to the state as a whole.



Source: US Census ACS Estimates

FACILITIES: MAINTENANCE AND UPKEEP

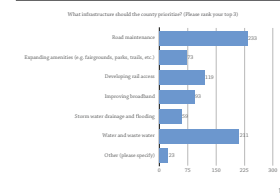
San Juan County owns and operates over 100 individual facilities. The County takes a proactive role in maintaining its facility inventory. Using bond funding, County government is conducting major HVAC upgrades to many of its facilities.

County administrators have expressed their desire to focus on providing quality service, being both strategic and tactical about maintaining or — if necessary — divesting of facilities. It does not seek to acquire additional facilities at this time.

County Properties

- Aztec Complex (8 facilities)
- McGee Park (21 facilities)
- Sun Ray Park Casino (10 facilities)
- Sheriff's Department (10 facilities)
- Fire Department (26 facilities)
- Public Works (15 facilities)
- Corrections (9 facilities)
- Riverview Golf Course (7 facilities)
- Miscellaneous (13 facilities)

Public Survey



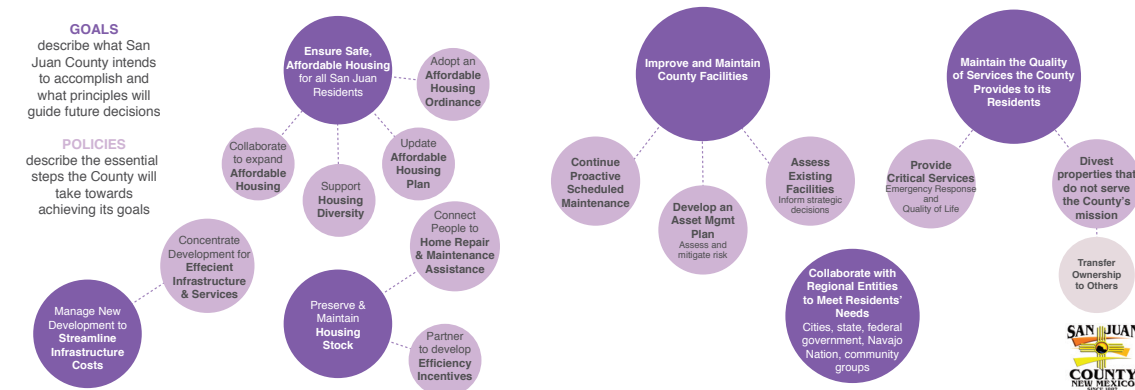
GOALS & POLICIES

GOALS

describe what San Juan County intends to accomplish and what principles will guide future decisions

POLICIES

describe the essential steps the County will take towards achieving its goals



SAN JUAN COUNTY TRANSPORTATION

EXISTING CONDITIONS

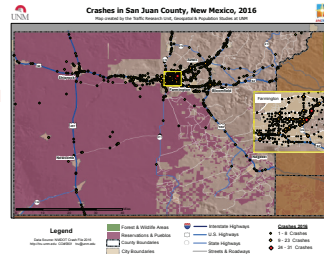
Public entities — cities, the county, the state — have jurisdiction over specific roadways in San Juan County, but maintenance of private roadways falls to property owners. The County does not maintain roads, many of which arose from oil and gas activity or exempt subdivisions (see the Land Use Board).

These roadways may not meet county standards for construction, durability, slope, or drainage. The County has documented incidents in the recent past where

Land buyers may not realize that their property sits on a private road with no guarantee of maintenance, legal access, or emergency access. A lack of land use regulations hamper the county efforts to plan for efficient future road construction.

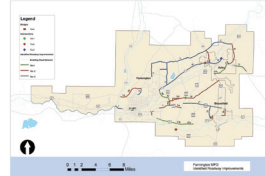
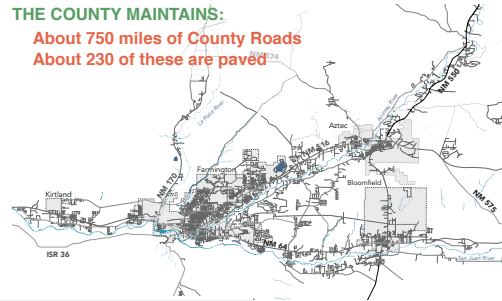
2016 Crash Data

1,971 crashes
635 caused injury
27 were fatal
163 involved alcohol



THE COUNTY MAINTAINS:

About 750 miles of County Roads
About 230 of these are paved



Planned Roadway Projects

\$88.3 million in roadway projects over next five years to widen highways, repair bridges, and improve safety

GOALS & POLICIES: Transportation

GOALS
describe what San Juan County intends to accomplish and what principles will guide future decisions

POLICIES
describe the essential steps the County will take towards achieving its goals

Promote Safe and Orderly Transportation Systems
Simplify, standardize, and modernize the street network in San Juan County

Standardize Road Division Standards

Discourage Long Dead-End Streets

Encourage Gridded Street Network
Improve connections and options

Prioritize Multi-Modal Projects
to support outdoor recreation and improve quality of life

Advocate for Complete Streets Projects

Expand Bike Network
Lanes, paths, routes, and trails

Inter-City Trail Network
Develop connections between cities

Continue to Collaborate with Planning Organizations

MPO, NMDOT, Federal Hwy/Trail, Navajo Nation

Maintain and Develop County Roads As Needed

Update Plans
Long-Range Transportation Plan, Asset Management Plan

Standardize Private Road Development
Meet county standards



SAN JUAN COUNTY WATER & WASTEWATER

EXISTING CONDITIONS

San Juan County does not provide domestic water, irrigation water, or wastewater services, and thus does not regulate those services. Municipalities provide water and (often) sewer services to their residents. County residents outside the cities rely on Mutual Domestic Water Consumer Associations (MDWCAs) for drinking water.

Many of the rural water associations struggle with aging, undersized infrastructure. Infrastructure is hard to maintain and may be inadequate for fire flow. Water quality can be inconsistent and on occasion poor. Most MDWCAs have limited staffing.

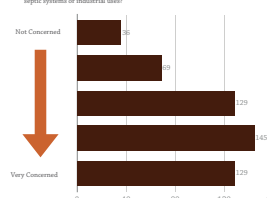
Outside of the municipalities, county residents rely on septic systems or leach fields to process sewage. The New Mexico Environment Department permits the installation of septic systems, but in some instances residents have installed systems without a permit. A lack of regulation on septic systems risks polluting groundwater and rivers, and poses a risk to public health.

List of Water Systems

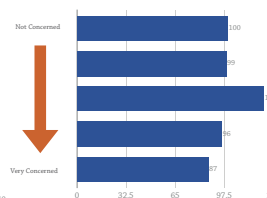
Active Water System in San Juan County	Population	System Capacity	Average Production	Avg/Per Cap	Recent Water Quality Issues
Acme Creek Water Supply System	1,200	1,000,000	1,000,000	100.0	1
Blanco River Water Supply System	26,000	30,000,000	10,000,000	278.9	3
Acme Creek MDWCA	400	100,000	20,000	45.5	1
Blanco MDWCA	1,140	200,000	50,000	49.1	1
Pine River MDWCA	2,740	200,000	20,000	75.2	1
Hydro Park Technical Inc.	25	20,000	20,000	1400.0	0
La Vie Water Community Water Supply	42	20,000	20,000	200.7	0
Los Arroyos Water Users Association	5,078	200,000	200,000	55.5	0
Leitchfield Water Treatment Plant Co-Op	8,000	1,000,000	800,000	65.4	3
Lower Valley Water Users Association	10,812	5,000,000	1,100,000	105.4	4
Montezuma Water Supply System	4,430	1,200,000	200,000	118.1	3
Navajo Dam Domestic Water Consumers, Inc.	458	73,000	20,440	64.3	0
Northwest MDWCA	3,000	200,000	200,000	66.3	0
Pine River MDWCA	44	41,700	20,880	474.5	0
Pine and Veneta Water Systems	200	50,000	5,700	14.0	0
San Juan Mutual Domestic Water	1,300	120,000	84,400	53.0	0
Upper La Plata Water Users Association	2,000	200,000	200,000	100.0	0
West Hammond MDWCA	5,078	200,000	200,000	55.5	1

Source: NM Environment Department, Drinking Water Watch

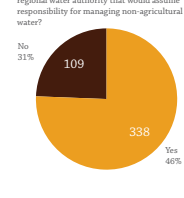
How concerned are you about water contamination from other sources like private septic systems or industrial use?



How concerned are you about impacts from Gold King Mine contamination?



Would you support the establishment of a regional water authority that would assume responsibility for managing non-agricultural water?



GOALS & POLICIES

GOALS
describe what San Juan County intends to accomplish and what principles will guide future decisions

POLICIES
describe the essential steps the County will take towards achieving its goals

Ensure that San Juan citizens have access to reliable, clean drinking water

Encourage cities and MDWCAs to improve water storage capacity

Support MDWCAs in updating infrastructure

Conduct a feasibility study for costs and benefits

Support the Development of a Regional Water Authority
to oversee water and wastewater systems

Identify funding sources

Coordinate stakeholder discussions

Improve Efficiency and Promote Sustainable Water Use
With low-flow appliance incentive programs, smart irrigation practices

Improve Irrigation and Water Infrastructure
Work with SJWC and Acequia/Irrigation Groups

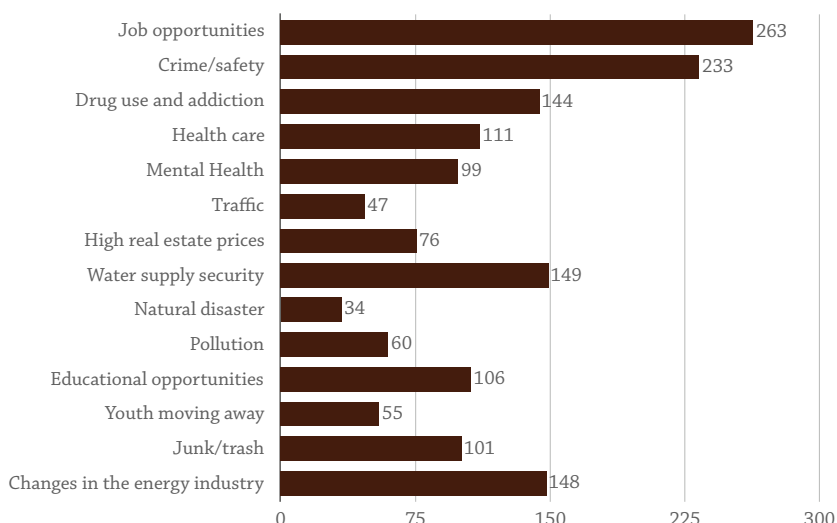


Survey Results: Comments

Following are survey comments presented verbatim, except for some spelling corrections.
See the Introduction for a summary of all survey questions.

Q. What are your top concerns for the county? (Chosen as top priority)

- Too much government!
- Oilfield eye sores old pump jacks etc. including the use of herbicide roundup ready crops
- Santa Fe is a manmade disaster that is worse than climate change
- Ditch flooding in my neighborhood
- FIREWORKS BEING SOLD EVERY YEAR EVEN WHEN WE ARE IN EXTREME FIRE DANGER
- More school or workplace shootings
- Navajo Dam Break
- Attacks on our schools: 5
- Illegal dumping
- My property has been wiped out many times due to a wash flooding. Costing thousands and thousands of dollars to repair each time.
- Winter storms, wild fires, and flooding are part of nature. Man-made drought is worrisome. The methane cloud is a blight on this town, and its people. The pollution in this county is disgusting.
- Community becoming a ghost town.
- Mosquitoes.... Drug traffic and production in the County
- When we get some flash flood in this area my mobile home is at risk of being shifted. A few years back I had a stream of water going through my skirting from one side to the other. I don't have a any machinery to make a berm. Farmington Airport not 'working' for commercial flights
- Someone (Agency or Agencies) need to help/facilitate fixing the road that goes towards Northern Edge Casino. This road is awful. More Lighting is needed. It is a hazard driving through there even when your not going to the casino but driving home.
- Corporate welfare. Big box and fast food paying less than a livable wage, giving less than full-time hours, no benefits so that the workers re forced into HUD housing, food stamps, medicaid. That is the worst man-made hazard. We need a \$15.00/hour "minimum" wage and a maximum wage to cap earnings, also. We need universal healthcare, single payer, not like Medicare, Medicaid for all now so people stop dying and suffering without health insurance.
- School shooting
- Very Concerned-School Shooting!!
- All above listed are very important daily
- Large vehicles contributing to air quality
- Is there a flood,plain plan?
- Government control, liberal agenda especially in our schools and college
- Why did you change the order -
- A terrorist attack I feel is unlikely but Raytheon is in our area and is a potential for attack on our community by terrorists.
- Wildfire, drought, river and arroyo flash flooding are natural and I would not live here if they bothered

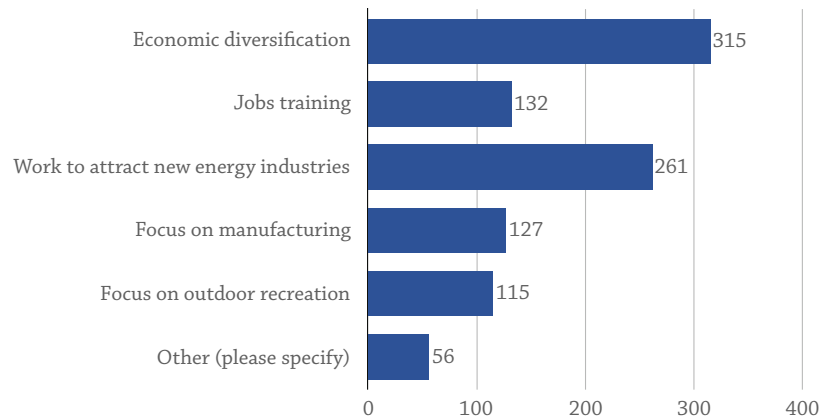


me. We are not a target for a terrorist attack being so remote and removed from the main areas of the country. We need to worry about and mitigate the damage that we as humans are doing to our land in the county so our future generations appreciate the land and have a connection to a natural, beautiful place, not are pushed away by focusing on the extractive industries that are doomed to end and do not provide enough job options for our children. We need to clean up our messes, prevent future ones, and diversify our economy to provide sustainable industries that will provide generations to come with jobs and the ability to live and love in the Four Corners Area.

- The “good guys” being unarmed and helpless when/where a crazy person starts shooting
- My neighbor has 50 junked out cars right next door to my property, yet my taxes increase every year.. Give me a break, or get rid of him. Either would suffice.
- Reservations that are in San Juan county given the same opportunities as the more populated areas
- Recycle material - Glass, and other items that can be recycled.
- No county rules regarding residential vs. business areas; allowing businesses to move into residential neighborhoods
- Cost of living in San Juan County and Aztec
- Property Rights
- Liberty
- Property Value
- High cost of living (water, electricity, etc.)
- Lack of land use/zoning regulations and enforcement.
- Environment/air quality/ground water pollution We need more oil and gas in the area job opportunities
- Access to “quality” health care is especially concerning. We shouldn’t have to drive to another State or even down to ABQ to get good health care.
- Community Relations
- Economy
- Demolish old buildings that aren’t to city code. Have junk cars removed and trash
- Trash pickup is poor. It has been two weeks now
- We need a Mental Health Hospital or facility other than the jail
- Support of Law Enforcement Agencies and First Responders
- Economic stability - #1
- I’d like for my kids to be able to play outside! Get rid of the drunks! Youth are moving away because there are no decent paying jobs in this state
- Lack of protection for residential areas (no zoning)
- Environment and public lands promotion -- tourism could be increased with more aggressive promotion and distribution/availability of maps, converting BLM lands to National Monument status would be a boon to direct tourists to our natural and cultural resources. Simply having the public land is not enough for tourists to stay in county and utilize them, as most pass through to get to SW Colorado and SE Utah. If we had a “Largo Canyon National Monument” for the beautiful canyons and archaeological resources like Crow Canyon, then more tourists would be staying in SJC and paying sales taxes and other taxes. The National Monument fight over Bears Ears and Grand Staircase-Escalante should not deter creating one or more National Monuments in county to represent our grand natural and cultural resources that would increase tourism in county.
- Water..Water...Water.....natural gas for power generation-let’s use what we have
- Dysfunctional families
- Law enforcement profiling and exploiting Navajo Nation highway system leading into border town
- Drug cartels and drug movement through the County
- Traffic is a big concern for me, we live off of Road 3180 people drive on this street as if it were a race track.

Q. How should the county respond to changes in the energy industries?

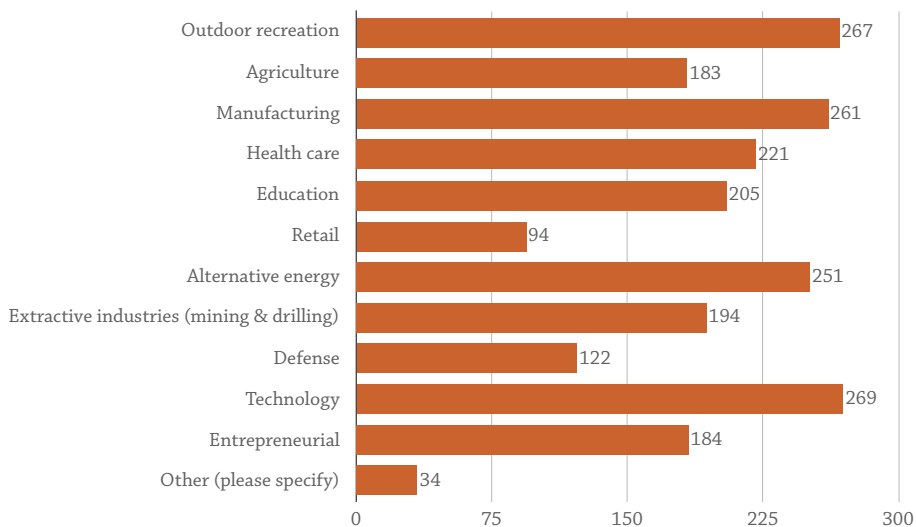
- Continue to encourage oil & gas business
- Do layoffs like everyone else. Quit blowing money on anything that doesn't generate revenue..Lower spending so tax rates don't increase
- Solar and wind energy
- Educating High School Students of the Energy Industries
- Convert Coal to Natural Gas. Rail System
- Road to albuquerque just for trucks and railroad farming our lands
- Decrease services and taxes.
- Invite industry that will be in place during an oil bust
- Promote it as a retirement community.
- Tourism based on history and culture, NOT attracting off-road vehicles nor related businesses which already negatively impact the land all around the County. Attract retirees - cost of living is lower than Durango and southern Colorado, yet very accessible from Aztec area.
- Manufacturing and outdoor recreation are aspects of economic diversification
- Elect pro-business officials to office. Focus on what we can do and what we have to offer.
- Focus education strategies better than NM standards
- Renewables
- Expansion of healthcare services as an economic driver
- We have more sunny and windy days than any other state. Invest in solar and wind energy.
- Was not a clear question- Top choice is Economic Diversification
- Bring back energy/change liberal administration
- Fostering a robust hemp agribusiness for paper, rope, fabric, building materials. We have the perfect environment for growing hemp. It can be used as a building material, as a plastic substitute that is biodegradable. We can be ground zero in this miracle economy.
- Move away from coal and oil
- Governmental regulation
- All of The Above!
- Look for ways to expand job opportunities to diversify
- Use the energy at hand and get natural gas throughout the county no more propane. Lowers utility cost and increase tax revenue from energy companies selling gas.
- Clean energy options (eg. wind and solar)Facilitate getting Train Service from here to ABQ/Santa Fe/ Gallup
- Attract new industries. Offer incentives to lure new industries/businesses to the area
- Cut back on unneeded services and feel good projects
- Encourage oil, gas and coal industry
- For decades we have talked about diversification. It is past time to start taking action!
- Alternative energy industries such as wind and solar
- The county should focus on getting better access to transportation. New Manufacturing/industries will require access to roads/trains to move their products.



- Promote the solar panel building industry. Build a bio-fuel refinery. Open the rail-yard. Build something that isn't another useless road.
- Seems as if we are seeing monopoly in oil industry and we should not allow any foreign companies or individuals to purchase our land or business
- Solar and wind
- ALL? They are all important
- Change liquor/alcohol sales laws to encourage more restaurants, bars, and coffee shops to develop in Aztec
- Attract jobs besides energy sector jobs. Stop,focusing,on oil and gas jobs as that industry will not,recover.
- Tourism promotion, environmental manufacturing and industry
- Promote senior and retiree living, Promote San Juan College
- Relying simply one industry for the entire economic well being; is ignorant and not a smart business move. Stop focusing on outdoor tourism as this only attracts a certain type of "inshape, physically active, health nut" type of tourists. Focus on good paying jobs and making this area a nice retirement community. Not all of us can afford to retire in Colorado or Arizona. This area could be a 2nd choice, close to colorado, but more affordable for retirees.
- WE NEED TO DRAW IN NEW BUSINESS, BUT NOT NECESSARILY IN ONE FIELD
- Bring the oilfield back!!!!!!Renewable Energy
- Support Small Business More
- GIS is an up and coming industry, we need to tap our local GIS experts and share the knowledge with kids in middle schools and high schools. San Juan College needs to have a GIS program as this will greatly serve the county and youth to have more individuals well versed in emerging technology. Training in GIS is a democratizing endeavor, and our youth would greatly benefit from the exposure to this vital discipline.
- We need employment that is not 100%oil and gas.
- Power generation using Natural gas augmented with all renewables locally sourced and built..no chinese stuff..America First
- Convert power plants to natural gas
- Work to bring our oilfield jobs back!!Promote affordable agriculture opportunities for young/new farmers

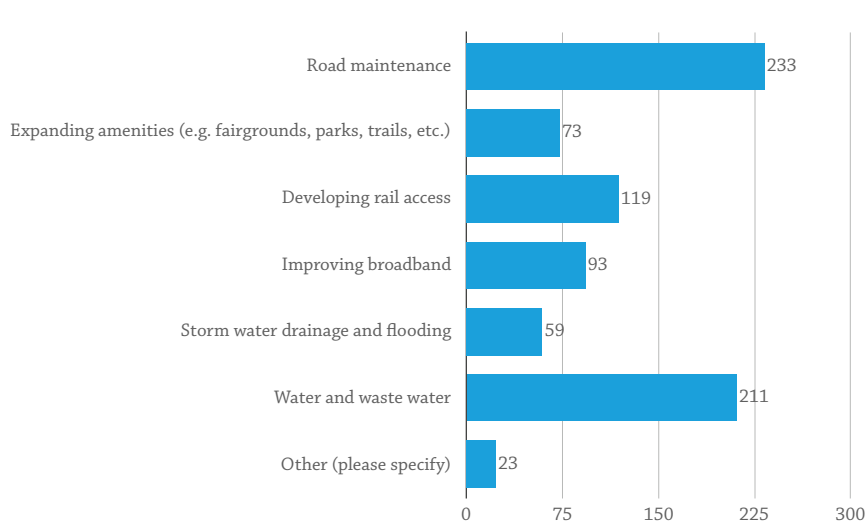
Q. What industries should the County work hardest to retain and recruit? (select all that apply)

- Unleash the potential of Entrepreneurs by making implementation of ideas easier, rather than throwing a ton of legal regulations at them
- Younger generation, times are changing so is the mindset of youth. Retain and keep future leaders here county rules for residential/commercial division
- Oil and gas
- Entertainment Privatization
- Entertainment



- Mental health professionals
- Keep the energy resources that are already here.
- Continue to keep SJCC strong.
- Travel
- SAN JUAN COUNTY NEEDS TO SEEK RECREATIONAL ACTIVITIES FOR OUR YOUTH AND NIGHTLIFE.
- Robotics are taking over manufacturing jobs, and the fossil fuel industry is dying. Don't invest in the past.
- Look at a 4 year college
- Tourism. Germany, Japan, Austria and Switzerland love this area. All very wealthy countries. Be the hub for their southwest travels.
- Hemp and related industries. Need to develop transportation to move goods and services as well as bringing people in
- Transportation
- Renewable Energies Wind/Solar
- Mental Health Facility - Its direly needed in our area.
- Electrical generation work hard to keep the coal plants going, but also natural gas generation off of the reservation. Make San Juan County an energy epicenter. Electricity, natural gas, coal, refined products, I would even be will to live near a nuclear plant. Energy should be our future.
- Teach our youth everything possible for their tomorrow
- Less monopolization of certain businesses
- Retirement, leverage our weather, cost of living, and geographic diversity
- Open the rail yard!
- Business that brings jobs would help with growth, also mental health facility would help our community
- Oil and gas
- County needs a nightlife for middle aged people as well as places to take kids for entertainment.
- Senior living communities
- Wind tower - Energy or power
- Need a rail system or an interstate. Oil and gas
- All of these are integral to a diversified, resilient economy. You cannot put all your eggs in one basket and the emergence and/or growth of all of these industries are what is needed for San Juan County to become prosperous and a force for good in our area of the world.
- Gas and Coal Power Plants
- Hard to promote agriculture until we have water for it, but I do think we should work to be more self sufficient with our food supply. We really can't tout education unless/until NM decides it does not want to rank #1 as the worst school systems in the nation. Retail doesn't pay much if anything above minimum wage, so why would we want to promote more minimum wage jobs in SJC? Health care will improve when our economy improves. Realistically, why would a good doctor want to move to Farmington when they would make more money in bigger community with a decent economy? Promoting outdoor recreation might bring in a handful of tourists, but tourist really do not want to see a bunch of businesses closed/boarded up all over county when they are not climbing rocks, visiting indian ruins, fishing/golfing. Until and unless we do something to improve and stabilize the economy, I don't see why anyone would want to move here. I personally think we need to focus on getting a bigger industry here that pay good. I don't see how a dozen more minimum wage jobs at another fast food chain is really improving our economy and quality of life in the long run. Also, make it affordable enough for retiree's to stay here. Masses of youth (including my kids) move out of state for better opportunities and better paying careers. Next, retirees are going to have to move because the cost of living is way too high and seniors can't afford it. I mean really, \$150 for your basic utility bill (aztec) is just ridiculous for a single person house hold.

Q. What infrastructure should the county prioritize? (Please rank your top 3)

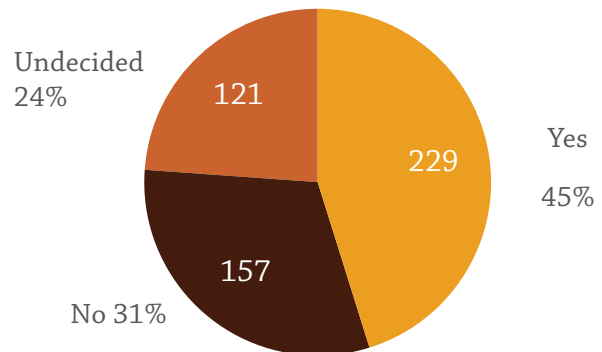


- Quit wasting money on things that do not generate revenue.
- Areas to get rid of waste on all San Juan county areas including reservations. Promote recycling
- Expanding Natural gas lines to more homes in the county--I'd like to have it. Use up that surplus they have.
- AIRPORT SERVICE
- Trash
- Creating and enforcing county ordinances for trash and junk
- Aesthetic appearance, there are too many "junk-hoarders" Expand trail at Riverside Park in Aztec

- The parks we have are lovely, but the drug-addled bums make the parks unsafe. We need better social systems before our amenities can be fully utilized.
- Bigger Airport. We do have air traffic control where Durango does not.
- Keep spending low
- Solar and wind energy county wide needs to be #1. individual solar and wind or community-based solar and wind. We could be manufacturing energy here effortlessly and making a profit as well as rewarding the community so that no one goes without energy, heat or electric.
- Someone (Agency or Agencies) need to help/facilitate fixing the road that goes towards Northern Edge Casino. This road is awful. More Lighting is needed. It is a hazard driving through there even when your not going to the casino but driving home.
- Push to recycle
- Home electrical access to power for older homes I never get city maintenance. We were annexed and ignored except for taxes.
- Wind and solar power may be good here as we are blessed with sun and wind
- Renewable energy development (solar)The county already put thousands (if not millions) into McGee Park for the high school rodeo finals fiasco. Did all of this taxpayer investment improve our economy? No (maybe for a couple of months but not in the long run). Did it bring fantastic concerts, entertainers, events, etc to our area? Nope, not really. We DID have a railroad when I was a kid, but apparently it was not needed in our county because the powers that be decided to remove the tracks! If the county invests in water and waste water, the cities won't have any excuse to keep raising prices on utilities.
- We need an interstate more so than we need a railroad, but nobody is talking about that. An interstate would bring all the benefits of a railroad but would also bring more tourists who are discouraged by the lack of an interstate to the area. Solidifying BLM Recreation and other Areas, such as creating another National Monument or two, would benefit the county immensely by getting our natural and cultural resources on the map for potential tourists to see when they consider areas to travel to for recreation and leisure. The weather and public lands of the county are phenomenal and should be advertised if the tourism industry is expected to compete with the Durango and Moab areas. need great infrastructure lets make San Juan County Great Again
- Airport, recreation
- Police and Fire Protection

Q. Do you support developing a road between Crouch Mesa and Farmington at Piñon Hills (County cost: \$12M est.)?

- Not at this time.
- Does it make money, or does it waste tax payer money? Simple! No!!!!
- Studies already showed endangered species in area. If so split the cost with the city of farmington.
- Use the 12 million for more important things. I don't think our population is so large that we need it.
- Reduce Traffic, and reduce accidents from speeding and traffic
- Absolutely!!!
- Not necessary There is not the traffic. Just don't see it, especially with fewer people here. my taxes are plenty high now paying for Aztec schools; do NOT need another tax increase
- But not at the total expense of keeping our other roads in good repair.
- this should have been done when oilfield was good and the road to Navajo lake is a joke. you want more tourism and look at that road. if we keep putting off pinon hills maybe we can wait till it is 20m
- What is the purpose of this road?
- I would love to see a faster way to get to Farmington from crouch mesa but I believe it could cause or add to some of the current issues such as speeding that already exists out in crouch mesa. I would like to see a traffic light be put up at the intersection where Dino Mart is.
- I think the would open the door for commercial and residential development. It would also ease some traffic on the browning bridge and traffic in that area of town.
- beneficial only if it will bring in businesses along that stretch It's been the plan forever. Stop wasting money on Museums, civic centers, and Golf Courses and do your job!
- Considering how that area has developed, it would be more convenient for people living on CM, but it may also encourage more growth in that area.
- At a time when the county feels financial difficulties that \$12M is far better spent in other endeavors, such as, but not limited to maintaining existing roads; one such being the highway from Aztec to Bloomfield which, as major thoroughfare, is disgusting in poor condition.
- This will need to happen at some point. I would rely on the county to determine the best timeline for this to happen with factors including cost effectiveness, ease of transition, and perceived need of course.
- Even just to connect Pinon Hills to South Side River Road (3000) via Road 3900 by just crossing the river and not necessarily go up the hill on 3950 would be great. I think this would alleviate a lot of the traffic problems as well as add revenue to the east side of Farmington. In my opinion, this would eliminate some of the traffic issues as well as provide better access for those citizens residing on and around Crouch Mesa.
- Crouch Mesa would be a good place for a larger airport
- My husband and I live in Morningstar Ranches and would like to have another access to the east side of the that doesn't include commuting through the 'ugliest' home sites in the county!
- To make a good decision, I would need to see a list of the major proposed projects and their costs and then prioritize based on what projects have the most value for the community in relation to the cost.
- This is an absolute necessity for the community. congestion in this towns roads is insane, and this would alleviate a ton of it.
- The traffic between 20 th and pinion on main street is very congested. I would estimate at least 25%

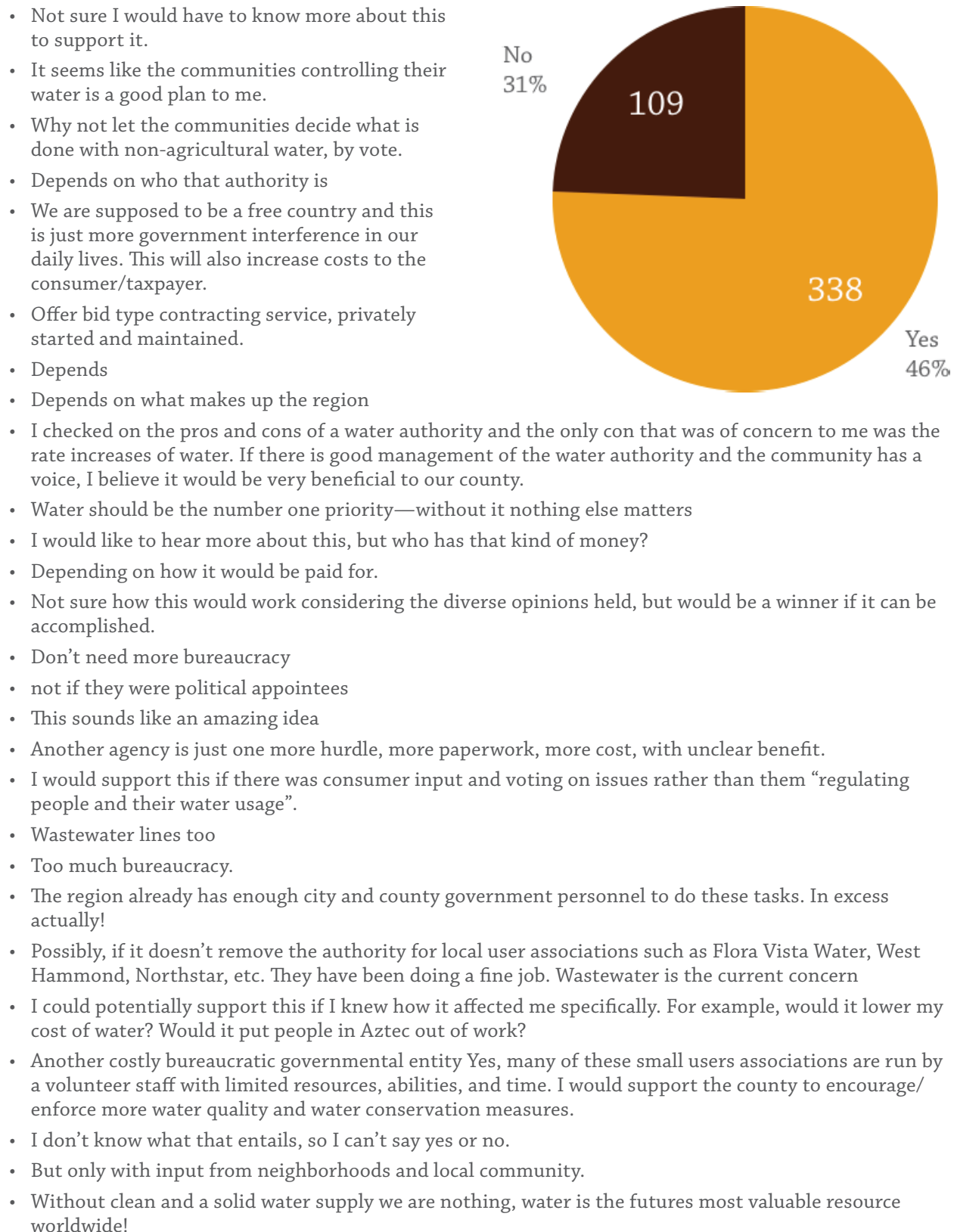


of those motorists are trying to get to Aztec or Crouch. By having an additional access route, the area around Browning would free up as well the mall area, just for people commuting back and forth not shoppers

- Not here but definitely the alternative route in Aztec adjacent to SSS Trucking. Finishing this project would keep needless heavy traffic off Main Street. Why?
- Would prioritize paving existing streets before embarking on this project No familiar with Crouch Mesa
- Accessibility
- I'm sure \$12 million could be put towards mental health care or something. We don't need more roads... This has been in discussion for over 20 years and should have been developed a long time ago.
- 12M is a lot of money that could be used in other areas. I am not really informed enough on the need of this kind of project. If it is a priority need for the community then, yes. If not, then use that money in areas of more need.
- It is better to develop now while we can manage the traffic construction.
- No, a priority should be made in Aztec for a road to bypass Aztec main street so big trucks don't go through town due to high pedestrian rate and skinny roads
- It would make getting to work a lot quicker for me. Only with substantial state and federal funding (90% or more)Giant waste of gov money. Completely outrageous with our economic state.
- This has been spoken of for years. It seems like it is a necessity that keeps being put off. There needs to be a road and bridge connecting Hogback and San Juan Chapter
- I think this would alleviate some of the traffic that travels on east main street to reach Crouch Mesa or Bloomfield.
- Replace the road from aztec to the lake where people actually spend money. Tax the oilfield companies for taking heavy vehicles on that road by making them buy a permit. I'm very pro oilfield I just think responsibility needs to be directed in helping the county and not just oilfield gain.
- put the bridge across the river
- Someone (Agency or Agencies) need to help/facilitate fixing the road that goes towards Northern Edge Casino. This road is awful. More Lighting is needed. It is a hazard driving through there even when your not going to the casino but driving home.
- It would lessen the bottle neck effect traffic causes on Main St.
- Invest \$12M to attract new businesses, create jobs for the people from Power Plant. Who is going to support financially this road in the future if there will be no jobs left?
- That project would cost a huge amount of money at a time when our economy is still struggling. It is a much needed road. It will cut traffic on Browning an main and make drive times faster for those in the crouch mesa area.
- We should Very much needed.
- I think taxes need to come from other than just property tax. Lots of people don't own property but use the schools and the facilities.
- This has been necessary for years
- It will ease traffic on other roads, reduce the use of fuel and thus reduce pollution.
- That project is, frankly, very stupid. It is a waste of money, as travelers can already reach that area through existing roads, and there is not enough travel between the two to warrant such a ridiculous expenditure.
- Unaware of the cost and benefits of the project
- Maybe in the future
- I think that the crouch mesa/wildflower area is really separated from the city infrastructure and would benefit from this project. There is a lot of room for E. Main to expand to make the most of this project.
- Pinon Hills is getting congested. We need a plan for another northern by-pass route.

- With our present economy, this may not be the best time to commit to that expense. If our economy picks up, then yes, I'd support it.
- If there were more jobs it might be good, but right now and in the foreseeable future, there won't be enough traffic to support an investment that big.
- Why? Are the 3 crossings we already have not sufficient?
- Not at this time. If people start moving back, we might consider doing this
- While convenient, the estimated cost doesn't, in my opinion, justify the cost.
- I do not consider that it would take anyone who chooses to live there any less time to get to Farmington. There is a reason why some people choose to live outside the city and have a little space to themselves.
- OUR COUNTY NEED ROOM FOR EXPANSION AND THAT WOULD BE A GREAT AREA FOR IT.
- Drive around
- I rarely use that part of town so doesn't affect me either way.
- I think it's a good thing to review further Browning parkway is very congested in the mornings and evenings this would elevate some or most of that.
- I would support finishing the Road to bypass heavy trucks from downtown Aztec first and feel the current roads between the Tri-City's are just fine.
- A decent road exists. Improve the current road to expedite that traffic.
- This would improve access and would reduce traffic and pollution on other roads. More cars sitting at lights = more pollution, so the best action is to keep traffic moving and adding another road will help to make trips shorter and reduce the amount of cars stopped at a light at any given moment. The best plan for this road would be to secure ROW for when an interstate or freeway facility is developed through the area so tourist and other cross-country traffic can be directed through the East Main Retail area without putting them on surface streets. More exposure to outsiders means more tax dollars collected, for example, my wife and I before living here would pass through Farmington on the way to Utah and never new about the East Main area and we would stop in Cortez for our last stop because it was nicer than the US 64 areas. Had we known of East Main / been directed there by the road network, we would have stopped and spent our money there with the greater array of options, IF it was convenient to access.
- Not needed...waste of money please spend in other areas that currently exist and improve them.. Thanks!
- If the road has to be built- City of Farmington would have to chip in 40%, county 40%, and the local Subdivision owners the other 20%. Maintenance would need to be shared between the City of Farmington and the County.
- There is no ROI
- Current traffic does not support such an expenditure
- I think it would be a good way to relieve smaller roads for example 'Old Aztec Hwy' from some traffic. I don't have property on that side of town so I don't know the downside to it.
- Why is this STILL a question? We were told it would happen 20 years ago.
- We've been doing fine without it and that \$12M could be better spent elsewhere.
- The bridge at Flora Vista is too far from the one at Browning Parkway. This puts too much traffic on Main. I just wish the plans after the river were clearer--will a 4 lane extend to US64 or will traffic have to get on Southside to go to Browning Parkway (getting some traffic off main, but forcing a traverse of a winding road) or north with no gain over the existing bridge in Flora Vista.

Q. Would you support the establishment of a regional water authority that would assume responsibility for managing non-agricultural water?



- I need more info to answer this question. What does a “regional water authority” do? There must be more to it than providing staff.
- If it is cost effective and gets results
- What would the cost be? Who is providing this service now?
- This is a stupid idea. We don't need to turn into a HOA town, where everything you do has to be approved by someone.
- Depends on the cost.
- Why out-source that? Need more info.
- As long as the cost to the customers can remain reasonable.
- 75% of water used in the county is ag. Waste of time and money, focus on more important issues. Should be a wet winter in 2018/2019 with good snow pack.
- Water is a commodity out here, so it makes sense that we have knowledgeable representatives to educate the public, and keep the system running properly.
- The funds could be utilized better elsewhere. Part of the problem is sending so much water to other areas when we need it in our region.
- I Need more information before I can answer this question. Depends on the cost
- We should play well with others, but San Juan County needs to look at for its residents first and foremost.
- If it is more effective, not at too high of a cost and not too cumbersome for the end user.
- Unsure as to the need for this. I am ignorant to the policies and procedures of the Water systems at current.
- Unsure, would need more information!
- Depends. Would this replace Animas Land and Water? Animas Land and Water is a joke, unprofessional, and needs to be replaced.
- Is this a waste of government money? Or private sector? You guys took my water rights this last time. I don't trust you.
- Depends. Need more information
- I am assuming the non-agricultural water is managed by the cities. I am not sure what it would mean to go regional. So, I don't know if handing over the management of our water would be in our best interest.
- Yes, so that consumers aren't told two months after the fact that there is a boil order/water unsafe.
- If they can get BLM and the forest service to take responsibility and maintain the waterways we have by eliminating edge growth to conserve more water to make available to the county.
- I would need more information in order to make this decision
- Another government to support. already have enough.
- I fear a larger regional power becoming too powerful and ruining our communities. Bigger is not always better. We do not need more government
- If this opens up new jobs without requiring a college education. Internships and trainee positions
- Depending on how much it cost. The amount of our bills keep going up with no explanation of where the money is going.
- This would be a waste of money, and resources. Sounds like government over reach.
- Need more understanding before I could really answer We have the water commission. What do they do?
- This would be great idea Possibly more jobs
- Storm water needs to be retained and not just sent down the river. Any rain water that hits here is just wasted and sent to another state. We need a division in charge to help us get this completed.

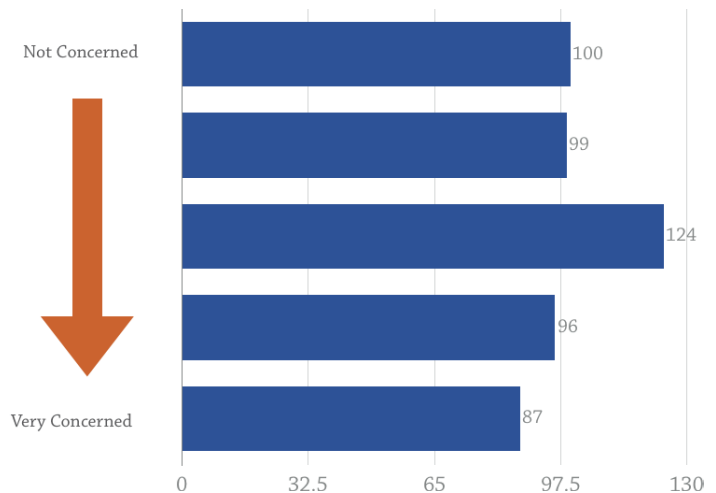
- Only if such systems in place would only benefit the few and those in positions would ensure diversity and representation
- I don't really know what that would mean, though.
- Without water, we die. We need better conservation efforts, maybe by saving water runoff. Also, make water rates high enough that people will be more aware of the value of the resource we use and require.
- Stop creating more bureaucracy that doesn't live here and won't know the conditions of every area.
- We need unity, not just someone pouring bleach in a tank.
- Uncertain without more knowledge on subject. If it doesn't just become a paid position that is politically based. If they actually do something, that would be good. i would like more elaboration on this.
- Depending on cost to residents
- I would want to know more about it before I support it.
- I think there is a lot of opportunity to educate consumers about water use, I would like to see this person have a community education role as well.
- We especially need sewer system and waste water treatment access in Kirtland, Fruitland, Waterflow, Flora Vista and parts of Farmington that do not have public sewer access.
- Would this be a private company? If so, how would you prevent corruption in their system? Would the staff be local citizens or workers brought in from outside the area? Would the cost be significantly different than current costs?
- As long as it's a private company, and not ran by the government. The city/county governments in the local area, are completely incapable of business.
- Just look at the rapid decline of the area. As long as they would work with other non-profit organizations such as the River Reach Foundation.
- Provided that this would not increase cost to the consumer
- I would need more information to determine whether or not I support it. No because this is a complex topic with little information.
- We have enough departments to use other personnel to do this work.
- It appears that in the last 60 years the focus has been on extraction and energy developments but there has not been much in preserving the environmental integrity of the region. With waste pools and failure to plan for the residuals it all needs to be redirected back to those companies that have made billions of dollars and have now left.
- Sounds expensive
- Right now I see a very divergent standard between the difference water users associations, especially in agriculture. One manages well and another has no restrictions or guidelines at all so that painfully obvious water waste and misuse are ignored.
- Many rural water associations are hanging on by a thread. A centralized operator who bills and maintains infrastructure is critical for maintaining existing and future growth.
- I feel many people waste water in SJC and just don't care
- I really don't know what this question entails but it sounds good to review and consider
- I answered 'yes' but don't know enough about this to say, really. What would the additional costs be, and who would pay for them? What exactly would the water authority do? Would they develop additional infrastructure? Would they be a public water supplier? Would they defend the region's water rights in court? I have too many questions to say whether I support this or not.
- Current water companies are over priced and undependable.
- The balkanization of water distribution may keep prices low (I do not know if it does) but it would be better for the community to have no ambiguity when it comes to the "who provides water in my area" question, such as how Farmington Electric Service is the electric authority for the county, plus it would

standardize water saving efforts instead of leaving residents wondering if their water provider is doing the same restrictions as Farmington, etc.

- Different communities have different needs and preferences. Leave it decentralized, more personalized.
- Not sure, it could also turn into a bad thing and carry out the duties they were assigned to do.
- Yes if Cities of Aztec, Bloomfield, Farmington, Kirtland, Shiprock also provide funding based on population. The County is 20% and provides the base/facility for the workforce and the cities would put in the other 80% of funding. A water board would consist of 7 commissioners that are elected with the Board choosing a rotating chairman from the group of 7. They would be elected to a term of 3 years and could only serve for 3 terms(ie term limited) also the chairman would serve only 1 year term and only could be chairman 3 times and as said above would be selected by the board of 7 commissioners. The commissioners would serve at no salary and only travel/expense for compensation.
- Let the local (city, etc) take care of the water for their area. Each area is unique and should have control over their own water. We do not need more government employees or control.
- I work for IHS on water systems in Shiprock and beyond and see great need for regional water management.
- Small community water systems represent a public health crisis liability
- People in the Crouch Mesa/Aztec area are being taken advantage of I've have seen some of my neighbors get charged for 20,000 plus gallons of water. Others going from paying \$40 a month to \$200 the next which is not fair.

Q. How concerned are you about impacts from Gold King Mine contamination?

- More concerned on who has to pay for its impact.
- If this would have happened by anyone other than the EPA, they would be in jail!!!!!!!!!!!!
- Gold King was only a psychological impact. Agricultural and septic system issues are more of a threat than gold king.
- What was harmed to the environment, fish, water, and how much is still exposed in the areas that was not removed.
- That mine has been draining into the river probably since it was first mined.
- This has been going on for 100's of years. Nothing new it just came in the form of a big bolus.
- I wonder about the long term effects of the contamination, but if the spill had leakage years before the major spill, then there is no concern, but the awareness on the spill and how water source can be compromised was an awakening for the general public, its good to be in the know.
- The contamination has been coming done the Animas river for over just not in that concentration
- If it had been a contractor acting alone the epa and enviromental folks would have hung them
- My concern is for property values and the fact that the source of the problem has never been addressed.
- We all know how the Gold King Mine has impacted us, we need to move together collectively toward solutions on how to move forward in a positive direction.
- Is our water naturally filtered out by now for it to be considered non-health concern for long-term consumption



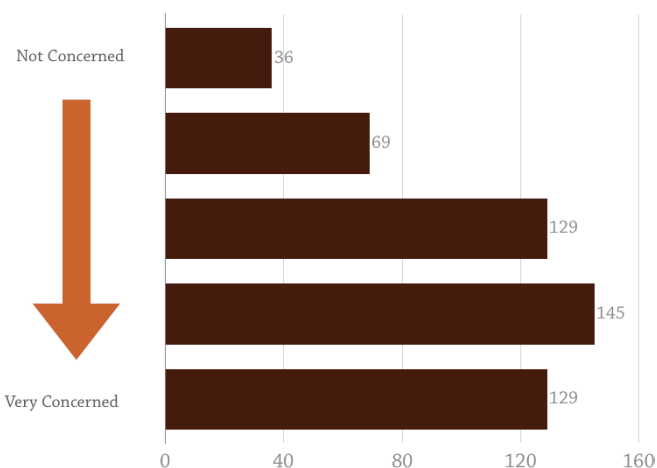
- Mostly that EPA has no real consequences and that rumors are floating around that it was intentional and still ongoing contamination being released.
- A federal agency that exercises the powers to place common people in prison over minor issues such as building a small dike to alleviate erosion on one's property is seemingly so far above the law it will not hold itself accountable to the same punishments it imposes on the private citizenry.
- With the minerals depositing at lower flow areas the lower Animas is prime to act as a sediment pond for the hazardous materials again and again as the upper turbulent river areas are flushed out and down stream to New Mexico. ALL contamination sources should be addressed and monitored.
- Since the spill there have been fewer ducklings and goslings at Berg Park. Not sure if this is related, but the timing is interesting.
- We may not see the immediate impact but maybe 10 to 20 years later...we may see the impact it caused on our environment and health. I think the EPA got away with it and need to be help accountable
- I am more concerned about the lack of accountability and responsibility to any entity that contaminates, regardless if it's air, water or ground.
- Would like to see more scientific data about long term impacts of the spill before forming a more definitive opinion Long term effects of our ecosystem
- Heavy metals are detrimental to human and animal health. The contaminated water leaches into water reservoirs. We drink it, we water our crops with it. It's in the soil, it's in the food, it's in the animals we ingest. We're going to have a lot more cases of cancer and birth defects, which in turn will require better health services.
- We need to know more. I used to work with the EPA. They will never be forthcoming.
- The EPA really screwed that up. why weren't they sued for billions like an oil company would have?
- We farm and our relatives farm. For some that's their livelihood! And more needs to be done for those farmers affected by the spill.
- Hard to say, I don't think the government is truthful about the actualities of contamination.
- I was not sure how this affects us in the future. Nothing was ever said about what the end results would be. Did not hear about it if they did.
- Health hazard.
- This contamination has been going on for decades-get over it
- I think we're going to need continuous testing. We may face new contamination levels now that the animus river has been dry with no waterflow. Only concerned that is cost my Ag Business and there was no financial recourse, and no accountability of the EPA and their actions. I am concerned about the decades old problems created by all of the mines upstream that are contaminating our domestic water.
- Including a lot farmers along the river
- Unfortunately, SJC has made attempts to utilize and skew data to fit the political narrative that there is no harm now or in the future.
- Heavy metal contamination does not lessen over time, as heavy metals do not break down.
- The mountain was dumping heavy metals in the river for the past few thousand years, what a shock!!!
- Not sure there was any long term contamination.
- More concerned for Farmers and Native Americans west of Frm than personally
- The 1978 Sunnyside incident sent more mine waste down the river than the gold,king. No long term effects from that. The animas is,more,polluted,from,poorly maintained,septic,systems than mine water. Those are more,of,a threat. The primary impact,of,the gold,king,is psychological. Any damage from,mining,was done in the 19th century before,tailings,impoundments were,used.
- Contaminating water supply
- Not sure about the truth in reports publicized, so hard to know the actual threat or impact
- I understand that residents are still concerned, and validate that concern, but I am grateful that much

of the community has moved on. The prolonged dialogue has a negative effect on our farmers and ranchers and their ability to sell their products locally.

- Not enough was done by the Federal Government and/or the Mine owner(s) for remediation
- More concerned with the rampant drug, violent crime and drunks wondering the streets.
- If you don't believe we have these problems, get out of the foothills neighborhood, and take a look around.
- I was told years ago the health issues in San Juan County were from the power plants. In reality it is from the River. Can it happen again
- I LIVE ON THE ANIMAS AND WE WON'T KNOW THE ISSUES THAT CAME FROM THE SPILL FOR MANY YEARS.
- I was upset about how that was handled, we may be seeing the effects of that farther down the road in our wildlife and I feel it was not handled with the seriousness of the issue.
- I live along the river and the water in Aztec still doesn't taste right or smell right until you filter it twice
- The GKM spill was a very short-term event, and studies have shown that water and soils in our area have returned to pre-spill quality. I'm much more concerned about other, long-term and persisting water quality issues such as nutrient and E.coli pollution in our rivers, and mercury and PCBs in our fish.
- Those pollutants are naturally occurring and rivers as a system function to filter water as it flows. The large concentration that was released was obviously bad, but time will mitigate its affects and the biggest concern should be to prevent other ticking-time bombs from doing the same thing.
- It has been going on all my life here in this area.
- Worst should be over..the FEDs/State/Government people... need to make sure the next time they have a Professional Engineer(PE) and Certified Geologist (CPG or equivalent) review and certify work plans and oversee the project(s) of this type.
- I am not too familiar with this situation
- What a nonsense issue. The Corps samples 12 hours after the release showed that no contaminants reached the San Juan River. Get over this one.
- You can still see the deposits on the river bottom now that the water is so low.
- EPA refuses to give any truthful information or take responsibility for this issue.

Q. How concerned are you about water contamination from other sources like private septic systems or industrial uses?

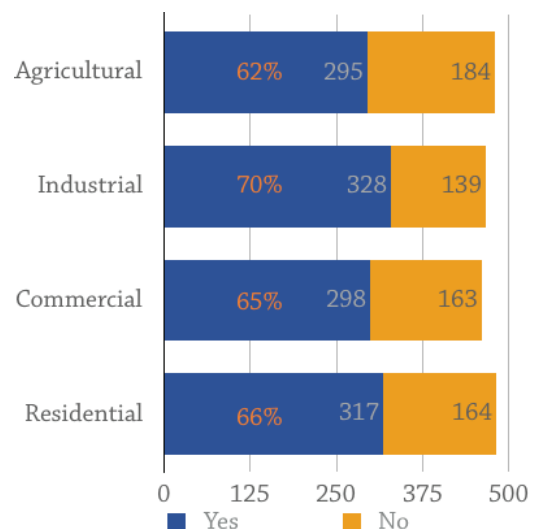
- Very concerned about the ditch that runs along Road 3312. Have heard that private septic systems are draining into the creek.
- I would have to look at facts showing contamination in those areas.
- The concern is how many un-reported situations that have not been caught or turned in.
- Can these be identified?rules/guidelines are not enforced
- I say that is more of a concern than a major spill because it may not be as noticeable or regulated to keep track of so the contamination may build up til the damage is so severe.
- Consider keeping all new septic's farther from the rivers and longer leech lines
- Proprietary slurries used in fracking are disconcerting.
- Would like to be connected to the city system for safety and health concerns
- Needs to stop. properties are not monitored..
- There are too many failed septic systems at no fault of the owners. Specifically in Flora Vista.
- Personally, I'm tired of our stretch of the Animas being known as a Dirty Little River. Really..
- The headwaters are less than 2 hours away and the quality is this bad?? (some accounted for upstream too). Its disgusting and it tells me "They" don't care and it doesn't matter. I care. It matters.
- I also see small groups working on these issues, but don't seem to get much support-event in the way of sharing information to the public.
- The closed mines and other sources need to be surveyed and contained.
- There has to be support for private citizens who cannot afford to upgrade their systems. Landlords and private businesses need to be accountable. There are many parts of SJC that oil companies have abandoned and left their industrial waste. This is unsightly and a potential public health issue.
- I don't know if our water system is monitored very well.
- I am much more concerned about industrial chemical pollution than biological pollution. The type of contaminants that are in the water
- Have you smelled the San Juan in Bloomfield? It smells like acetone. Would you want to drink nail polish remover?
- You know that was not ever discussed when we set up our private septic tank. Does that cause problems later?
- The industry and standards have changed what damage was done is done no need to waste money on something controlled now by OSHA standard.
- Democrats have allowed this to go on since statehood, why are you worried about it now
- We live in an area with a lot of old trailer houses that use septic systems. I feel like this is just part of being in this area.
- Again this seems like government over reach at a time when there are more important concerns.
- Highly concerned our kids use water in this area it's scary thought
- There does not seem to be enforcement of the county laws in this area or if any is designed to ensure such uses are monitored.
- We went to long without oversight. now it is an issue.



- People dump sewage all over. Septic systems are poorly maintained, and rarely inspected. The flora vista sewer project has never happened. Water needs to be protected in this county.
- This is such a bigger issue than GKM, there needs to be more information available for residents to understand these impacts. Is there a plan for re-mediating this issue?
- We need expanded sewer and sanitation services to our rural communities that have high density building. Kirtland, Flora Vista, etc.
- Way too many unregulated properties within the county (Crouch Mesa in particular)...unregulated growth and over-development of housing areas without necessary infrastructure (sewer, roads, sidewalks, etc.)
- Concerned about it getting into rivers
- Please see my answer from #12.
- Humans tend to not care what happens downstream, and we need to educate each other and make assistance available to help the population mitigate private septic leaks. Industrial water contamination needs to be more vigorously monitored and prevented by local governments through inspections, law creation and subsequent enforcement.
- Septics should be monitored more carefully. They should be required to establish background WQCC containment levels in the vadose zone and surrounding soil/groundwater prior to installation. All new septic systems should be required to install piezometer tubes for easy sampling of the vadose zone and if active shallow ground water is present they should have a groundwater monitor well at the tip of the leach field.
- How did we go from 'NO SWIMMING' in Farmington Lake (because of contamination concerns) just three years ago, to EVERYONE pay your \$5 and come play in Lake Farmington?
- We buy bottled water and don't drink or cook with tap
- Animals Valley Water is using Farmington's water supply to cheat and steal from their customers.
- Mostly concerned about the infrastructure on Crouch Mesa
- Water is life. Water quality has a direct impact on quality of life here.

Q. Should the county adopt land use restrictions to protect certain uses? (select yes or no for each)

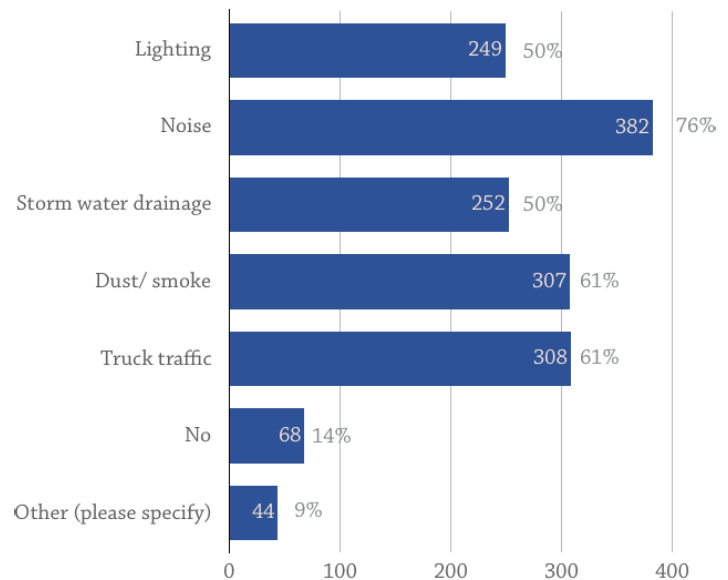
- Yes! Junkyard at Road 2945 as an example!!!
- Leftover eye sores, noise, their there to make money not worry about how there business looks or whats left after they leave. Look at old refineries left
- THERE SHOULD BE ZONING.
- We have such a hodge podge now that it really does not matter.
- My neighbors in my neighborhood bring down the value of my property, so yes and other non compatible land use would worry me as well.
- Areas should be zoned, and only changed by local resident (or business) vote.
- Let the market determine what it will; THAT is "liberty" as we are lead to believe liberty is!
- It's a real mess in SJ County. It is sad to see a mixed land use. The beauty of the area and the development of shopping areas and parks is so limited without zoning. We need zoning please.
- This is a very important issue. The LACK of strong land use regulations in San Juan County is a detriment for attracting clean businesses and the people who might own and work for them
- That could be an issue.



- The only reason I'm not concerned is because I live in the middle of an established neighborhood. If I lived near industrial land then yes, I would worry.
- I worry about my neighbors' junk yards next door.
- We own land with well-sites in view and worry about their appeal later down the road. Need more education on this topic
- Why is this even a question? I'm sure people on F-Hill aren't even asked this question because it's a given.
- Needs to be proper separation from different uses
- Yes, driving throughout the different areas of San Juan County, I've noticed industrial buildings next to residential areas, with mixed residential types that are not organized by apartments, houses, and mobile homes, which doesn't make for an aesthetically pleasing sight or feel.
- Compressor noise will effect property noise
- Someone (Agency or Agencies) need to help/facilitate fixing the road that goes towards Northern Edge Casino. This road is awful. More Lighting is needed. It is a hazard driving through there even when your not going to the casino but driving home.
- Aztec is not enforcing their zoning regulations
- When I purchased land in the county it was because there were no ordinances or zones. I prefer it to stay that way.
- And no unsure about this one
- It brings down the property value of the home
- I worry about the effects on the people that live there. I was an NBC soldier in Iraq. Trust me. All industry has it's contaminants.
- Not a specific issue personally but in general, this is perceived as a problem in county and in Frm due to lack of ordinances protecting against this issue.
- Duh.... if you don't think this is an issue; you probably shouldn't be apart of the decision making process.
- If planning zones the areas properly, there should be no issue. Home owners should know what they are buying and the zoning around them.
- Nobody wants to live next to a refinery, and most would prefer to not see drilling operations in their backyard.
- But sometimes you have to give in order to get what you want or need.

Q. Are there issues that property owners should be required to mitigate if they are close to residential neighborhoods? (Select all that apply)

- Yes truck traffic cause roads will be overused and abused Depends on issue and where
- Depends on who came first
- Trash and garbage
- A refurbishment of 5 miles bridge to allow trucks to cross the largo instead of driving down county road 4990
- See question about in place business above
- All the heavy trucks continue to add wear and tear to the area roads including county dirt roads which are not maintained properly to begin with. I was told when I purchased my land 28 years ago that the roads would soon be paved along with several other promises of improvement that never happened
- In the county no to all, in the cities yes to all.
- Each occurrence should be addressed per situation.
- Real estate agents should also be required to disclose such information, along with whether there are covenants on the property.zoned use
- Trash
- Big trucks restriction on residential roads, and hours of operation by commercial businesses nearby. Tearing up roads, especially during winter and spring.
- Excessive speeders in neighborhood need speed bumps
- Liquor serving establishments (not necessarily retail)
- Animals (keep them restrained)
- Weed control and upkeep on exterior of home or commercial property!!
- Provide natural gas in county and better roads
- Again, very difficult to answer. Yes, I believe that an industry moves into a residential area and disrupts the community that they should comply with some regulations to mitigate issues, but not to the degree that the business cannot operate. If regulations are going to be enforced they need to be in place prior to the business moving in.
- Junk!!!!!!!!!!!!!!!!!!!!!!!!!!!! Cr 2945 in Aztec!!
- Residential areas shouldn't be that close to commercial sites, but in San Juan Co. they're all intermingled. So, yes, commercial property owners need to take residential areas into consideration in regards to light, noise, pollution, etc.
- Only if they come in after the residential areas were established, or if there is a material changes in their impacts.
- Trash burning
- Shutting down the "Wolf Sanctuary" at CR 1799 and 1800 and 1798. It is inhumane to the wolves.
- Nuisance from animals.
- Junk cars and trash
- Weeds Hazardous materials
- Someone (Agency or Agencies) need to help/facilitate fixing the road that goes towards Northern Edge Casino. This road is awful. More Lighting is needed. It is a hazard driving through there even when your

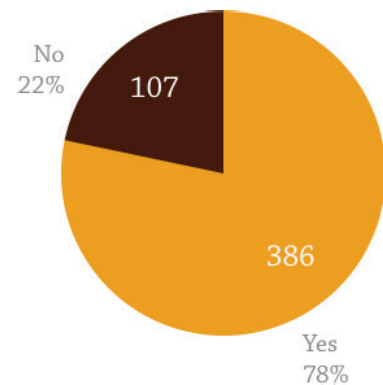


not going to the casino but driving home.

- Sidewalk maintenance to keep kids safe
- Chemical storage
- Really? We are in the county because we like the space and freedoms of being in the county.
- Any kind of unhealthy conditions should not be permitted near residential areas. Take a look at the IEI Land Farm on Crouch Mesa and the Basin Disposal facility between Aztec and Bloomfield.
- Trash/garbage yards
- Owners should be responsible for what's theirs
- Nothing should be allowed to decrease property value or right of enjoyment for owners of property
- We are near parks with dark night designation. I think it needs to be protected, I love it dark
- Fences to protect children from injury

Q. Should the County require permitting for large earthworks projects (e.g., major cut and fill or excavation)

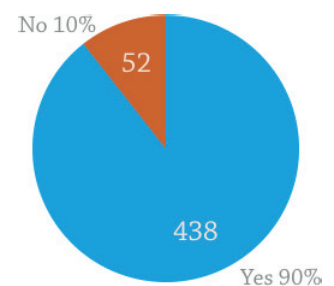
- Who gets the money from the permits?
- Extra monies for you to put back into programs.
- What is considered major?
- Only if it pertains to a company and not a private individual May change runoff
- They do for everything else.
- Because of possible flooding
- Yes, within reason. I would recommend this be affordable for the business and economically geared for the people of the county. The county cannot risk running away the oil and gas industry any further.
- You don't do that now?
- This could also be a source of revenue for the county
- If it affects residential neighborhoods and the smooth flow of traffic.
- Environmental studies as needed/appropriate
- We don't require a permit to dump crap around town? Is it still the 70s?
- Residential owners cut back their property into hills and the people living on top of the hill no longer have the land stability that they once had. The earth moves and their foundations form cracks and other mishaps occur especially during rain storms. This should be prevented by having permits and inspections. Unfortunately, there is very little the homeowner on top of the hill can do to prevent this at this time.
- As long as proper dust control & other ordinances are followed
- Maybe
- Use the permit money to improve the county.
- Any area bigger than 0.5 acre should be issued a county "declared use permit" where the owner(s) declare that they will comply with all required Federal/State/City/County Regulations. If the are more than 10 Acres then the permit will also issue a public notice in the local newspaper declaring the use and compliance with the rules(ie.e Federal/State/City/County).
- Large earthwork projects should already do their due diligence to ensure they are following all EPA requirements for projects over an acre.
- As long as it doesn't lead to environmental disaster or is occurring near residential zones.



- Someone (Agency or Agencies) need to help/facilitate fixing the road that goes towards Northern Edge Casino. This road is awful. More Lighting is needed. It is a hazard driving through there even when your not going to the casino but driving home.
- Only to ensure you do not adversely effect neighboring properties with storm water.
- But, it would depend on where and what is being done
- Again, this all seems like an over-reach. If need be have community input those who will voice there opinion
- Yes, because many times the developers that conduct large earthworks projects are not complying with the EPA's NPDES Stormwater Construction Permits. Permitting would give a chance for the local government to educate and notify developers of these requirements.
- Yes. Plus, it's an additional source of revenue. Again; relying on one sole (major) source of income is ridiculous.
- And for Cell Tower construction/demolition
- While I understand the County would like to be business and industry friendly, and not impose additional tax and regulatory burden on residents.....in the long run it almost never pays off to allow unchecked development. Generally the tax payers are shouldered with the burden of cleaning up these messes when businesses abandon their sites or declare bankruptcy anyway (i.e. Bonita Peaks superfund site).
- No for residential and Agricultural works. Yes for commercial and industrial works.
- Only if it puts nearby property at risk, such as likely causing mudslides during storms or redirecting/blocking arroyos.
- Not sure
- The US EPA already regulates earthwork greater than 1 acre in size however there is a significant lack of compliance and no monitoring from NMED. Under new MS4 regulations, the County will be required to monitor these activities. A means by which to enforce compliance is needed. Enacting an earthwork ordinance really isn't optional if the County government wishes to comply with MS4 requirements.

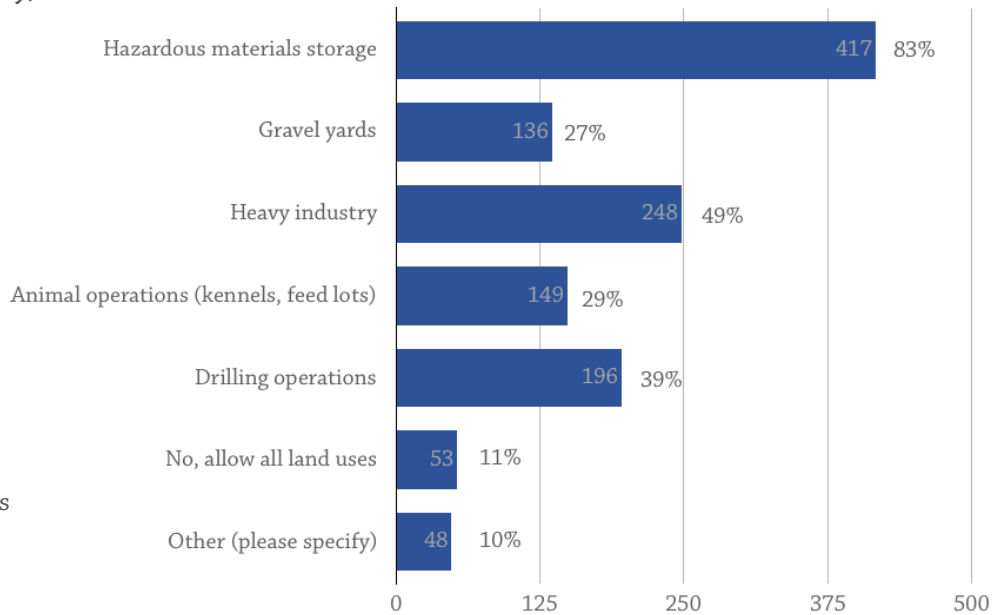
Q. *Should the county require property owners to disclose water availability and road ownership to buyers when land is sold?*

- Should be provided BEFORE land is sold.
- I am not sure that is the county's job, should be property owner
- property owners should have to "tell all" about the property to potential buyers and have the land dimensions properly marked
- Full disclosure makes sense!
- Real estate agents should also be required to disclose such information, along with whether there are covenants on the property.
- Yes on road ownership. No on water availability. Both should be public record anyway.
- Absolutely. Also disclose any covenants or related considerations on a property. This should also be required for real estate agents.
- That should be part of buyer's due diligence
- In this scenario, the county needs to clarify who can drill a well and at what cost.
- Someone (Agency or Agencies) need to help/facilitate fixing the road that goes towards Northern Edge Casino. This road is awful. More Lighting is needed. It is a hazard driving through there even when your not going to the casino but driving home.
- Leave it up to the buyer and seller. And let people be responsible. This again seems like government over-reach. I truly used to believe that the Republican Party was for small government. But this part of the state is causing me to rethink what I thought to be true.
- Shouldn't disclosures fall on the responsibility of the Real Estate Agent or the seller?



Q. Are there land uses that should not be allowed near residential neighborhoods in the county? (If yes, select all that apply):

- Continue to use zoning to separate neighborhoods from industry
- My neighbor has 80 some odd junked out cars on C.R. 2945. Running a junkyard without a license or zoning. You all have done absolutely zero about it! Work on cleaning up current problems before introducing more chores for yourself.

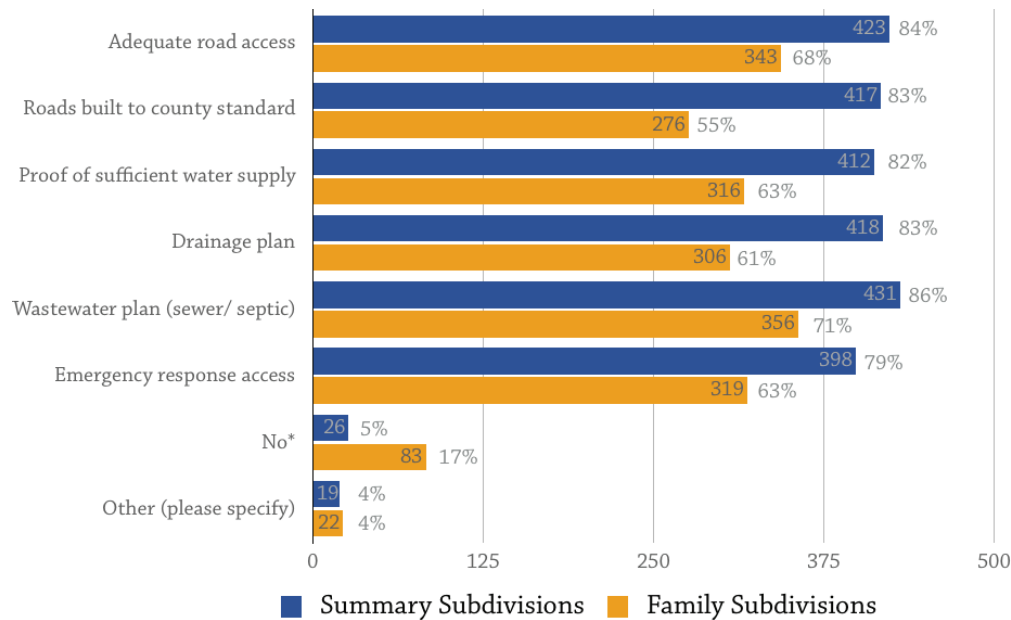


- Consider all public input, young to old
- Kinda difficult when the county approves neighborhood developments. Can't make business move because a new residential neighborhood wants to move in.
- Commercial businesses
- NOISY OPERATIONS
- With in reason
- If there is any of the above in place and people start to build around it then it is the home owner that is at fault
- I believe if a neighborhood is already established that there should be question/comment time given on the pros and cons of any future land use other than for retail or residential use
- If we are talking county then allow all, that is why you move to the county.
- Each occurrence should be assessed!
- Should depend on zoning. Rezoning should be by local vote.
- People should have the liberty to do with the property they own without governmental interference and mandates.
- Heavy trucking
- Off-road vehicle use.
- I think that any land use should be evaluated for danger to residential neighborhoods and if there is none, that industry should be allowed to operate.
- Zoning issues in NM are interesting.
- Liquor establishments within close proximity to schools and neighborhoods (as one has recently been allowed)
- Any known hazardous materials should be a safe distance away from residents' homes.
- This county has serious zoning issues. Abandoned buildings need to be removed because they create attractive nuisances. Vacant lots need to be turned into community gardens or something. Why are there junk yards in the middle of a town? Why are there dilapidated trailers next to an asset like Navajo Prep? The amount of broken down cars and garbage surrounding businesses and homes alike is a disaster. #redneckyardofthemoonth
- With proper setbacks
- If the land use was there prior to the residential neighborhood, then it should not be forced to close down.

- I am not keen on any of the following besides drilling because our neighborhoods will look dumpy.
- Wind mills, smelly power plants like the one in Bloomfield
- This depends on how close any of these “uses” will be to a residential neighborhood. There should be a modest amount of distance between commercial and community.
- So-called “Wolf Sanctuary” that is more like Leavenworth. It is torture. These people keep wolves in tiny outdoor cages about 10 feet by 10 feet in the hot sun. They need to be shut down now.
- Mining
- No compressors that cause noise pollution
- Someone (Agency or Agencies) need to help/facilitate fixing the road that goes towards Northern Edge Casino. This road is awful. More Lighting is needed. It is a hazard driving through there even when your not going to the casino but driving home.
- Let each neighborhood decide
- It depends on what it is and where it is or near trails and parks; to include electrical grids
- Motocross or dirt bike racing or courses
- Growing marijuana
- Drilling operations are a concern, but if properly regulated, would be OK.
- Prisons. This is stuff that playing SimCity 2000 in grade school should have made clear.
- These should be allowed if they were there first, you can not stop industry due to poor planning on a developer or a citizen that feels they are the most and only person that has the right to live in a dried cooling pond.
- Trash collection as in county dump area Junkyards
- Very difficult question to answer. What is “near”? Are we talking about noise? Smell? Land value? I would need more information to answer this question well. I think any amount of zoning in the county would be beneficial, but it needs to be done in a manner that does not impede economic development.
- Any use that could pollute or contaminate the water table, rivers or aquifers River walk
- Illegal dump sights not being cleaned up
- The county should create buffer spaces around residential areas and restrict development within these areas.
- There needs to be individual consideration of cases and circumstances. How near is “near,” anyway?
- All reasonable land uses
- No adult stores allowed in county
- Should separate kennels and feedlot choice

Q. Are there requirements that subdivisions in the county should meet? (If yes, select all that apply):

- Water and sewer systems
- I would like to see all utilities underground
- Actively use less electricity to reduce the footprint left by the business
- Isn’t there already state standards.
- Archaeological survey to insure there are any unmarked historic or prehistoric graves on the properties.
- For profit and family owned should be held to the same standards. For-profit means they have money. So... yes.
- If they are in it for the money, they should be held accountable for the safety or lack of in their development. Otherwise that is just greed!! I have not sympathy for the greedy developer.
- All should follow the same requirements or standards set
- Cleanup and restoration for,end,of,life,of,the,facility
- Less trailers--require homes with landscaping

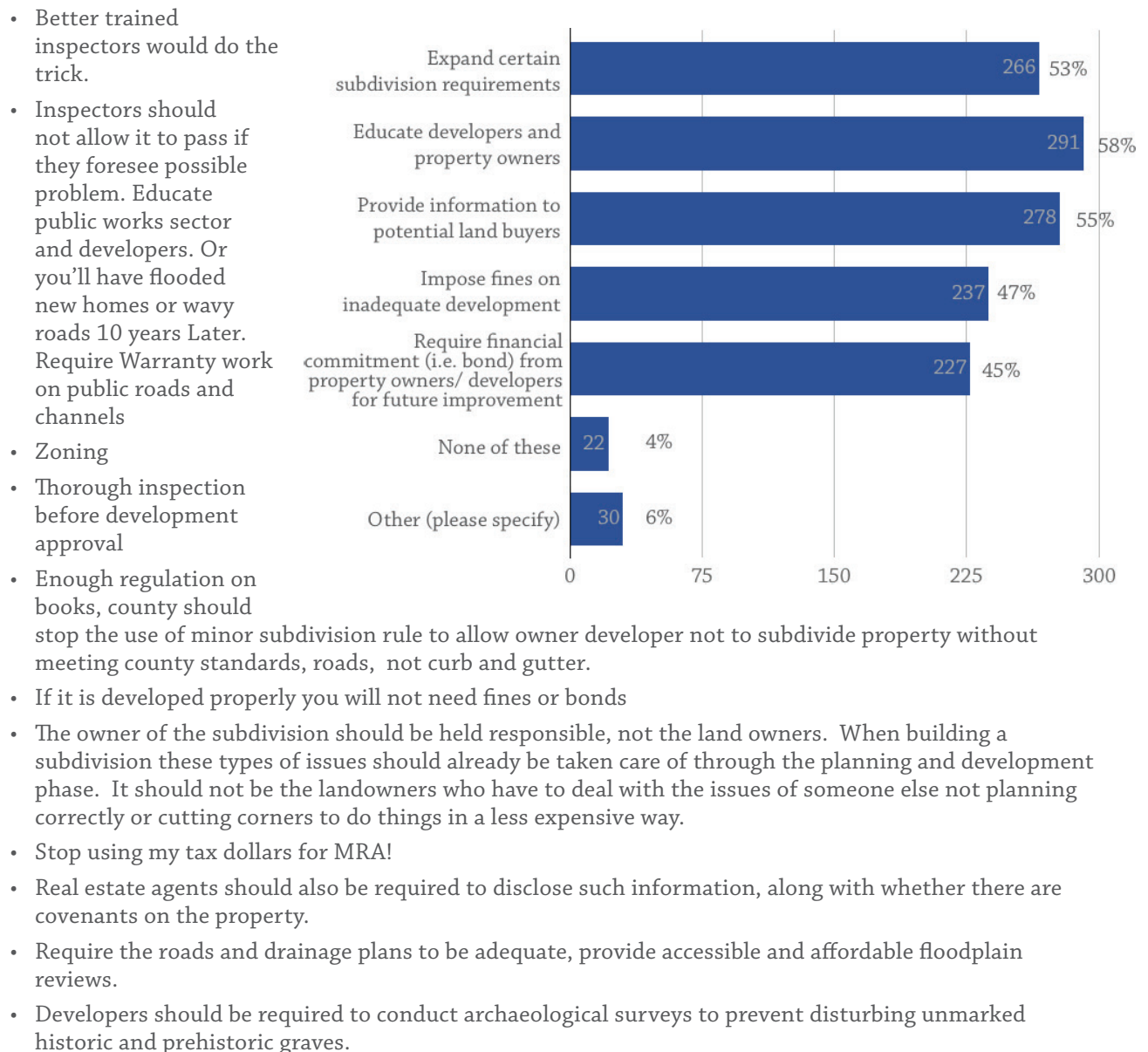


- I do not know if there are requirements in place already.
- This is for developers
- If they are going to build for profit they need to do it the proper way. Buyers expect to have these standards met and very few realize that it is not a requirement. Prime example is the Aztec Pioneer Heights. The developer of that subdivision was supposed to provide much more and he got away with the bare minimum and the development plan had not been enforced. Stricter policies need to be in place. Property and housing has been ruined due to the lack of enforcement. The houses are being built in an old wash and the land is not even being compacted before building.
- Green/wild/recreational area that is open, safe and available to all residents.
- Also naturalistic landscape design: xerophytic.
- Set aside land for new schools
- Someone (Agency or Agencies) need to help/facilitate fixing the road that goes towards Northern Edge Casino. This road is awful. More Lighting is needed. It is a hazard driving through there even when your not going to the casino but driving home.
- This is redundant
- If public money is used towards those properties in anyway they should be held to same standard
- Family subdivisions (for family only) not for resale to public for at least 5 years.
- If your answer is NO to above then you are probably part of the problem with rural san juan county
- As long as the family unit doesn't infringe on their neighbors!
- Yes, unless it is a "camp" type of use- then limited road access would be more likely to happen. They should have to sign a disclaimer that they take full responsibility for all of the above.
- They should also require adequate space in each lot between dwellings
- More stick built houses--less trailers that end up looking junky or are hazardous. self -esteem folks!
- I don't feel that I know enough about this topic to have an educated opinion. I don't know the difference between a family land subdivision and a for-profit subdivision, so I don't feel like I can answer this.
- Existing subdivisions should not have an unreasonable burden placed on them
- Detailed plans for home placement.
- I don't know enough about this issue and the consequences of these requirements to make a decision.
- Mail service maybe? Internet/fiber hope you have these already If the tax payers have to bail people out

who plan poorly, then YES, clearly these people need to meet these requirements.

- Someone (Agency or Agencies) need to help/facilitate fixing the road that goes towards Northern Edge Casino. This road is awful. More Lighting is needed. It is a hazard driving through there even when your not going to the casino but driving home.
- I believe the county already has subdivision rules
- Honestly I don't know enough about it.
- What I have seen has seemed unfair
- up front about covenants on land
- This is NOT the Wild West anymore. Recognition of changing environment, population needs and being able to attract tourists and new residents must take precedence if Farmington is to grow.

Q. Subdivisions with inadequate private roads and drainage plans can lead to safety issues that require public investment to fix. Which steps should the county take to ensure appropriate development standards?



- Set a standard for subdivision home placement.
- Require city to pave roads in existing subdivision, can offer paving in exchange for acquisition of ROW that may be owed by residential owners on roads w/in city limits
- If developers can't build to code, then they can't build. Period. The residence who buy property in poorly built subdivisions shouldn't have to pay for shoddy work repairs. Neither should the tax payers. The developers should be on the hook.
- Fines for inadequate development should be paid by the developer, They are the ones with the designs and have the equipment to build accordingly.
- There needs to be better building code for site development. But to do so some county road work standards would need to be established.
- I am not for imposing fines on developers, unless they are purposely ignoring and avoiding regulatory policy.
- If the standards are in place enforce them or create appropriate standards and then enforce them throughout the County
- Zoning and planned development.
- These people are tax payers and should receive the same care as those who live in areas that get the above. The people and developers should all be educated.
- Expanding certain subdivision requirements will allow the developers know what requirements that are expected of them. Additionally, by providing information to potential land buyers than they can be better informed as to the costs and issues that they may have to overcome to develop the property.
- Don't allow the development if proper planning is not in place. Require a bond.
- The developer should be held primarily responsible for this initially, with an approved and enforceable plan for subsequent years.
- All of these
- Someone (Agency or Agencies) need to help/facilitate fixing the road that goes towards Northern Edge Casino. This road is awful. More Lighting is needed. It is a hazard driving through there even when you're not going to the casino but driving home.
- Require more inspections during development
- Developers have to be held responsible
- I believe the county already has laws and rules in place for subdivisions. Enforce the rules.
- Aztec has never helped the areas it annexed. It appears to have done work on private new subdivisions like the one near Tiger Lake. I see city equipment there.



Architectural Research Consultants, Incorporated

✉ Albuquerque, NM

☎ 505-842-1254

🏢 505-766-9269

🌐 <http://arcplanning.com>

21801