The Sustainable Land Development Plan (SLDP)

2010 SLDP Final Draft June 2010

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CHAPTER 1: A SUSTAINABLE FUTURE FOR SANTA FE COUNTY

1.1 INTRODUCTION

The 2010 Sustainable Land Development Plan ("SLDP") is a comprehensive revision and update of the Santa Fe County Growth Management Plan (General Plan) adopted in 1999. The SLDP is the duly adopted, statutorily authorized General Plan for the unincorporated portion of the County. The SLDP, and all future amendments to the SLDP, including the Official Map and Capital Improvements Plan ("CIP"), which will be separately adopted, will comprise the constitution for, and controlling document over all planning, environmental, public facility and service, fiscal, land use, housing, resource conservation, renewable energy and green development legislation, administrative regulation, and development applications, financing and fees.

Santa Fe County has statutory authority and general police power authority to prepare and implement a Sustainable Land Development Plan (SLDP). The national and New Mexico practice is for cities and counties to adopt long range general plans to address a 20-year planning period, with the Plan being required to be updated every five to ten years. The 1999 Santa Fe County Growth Management Plan (General Plan) reflects the conditions and preferences that were important at that time. Compelling circumstances and significant change in conditions require that the new SLDP replace the 1999 General Plan.

> *After a year of community meetings and workshops on the Sustainable Land Development Plan, residents and public officials of Santa Fe County have come to understand the gravity of the limits of our natural resources, the fragility of the web of our living systems upon which our survival depends, and the need for a new and different relationship with our local and global environments and with each other. Our present way of living without a more complete understanding of the fragility or our natural settings and the limitations of both our natural and human-made systems is no longer possible.*
>
> *In light of this, Santa Fe County and a wide array of residents and community groups have designed a Sustainable Land Development Plan to create a framework to protect our resources and to provide a sustainable quality of life with an attendant Sustainable Land Development Code, guided by the Plan, to enforce this new growth management paradigm.*
>
> *The Santa Fe area is known worldwide for its special landscape, creativity, artistic endeavors and unique cultural history. There is an opportunity at this time, and also a pressing need, to expand the degree to which Santa Fe County puts to good use the considerable creativity, expertise and wisdom of its residents in developing a more sustainable lifestyle, finding new and better ways to relate to nature, and to initiate a more collaborative relationship between residents and government entities to solve problems of interest and concern to all.*
>
> *The Sustainable Land Development Plan, therefore, is deemed to be the growth management strategy that will direct the relationship between Santa Fe County, its residents and the environment regarding the many elements it defines.* (Preamble to Sustainable Land Development Plan)

1.1.1 SUSTAINABLE LAND DEVELOPMENT PLAN ELEMENTS

The SLDP is based on extensive data collection, analysis of past planning, management and resource policies, written findings and preparation of multiple alternative scenarios. These components have been combined into Sustainable Plan Elements through the extensive cooperative work, assessment and analysis among the County, the Board of County Commissioners, the County Development Review Committee, the municipalities, the Pueblos, communities, citizens, citizen groups, environmental groups, professional associations, consultants, developers, realtors, attorneys, non-profit organizations and the County's consultant team.

Each SLDP Element begins with Key Issues which identify significant issues facing the County. Keys to Sustainability are fundamental concepts for implementation of sustainable development and set the framework for the plan directives. The critical findings includes background information and descriptive analysis of the direction the SLDP has adopted, illustrated by graphs, figures, tables and maps; and ends with goals, policies and strategies. The Sustainable Land Development Plan Elements are organized topically as follows:

Chapter 1: Introduction

Chapter 2: Land Use Element

Chapter 3: Economic Development Element

Chapter 4: Agriculture and Ranch Element

Chapter 5: Resource Conservation Element

Chapter 6: Open Space, Trails, Parks and Recreation Areas Element

Chapter 7: Renewable Energy Element

Chapter 8: Sustainable Green Design and Development Element

Chapter 9: Public Safety Element

Chapter 10: Transportation Element

Chapter 11: Water, Wastewater and Stormwater Management Element

Chapter 12: Adequate Public Facilities and Finance Element

Chapter 13: Housing Element

Chapter 14: Governance Element

Chapter 15: Implementation Element

1.1.2 PLAN DIRECTIVES

SLDP Directives are identified in the "Goals, Policies and Strategies" section which specifically determine and direct all legislation, administrative regulation, area, specific and community plans, and the development review process:

Binding Principle: The mandated direction pursuant to which legislation, administrative regulations, resolutions, policies, and action programs should be consistent with the SLDP.

Key Issues: Statements of specific problems and concerns.

Keys to Sustainability: Fundamental concepts for implementing sustainable development.

Critical Finding: All data, information, studies, plans, reports, documents, staff analyses that support the Binding Principles, Goals, Policies and Strategies.

Goal: The SLDP intent to achieve a sustainable direction for the community in the future. Goals are public purposes toward which all legislation, administrative regulations, policies, actions, decisions, development applications and programs are directed. Goals are phrased to express the desired end products of the Sustainable Land Development Plan.

Policy: Statements of government intent against which individual actions and decisions are evaluated. Policies direct the manner in which actions and decisions should be made.

Strategy: The specific action, tool or program that the County will implement to achieve goals and policies and solve issues and problems.

The distinction between a SLDP "policy" and "strategy" is subtle. For County government operations and management, a policy item generally describes "how we do it" or "what criteria we consider" when making operational decisions. A policy influences the way in which everyday tasks are carried out; directs on-going coordination; describes on-going operational tasks that require updates and action on an annual or more frequent basis; includes operations and programs that require on-going funding commitments; and includes regulations, standards and procedures that should be included with the SLDC.

Strategies are action items that generally include special or one-time projects within a finite timeframe of generally one year or less, possibly requiring updates, but on a less than annual basis; strategies also direct coordination to achieve those specific goals. Strategies include creation of discrete programs, processes, plans, studies, legislation and regulation.

Taken together, the goals, policies and strategies of each Element form the core of the SLDP's Policy Framework. The Policy Framework directs the Implementation Element, which describes the major tools for implementing the SLDP and achieving the SLDP's policy framework: the Sustainable Land Development Code (including the Zoning Map); the Official Map; the Capital Improvements Plan; and the Work Program (including the Strategic Plan and the Action Plan).

1.2 VISION STATEMENT

"SANTA FE COUNTY IS A PLACE OF NATURAL BEAUTY, DIVERSE CULTURES AND ENDURING SUSTAINABLE COMMUNITIES"

1.2.1 SUSTAINABILITY

1.2.1.1 WHAT IS SUSTAINABILITY?

A sustainable society is one which provides a standard of living that protects and enhances the environment, builds balanced and planned economic and residential communities and respects the diverse needs and approaches of individual citizens and local communities. Sustainability and sustainable communities are defined in a number of ways beginning with the Brundtland Commission:

> "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Brundtland Commission of the United Nations March 20, 1987.

It is further elaborated upon by "A Sustainable Primer":

"Sustainability is about creating the kind of world we want for ourselves, our neighbors, and future generations. It challenges us to live our lives and make decisions as individuals, organizations, and societies so that we make sure that future generations have access to the same opportunities and quality of life that we do." **("A Sustainable Primer" developed by The Natural Step Canada – 2009)**

1.2.1.1 WHAT DOES SUSTAINABILITY MEAN FOR SANTA FE COUNTY?

While there are diverse notions of how sustainability might be understood, the most applicable definition for the purpose of Santa Fe County's Sustainable Land Development Plan is the following:

Sustainable development maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which people, natural systems and economies depend.

1.2.1.2 PRINCIPLES OF SUSTAINABLE COMMUNITIES

Sustainability applies to both natural and built environments, which are shaped by human impact. People decide how, where and when to build buildings, neighborhoods and infrastructure (the built environment). People burn fossil fuels, consume land and water, and use the earth's natural resources. Developing and implementing strategies and programs which encourage a sustainable and green approach to the environment is vital to achieving overall sustainability. To be sustainable, a community must adhere to three key principles of sustainability: environmental responsibility, economic strength and diversity, and community livability. These three principles of sustainable communities relate to elements of the Santa Fe County Sustainable Land Development Plan in the following ways:

1.3 PURPOSES FOR CREATING THE 2010 SLDP

1. Direct the location and character of future growth to appropriate and designated areas that include Residential, Commercial and Industrial Uses.

- Growth should be focused in specific community settings, both existing and new, where infrastructure and services can be delivered more efficiently and where diversified housing choices, relevant local jobs, social opportunities and transportation choices can be provided.
- The County's prevailing character should express and reflect the highly unique places and their desirable qualities through innovative development patterns and the preservation of existing historic and traditional communities.
- Continue to protect and create central, mixed use places in community settings. Real, desired places that have "centeredness" allow for focused economic, institutional, social and functional opportunities.
- Definable distinctions between the traditional and the modern should be maintained through sensitive scale and design and clear discernable edges. The greater part of Santa Fe County's distinctive character is the opposite of sprawl.
- Specific, designated growth areas should be developed at more compact, urbanizing densities, provided that services and infrastructure exist to service such areas.
- The elements that contribute most to Santa Fe County's distinctive character are respect for place, compact development, and regional tradition – the opposites of sprawl.

2. Fiscal Responsibility

- A balanced, vigorous economy in combination with fiscally responsible policies ensures the long-term fiscal health of the County and its residents and businesses.
- A key component of growth management techniques is maintaining fiscal responsibility and fiscal health.
- Fiscal stability is a cornerstone of a sustainable community.

3. Focus on Community Needs and Values in Relation to Future Planning and Local Economic Development

- The community planning process should evolve to include other mechanisms for community participation including the creation of Community Organizations and Registered Organizations with established rights and responsibilities.
- Community involvement in infrastructure planning should be established.
- Develop land use policies that support a healthy, diverse and sustainable local and regional economy and that respect the past, the present and the future.
- Accommodate and encourage local businesses that create employment opportunities for the county including but not limited to retail, office, media and film, consulting, finance, arts, manufacturing, green industry, eco-tourism, agricultural activities and industrial uses.

4. Protect and Restore the Natural Environment, the Rural Landscape and Open Spaces Between Established and New Communities

- Acquire open space in strategic locations to support healthy communities and provide opportunities for outdoor recreation, resource preservation and conservation programs, and acts as a mechanism to control sprawl.
- Restrict development in identified areas of ecological, archaeological and cultural sensitivity.
- Provide and maintain connections, both physical visual, including roads, trails, viewsheds, watersheds, public open spaces, economic activities, social functions and activities, and thriving animal habitats, that provide efficient transportation alternatives and protect the integrity of the landscape and its residents.

5. Conserve Water and Natural Resources for Present and Future Generations

- Ensure a sustainable water supply.
- Rely less on groundwater for future development through conservation and use of surface water.
- New development will be responsible for its fair and equitable share of the cost associated with growth.
- Extend County infrastructure and services in a sustainable, logical, responsible and efficient manner.

6. Redefine the Zoning Standards and the Development Review Process

- Eliminate existing hydrologic zoning.
- Ensure adequate enforcement of regulations to ensure plan and code directives are carried forward.
- Development will be responsible for its fair and equitable share of the cost associated with growth.
- Extend County infrastructure and services in a sustainable, logical, responsible and efficient manner.
- Implement zoning and fiscal solutions that foster creative, sustainable design and development

7. Provide the Appropriate County Resources to Implement a Sustainable Growth Management Strategy for the County.

- Create a new Sustainable Land Development Code.
- Create a Capital Improvement Plan and Program.
- Implement a County Strategic Plan and Sustainable Land Development Plan Action Program.

8. Ensure Effective, Transparent and Ethical Governance

- Enhance transparency at all levels of County government
- Ensure ethics are considered in the decision-making process

1.4 Binding Principles for Sustainable Land Development Plan

1.4.1 Environmental Responsibility

How we design and build

- Design and build energy efficient structures that incorporate site sensitive planning, green building standards, operate efficiently, economically and require low maintenance. (Chapter 2)
- Design compact, mixed use places in priority growth areas to maximize open space, create service efficiencies, support walkability and multi-modal transportation opportunities (Chapter 2)
- Direct growth to prioritized Sustainable Development Areas most efficiently served by adequate facilities and services. (Chapter 2)
- Allow higher densities in designated priority growth areas to efficiently expand centralized water and wastewater systems (Chapter 2)
- Require studies, reports and assessments to provide a solid basis for development review decisions. (Chapter 2)
- Allow mixed-uses in existing and new communities. (Chapter 2)
- Support a more balanced mix of residential and non-residential development. (Chapter 3)
- Focus intensive development including manufacturing and light industry in Activity Centers. (Chapter 2)
- Promote development patterns that reduce incompatibilities. (Chapter 2 and 4)
- Promote energy conservation, efficiency and renewable energy applications. (Chapter 7)
- Utilize local building materials and methods of construction for residential and non-residential development. (Chapter 8)
- Require drought resistant native vegetation, xeriscaping for landscaping, building shading and hardscape surfaces. (Chapter 8)
- Enhance GIS data for environmental factors, wildlife, habitat, and archaeology to enhance County decision making (Chapter 5).

How we conserve and protect

- Prevent unsustainable residential development patterns. (Chapter 2)
- Protect important open spaces and range areas that include archaeological and cultural resources by limiting growth and development in environmentally sensitive areas. (Chapter 5)
- Protect archaeological, historic and cultural resources. (chapter 5)
- Support agriculture and ranching activities. (Chapter 4)
- Maintain acequia sustainability and include acequias in long-term planning. (Chapter4)

- Conserve water and protect our water sources by reducing reliance on groundwater consumption. (Chapter 11)
- Ensure a long term, sustainable water supply, plan for droughts, water emergencies and other potential disasters. (Chapter 8)
- Maintain mapping to monitor the cumulative impacts of development and use quantifiable data to guide decision-making. (Chapter 2)
- Avoid and mitigate pollution from storm water run-off, industrial contaminants and malfunctioning septic systems. (Chapter 11)
- Prevent further fragmentation of natural areas, eco-systems and eco-regions by the protection of habitat, species, and biodiversity. (Chapter 5)
- Define and protect important wildlife habitats, wildlife corridors and migratory routes, natural resources and ecosystems. (Chapter 5)
- Enhance gateways and corridors, protect scenic vistas. (Chapter 5)

How we consume

- Support community based agriculture and ranching, individual small gardening, farming and ranching preservation activities. (Chapter 4)
- Reduce solid waste output and increasing recycling. (Chapter 8)
- Reduce toxicity in what we consume and create. (Chapter 7)
- Reduce our carbon footprint through energy conservation and efficiency and use of renewable energy sources. (Ch 7)
- Produce more food locally and organically. (Chapter 4)
- Promote local agricultural products and markets. (Chapter 4)
- Conserve and recycle water. (Chapter 11)

How we restore

- Protect natural and environmental resources and encourage restoration activities. (chapter 5)
- Develop green infrastructure for public use and enjoyment, including preserved open space, trails, community gardens and storm water catchment systems . (Chapter 6)
- Retrofit and upgrade buildings and infrastructure for energy, water conservation and other sustainability elements. (Chapter 8)
- Restore waterways and riparian areas. (Chapter 5)
- Allow sensitive infill development in appropriate areas such as contemporary and traditional communities. (Chapter 2)
- Prepare for potential climate and environmental changes to reduce further impacts to the natural and built environment. (Chapter 7)
- Develop renewable energy infrastructure and generation to reduce fossil fuel use. (chapter 7)

- Promote recycling and composting to minimize landfill use. (Chapter 8)

1.4.2 ECONOMIC STRENGTH AND DIVERSITY

How we produce

- Support and promote local food production, sustainable agriculture and growers and farmers markets. (Chapter 4)
- Partner in the development of green products that minimize waste and toxicity to the environment. (Chapter 7)
- Promote Target Key Industries: film and media; arts culture; green industry; agriculture; ecotourism and outdoor recreation. (Chapter 3)
- Support the development of area-appropriate eco-tourism and outdoor recreation activities and equine related activities. (Chapter 3)
- Support target green industries related to energy and water conservation technologies. (Chapter 7)
- Implement Renewable Energy Financing District. (Chapter 7)

How we sustain

- Develop target industries that support a living wage and a high quality work environment. (Chapter 3)
- Support local business that serves as the foundation of Santa Fe's economy and attract businesses that provide for a living wage. (Chapter 3)
- Support regional partnerships that develop community-based economic enterprises. (Chapter 3)
- Provide fiscal balance in local government operations. (Chapter 12)
- Equitably finance roads, water, wastewater, and other basic infrastructure improvements. Integration and coordination of new developments with existing and new communities. (Chapter 12)

How we prepare

- Develop local food security. (Chapter 4)
- Develop a target industry workforce with knowledge and experience to attract related business. (Chapter 3)
- Prepare for Economic Impacts of Climate Change. (Chapter 3, 7)
- Provide Services for Local Businesses. (Chapter 3)
- Develop Regional Partnerships and Resources. (Chapter 3)
- Invest in regional and small scale renewable energy infrastructure and development. (Chapter 7)
- Provide essential infrastructure necessary to attract high quality employment. (Chapter 3)
- Use our local natural and human resources wisely. (Chapter 3, 8)
- Require fiscal impact assessments. (Chapter 12)

- Support vocational training and post high school educational opportunities. (Chapter 3)

1.4.3 COMMUNITY LIVABILITY AND QUALITY OF LIFE

How we live and interact

- Protect and Preserve Community Character and Integrity. (Ch 2, 5)
- Honor Existing Community Plans and Ordinances and Support Community Planning. (Chapter 2, 14)
- Ensure diverse community participation, recognize the importance of sustainable communities. (Ch 2, 14)
- Revive and reestablish historic building techniques and traditional community forms (compact mixed use places focused on plazas, main streets and crossroads) or ranch life preservation development where appropriate as a regionally-based alternative to conventional development. (Chapter 8)
- Link and connect new and existing communities with other communities, community services and regional linkages. (Chapter 10)
- Provide permanent affordable housing for working families that is designed to utilize renewable energy and limit operating and maintenance costs. (Chapter 13)
- Integrate affordable housing and housing choices into new and existing neighborhoods. (Chapter 13)

How we enjoy

- Design community places that are enjoyable, creative and walkable. (Chapter 2,14)
- Support public health through access to affordable health care and disease prevention. (Chapter 12)
- Provide access to outdoor recreation areas, trails and community centers. (Chapter 6)
- Provide educational, recreational and employment opportunities for all residents. (Chapter 3)
- Expand the trails network. (Chapter 6)

How we support and maintain

- Protect existing traditional communities and land grants. (Chapter 14)
- Partner with service providers, including institutions, schools other government entities, especially tribal governments. (Chapter 14)
- Collaborate with other agencies to protect our archaeological, cultural and historic resources. (Chapter 5)
- Protect contemporary communities and neighborhoods. (Chapter 2,14)
- Protect our agricultural and open range areas and rural landscapes. (Chapter 4)
- Provide backup water supply and alternatives for small, community water systems. (Chapter 11)
- Establish and Use the Official Map and SLDC to Identify and Enhance Open Space and Trails. (Chapter 6)
- Identify Funding Options for the Operations, Maintenance and Acquisition of Open Space. (Chapter 6)

- Support Development of Partnerships and Engage the Public in Open Space Programming. (Chapter 6)

How we evolve

- Support local capacity building and self-sufficiency in all communities. (Chapter 14)
- Work with individuals and communities to find solutions to shared problems and increase community participation. (Chapter 14)
- Retain young adults in our communities through a high quality opportunities and creative options. (Chapter 3)
- Respect and protect both community and individual property rights. (Chapter 2, 14)
- Reduce greenhouse gas emissions. (Chapter 7)
- Promote green energy technology. (Chapter 7)
- Recognize relationship of water and energy. (Chapter 2,13)
- Inform County residents about state and federal tax incentives for energy efficient buildings. (Chapter 7)

1.4.4 SUSTAINABLE EXISTING AND NEW COMMUNITIES

A sustainable community, whether a city, a county or a region depends on the balance and compatibility of systems, both natural and human made, with the settings and landscapes upon which the systems are placed and are expected to function into the future.

The motivation of various new planning movements over the past 20 years, such as New Urbanism, Traditional Neighborhood Development and Transit Oriented Development, is to provide alternatives to inefficient, auto-oriented development and promote walkable, mixed use communities and a practical commitment to place-making.

1.4.4.1 TRADITIONAL COMMUNITIES

The first permanent settlements in Santa Fe County were traditional communities with continuous settlement exhibiting historic patterns of diverse and mixed community land uses which continue to the present. Each traditional community has historic structures or developed features, the existence of an entryway, a corridor and a village center or centers.

Traditional Communities were originally recognized under the 1980 General Plan and the 1999 General Plan recognized a total of 29 Traditional Communities. These designations were established with the intent to for these villages to accommodate a mixture of uses such as agriculture, residential, large scale residential community service, institutional, non-residential or recreational uses anywhere inclusive of the boundaries of the village, provided the performance standards and criteria set forth by the Land Development Code were met. Traditional Communities in the County have been in existence for over 100 years.

Traditional Communities designated by the 1999 County Growth Management Plan: Sombrillo , Cuartelez, La Puebla and Rancho del Valle, Chimayo, Rio Chiquito, Cundiyo, Nambe, Pojoaque, Jacona,

"The importance of small, traditional settlements in Santa Fe County far exceeds their combined population size. The irrigated fields and orchards and houses of these communities constitute an unique cultural and historic landscape. Moreover, extensive public and private investments have been made in housing, roads, acequia systems, community wells and other community facilities." 1980 General Plan

Jaconita, El Rancho, Cuyamungue, El Valle de Arroyo Seco, Tesuque, Rio en Medio, Chupadero, Canada de los Alamos, Agua Fria, Glorieta, La Cienega, La Cieneguilla, Madrid, Los Cerrillos, Lamy, Galisteo, Golden, Edgewood and Stanley.

1.4.4.2 CONTEMPORARY COMMUNITIES

Several settlement areas of the County were defined in the 1999 General Plan as Contemporary Communities. Many of these are located in loose clusters away from traditional settlements as a result either of large subdivisions or many adjacent small land divisions. Some are located in traditional settlement areas, but the dominant development pattern has been determined by subdivision or land division plat needs, not the social and functional needs of a community of residents.

One option for communities is an opportunity to support and reinforce their evolution to functioning community centers and neighborhoods. The intent is that local planning will support the continued development of these areas to evolve into full communities with sensitivity to local character, unique cultural attributes and landscapes; diversity and choice in housing; effective provision of services and social centers for residents and specific local infrastructure needs. Another opportunity for contemporary communities is to coordinate the creation of area, district, and/or contemporary community plans, especially in areas that have a ranching tradition such as for southern Santa Fe County.

1.4.4.3 TRADITIONAL HISTORIC COMMUNITIES

A Traditional Historic Community is a designation that was created by the State Legislature in 1995 (3-21-1 and 3-7-1.1, NMSA 1978) for Santa Fe County which allows registered qualified electors of an identifiable village, community, neighborhood or district which can be documented as having existed for more than one hundred years, includes structures or landmarks associated with its identity, and has a distinctive character distinguished from surrounding areas or new developments to petition the Board of County commissioners for designation as a Traditional Historic Community. The Village of Agua Fria, La Cienega and La Cieneguilla, and the Village of Tesuque have been designated Traditional Historic Communities.

1.4.4.4 COMMUNITY PLANNING

Santa Fe County has built a strong tradition of community-based planning spanning from past decades to the present. The County established a Community Planning Process in the 1999 Growth Management Plan which outlined a process for preparing community plans and provided for County staff to assist communities in developing plans for communities. The goal of the community planning process was and is to assist communities to identify and develop solutions to community problems and develop strategies to achieve their vision. Community planning presents an opportunity for residents to plan for and address local community issues, regional issues and countywide issues, including those which may be overlooked from a county-wide perspective. It also considers a community's history and the ways that past planning efforts have shaped the area. The County community planning process is also concerned about educating residents in governance, power sharing and community problem solving.

Community plans developed through this process were the product of communities collectively identifying a common set of concerns, creating goals that address these concerns, and creating policies to achieve the goals for future development in the community through a consensus process. Community planning is a way for communities to express a cooperative vision for the future. Thus, the Community Plans and Ordinances are a critical component of the growth management framework and the SLDP. The SLDP will work well with these efforts; while the community plans accomplish planning at a small scale, the SLDP recognizes the need to plan on a larger, County-wide scale, recognizing that problems don't stop and start at the community boundaries, and neither should the solutions.

1.4.4.5 NEW RURALISM

There is a strong preference in Santa Fe County to view development in a unique manner, bringing attitudes about rural and alternative life style preferences into new, more urbanizing patterns. The concept of New Ruralism principles for new types of large area developments was created in 2000 for the Community College District, an 18,000 acre new community district south of the City of Santa Fe.

By planning for new development and establishing desired development patterns already in existence , the County and its communities can enhance established areas, prioritize new development in economic and residential growth corridors, and designated centers promote New Ruralism in new compact development patterns for its rural and agricultural areas.

New Ruralism might best be described as a rural attitude in an urban, or developed, setting. It is, therefore, not only about densities and infrastructure but it is also about traditional Southwestern development patterns, environmental design features favoring solar orientations and social and cultural mechanisms fostering festivity and interaction that go back hundreds of years. It is a belief that countryside and cityscape can be inter-related. These features are evident in the older neighborhoods of the City of Santa Fe as well as in the traditional communities throughout the County. It is a local belief that the past, present and future are intrinsically bound.

Certain design features such as central plazas, street design and community form can be traced back to 1573 and King Phillip of Spain's Recompilation of the "Law of the Indies." These principles apply to both small rural villages and larger city settings.

1.4.4.6 NEW RURALISM DESIGN ELEMENTS

The following key rural and community design elements are integral to the design and siting of both new developments and continuing development within existing community settings:

- **Distinct Places**. Village style development should be blended into the various landscape settings. Communities should have a discernable center, with a main street or crossroads setting, or a public space such as a plaza bordered by buildings. The villages should have discernable edges, typically formed by natural features and gateways and defined points of entry.

- **Open Space, Trails and Outdoor Activity Centers**. Each new place should have public spaces and distinct activity areas, open space and trails that promote an active outdoor life style.

- **Housing Choices.** Neighborhoods within either new developments or existing communities should contain a variety of dwelling types and densities to accommodate a diversity of people and demographics.

- **Transportation Options**. Development in primary growth areas should plan for multi-modal transportation options, including walking, biking, transit, vehicles, and horses. Ideally, community center activity should be within a ¼ miles radius of the community edges to allow these choices of transportation modes to actually occur.

- **Street Types**. Just like in the existing traditional communities, new developments should provide a diversity of context-sensitive street types that respond to a diverse built environment and a sensitive natural landscape, including alleys and bike paths.

- **Connections**. Communities should have a connected network of streets, sidewalks and internal trails. Use of natural features, including arroyos, acequias and natural corridors can be used to link developed areas for pedestrians, cyclists and equestrians.

- **Maintain Views and Landscape Inspiration**. Retain scenic vistas and views of natural features. Incorporate natural features into the design of the built environment. Consider sun angles and solar opportunities in building placement and, especially, in the design of public places.

- **Sustainable Design**. Conspicuously use sustainable design features, including green building and site design techniques. Given the arid landscape, the consideration for low-water usage is critical, as well as progressive measures to limit energy usage and create energy on-site.

- **Emphasize Community**. Community celebration is a way of life in Santa Fe County. Allow the design of the place to further the cultural heritage and activities of the community, including music, dancing, parades, celebrations and community events. Design is a physical element, spirit is a human element.

These new planning concepts have equal relevance in both rural and urbanizing landscapes and environments. In Santa Fe County, as the result of the 1999 Growth Management Plan, several of these concepts were implemented in a number of projects including the Community College District. Often times, growth management, sustainability, new urbanism and green development practices are used collectively or interchangeably. The County future development should be rooted in practical and desirable goals of rural sustainability.

1.4.5 SUSTAINABLE LAND DEVELOPMENT PLAN COMMUNITY PARTICIPATION PLAN

The Sustainable Land Development Plan sets forth a legal, manageable and transparent role for general, community and area-based participation. Effective community planning should be firmly rooted in Countywide goals such as sustainability, environment and economy but also focus on the community. There are several ways which groups and individuals can be involved in issues of community importance including the following:

1. General Public Participation
2. Community Planning Committee's (CPC's)
3. Community Organization's (CO's)
4. Registered Organization's (RO's)

Public notice and participation in planning and development decisions are important tools for building community support and are supported through SLDP policies. Stakeholders (private citizens, property owners, residents, business owners, etc) must be notified of planning and development issues using effective tools such as the County's website, local news organizations, e-mail notifications, announcements at public meetings, meetings with elected and appointed officials and quarterly regional meetings held by County staff.

1.4.6 SLDP COMMUNITY PARTICIPATION PROCESS

The participatory planning process set the stage for successful conception and formulation of the SLDP goals, policies and strategies (directives), work programs and implementation techniques. The SLDP is based on extensive data collection, analysis of past planning, management and resource policies, management and resource policies, written findings and preparation of multiple alternative scenarios.

The development of the SLDP directly involved citizens and stakeholders throughout the planning process. Interested persons, landowners, businesses, environmental groups, professional associations, community homeowner associations, and non-profit groups were encouraged to provide input and review and discuss recommendations.

Recognizing the vast changes in the physical, cultural, historic and environmental conditions across the County and the need to hold meetings in locations convenient to the public, a series of four three-day Charrettes were scheduled, one for each of the four Growth Management Areas (GMAs) in the County: El Norte, El Centro, Galisteo and Estancia. Results of the Charrettes were presented in a Charrette Report in March 2009.

An on-line survey was conducted from the project website. Paper copies of the survey were also available at the Charrettes and at the County Planning Office. The purpose of the survey was to identify the common concerns and ideas of the people who live and work in Santa Fe County.

A series of brochures in the format of frequently asked questions were developed to update the public about the direction and progress of the project. These brochures were available on-line and at the County Planning Information Center. Fact sheets were prepared and distributed on the topics of Coordinated County Planning and the Sustainable Land Development Plan Next Steps (process, schedule and participation opportunities). Youth and young adults were included in the planning process at schools, universities, and youth centers and specific outreach to young artists and environmentalists was accomplished.

Coordination of outreach efforts through community leaders, and organizations. The outreach efforts included distribution and translation of key documents into Spanish. Additional meetings were conducted with stakeholders, such as ranchers, developers, property owners, business and professional groups and organizations. Several meetings were conducted with Community representatives, organizations, and the United Communities, an organization with outreach and participation from selected communities throughout the County.

The County website (www.santafecounty.org) and project website (www.plansantafecounty.org) were maintained and updated constantly as valuable tools for providing information to the public, gathering feedback and enhancing communications. Both websites were established prior to the Charrettes and include meeting notices, background information, project updates and other information. The websites included tools to allow stakeholders to register for notification of upcoming events and send comments to the Planning Team.

Public Hearings were held on the SLDP throughout the process through regular or special CDRC meetings. In addition, the County held a series of SLDP Review Workshop Meetings to provide the public an opportunity to review the plan and provide input and comments. The SLDP Workshops began on February 10th, 2010 and ran thru April 1st, 2010, seventeen meetings were held in eight weeks. Workshop Meetings were published on a weekly basis in the Santa Fe New Mexican Newspaper and on the Santa Fe County Web Site also, information regarding the meetings were sent out via-email weekly. The meetings were open to all Community Members of Santa Fe to attend & participate in the SLDP process. Public meetings were also held with communities throughout the process as requested.

CHAPTER 2: LAND USE ELEMENT

The Land Use Element provides direction for future growth and sustainable development to include protection of ground water resources, reduction of land consumption while maintaining quality of life, economic opportunities and environmental protection. Land Use is an important element of the SLDP and provides a bridge to connect the binding principles and key directives in subsequent chapters.

2.1.1 KEY ISSUES

1. **Population growth and increasing competition for diminishing natural resources.** Santa Fe County is reaching a critical point with regard to population growth and land consumption and there is a need to direct future growth to appropriate areas which can be served in a sustainable manner.

2. **Existing communities need to be sustainable.** Certain existing patterns of development result in poorly defined places and a lack of sustainability. The County needs to assist communities, both existing and new, to become more sustainable in accordance with the SLDP's principles of sustainability. While existing communities are not primary growth areas, many communities have certain infrastructure which may accommodate limited infill development according to the community's identified needs.

3. **Primary growth areas where infrastructure and services will be provided need to be identified to direct future growth.** These identified areas should be the focus of development initiatives and adequate public facilities and services.

4. **Unsustainable development patterns negatively impact the environment.** Fossil fuel use creates greenhouse gas emissions that contribute to global warming and climate change. Large lot, low-density residential development is resource intensive, expensive to serve, overly consumptive of land, and often results in excessive vehicle miles traveled. These impacts are exacerbated by overly consumptive land development that consumes forests, water resources, wildlife, open spaces and agricultural and ranching lands.

5. **Climate change results in negative environmental impacts and resource scarcity.** Many individuals, groups and communities are vulnerable to the impacts of environmental, economic and social problems.

6. **Existing hydrologic zoning has created sprawling development patterns and inefficient lot sizes throughout the County and allowed development to occur in environmentally sensitive and inappropriate locations.**

7. **Facility and service deficiencies exist in many parts of the County due to unplanned and unsustainable development patterns and limited financial resources.**

8. **Mining, quarrying or extraction activities impact communities, roadways and scenic landscapes.** Locations for resource extractive developments should not adversely impact existing communities, infrastructure and tourist economy.

9. **Lack of understanding about the relationship between land development regulations, private property rights, and community concerns.**

10. **Development options for large property owners are not well defined.** As large ranches and large properties break up, there needs to be options for sustainable development including the establishment and continuation of smaller agricultural activities.

11. **Lack of coordinated regional land use planning.** There is no forum or established organization for veritable regional land use planning. There are seven adjacent counties that share or experience many of the same land use problems. The counties working together could address many of the issues and create solutions.

12. **Lack of coordination between new developments and existing places.**

13. **Lack of understanding and misconceptions about cluster development and higher density development.** There is a need for better informing the public of the positive outcomes of more compact development forms that result in open space, affordable housing, environmental protection, more efficient services, and a mix of uses.

2.1.2 KEYS TO SUSTAINABILITY

1. **Plan for Sustainability.** Create a framework of goals, policies and strategies to ensure green development design and improvement standards, fiscal balance, commercial development, water quantity and quality, adequate facilities and services, environmental, land use, transportation and energy sustainability.

2. **Assure that land and resources are used in a fully sustainable manner in accordance with the Binding Principles for the SLDP.**

3. **Communities should be supported in their efforts to enhance their quality of life through community participation and planning.**

4. **Better water and land management is necessary to ensure the integrity of the environment, the viability of agriculture, and the ability to sustain on-going community development.**

5. **Planning and development regulations must be comprehensive**, and take into account the cumulative impacts of individual development projects, family transfers, lot line adjustments and parcel divisions that are exempted by statute from subdivision review but not zoning processes.

6. **Plan for coordinated growth management.** Direct a growth management program based upon compact, mixed use development patterns in priority growth areas.

7. **Direct growth to specific areas most efficiently served by adequate facilities and services.** Development should be based on the ability to provide adequate facilities and services, at adopted levels of service.

8. **Allow higher densities in primary growth areas where infrastructure and services can be efficiently provided.**

9. **Focus on compact development for residential and mixed uses, and establish Activity Centers to allow for community, regional and opportunity centers for non-residential uses.**

10. **Require all new discretionary development applications to prepare fiscal impact,** transportation impact, fire, sheriff and emergency response and adequate public facility studies, assessments and reports to establish that the development will produce a positive fiscal impact at build out and meet the standards for adequate facilities and services for the County at the time of development application.

11. **Require that all development proposals demonstrate private or public utility water supply availability**, or demonstrate that the use of wells will provide adequate water for the development with limited groundwater use.

12. **Mining and other natural resource development areas** will be defined as developments of countywide impact and regulated through an overlay district mechanism.

13. **Develop incentives and other mechanisms for density transfers** to allow large property/ranch owners to transfer density for preferred development patterns.

2.2 CRITICAL FINDINGS

The overall character and economy of the County is defined by population growth, development patterns and the consumption and preservation of land. There is a critical connection between available developable land and the need for adequate facilities and water resources to sustain future land use. Sustainable development and building practices have evolved out of land use and community planning movements and concepts of the past twenty years. Proactive growth management lanning is essential to balance population growth with levels of service.

2.2.1 GROWTH TRENDS AND GROWTH PROJECTIONS

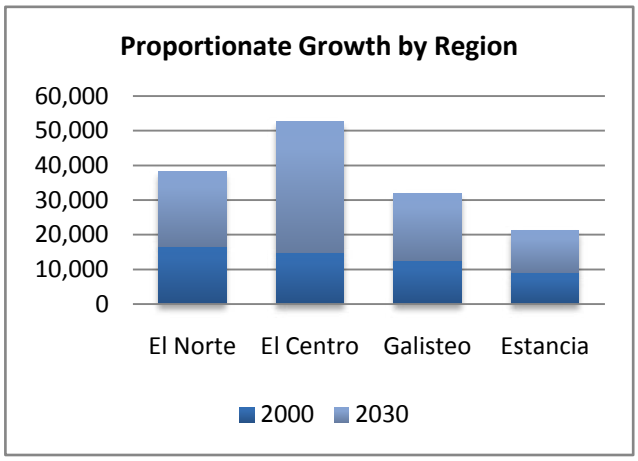
Santa Fe County commissioned a study, Population and Housing Trends in Santa Fe County" as part of the process to create the SLDP to determine future population and housing projections for the County. This study was based on data and separate studies from the Bureau of Business and Economic Research at the University of New Mexico (BBER) that were analyzed for relability. Population and Housing growth in this plan is projected for the County for the period 2000-2030. Regional population and Housing projections are broken down four Growth Management Areas (GMAs), El Norte, El Centro, Galisteo and Estancia, (see Map 2-1) as defined in this Plan. The GMAs were delineated for planning purposes according to the following criteria: geographic boundaries with topographic features and hydrologic basins; continuity with existing Community Planning areas and boundaries to avoid fragmentation; delineation of political boundaries (i.e. Tribal lands, Federal lands, State lands); major transportation networks and corridors connecting the GMAs; existing large tract and parcel boundaries; sensitivity to the landscape and historical context (i.e. land grants, archaeological sites, historic communities, cultural resources, environmentally sensitive lands, large agricultural and ranch holdings, and settlement patterns; and consideration of open space buffers.

These projections reveal little change in recent County growth rates through 2020. This is in line with the relatively stable growth rates the County has experienced for the last decade (approximately 2.0% in the Unincorporated County; 1.7% in the Total County). The growth rate is projected to gradually decline after 2020. The largest period of growth predicted for the unincorporated County occurs from 2010 to 2015, with a total increase in population of 10.2%. Projected population growth in the County, including all incorporated cities and towns (total); excluding the cities and towns (unincorporated areas including Tribal land); and by region (also excluding the cities, but including Tribal land) is shown in **Figure 2-1.** Population in the incorporated areas of the cities of Santa Fe, Espanola, and the town of Edgewood is shown in the "Incorporated" column. **Figure 2-2** shows projected dwelling units and employment, as follows:

- The unincorporated areas are projected to experience greater population growth 2010-2030 than the incorporated areas, gaining 26,544 residents as compared to 22,459 residents. This equates to a 41.3% increase in the unincorporated areas, a 25.6% increase in the incorporated areas, and a total County increase of 32.3% in the next twenty years.
- El Centro is growing the fastest among the County's four regions, experiencing an annual growth rate of 7.68% from 2010 to 2030; El Norte is projected to be the slowest growing region, experiencing an annual growth rate of 1.78%.
- The percentage of residents in the unincorporated areas of the County is expected to increase slowly from 2010 to 2030, increasing from 42.3% to 45.2%.
- The number of persons per household is projected to decline slightly from 2010-2030 (2.61 to 2.58)(reflecting the increase of singles, married persons without children, partners and seniors).
- The number of dwelling units in the unincorporated County is projected to increase by 45.1% from 2010 to 2030.
- Employment in the unincorporated areas of the County is expected to experience a greater proportionate increase in the period between 2010-2030 than, increasing 34.9% compared to 17.6% for the Total County.

Figure 2-1: Population Projections

	2000	2005	2010	2015	2020	2025	2030	Change (2010-2030)	Percent Change (2010-2030)
Growth Management Areas									
El Norte	16,778	17,516	18,254	19,047	19,876	20,739	21,495	3,241	17.8%
El Centro	14,933	18,465	21,341	25,413	29,592	33,908	37,730	16,389	76.8%
Galisteo	12,522	13,942	14,640	15,805	17,022	18,278	19,387	4,747	32.4%
Estancia	9,121	9,566	10,023	10,554	11,110	11,686	12,190	2,167	21.6%
Total Incorporated	76,572	82,042	87,615	93,182	98,914	104,845	110,074	22,459	25.6%
Total Unincorporated	53,354	59,489	64,258	70,819	77,600	84,611	90,802	26,544	41.3%
Total County	129,926	141,531	151,873	164,001	176,514	189,456	200,876	49,003	32.3%



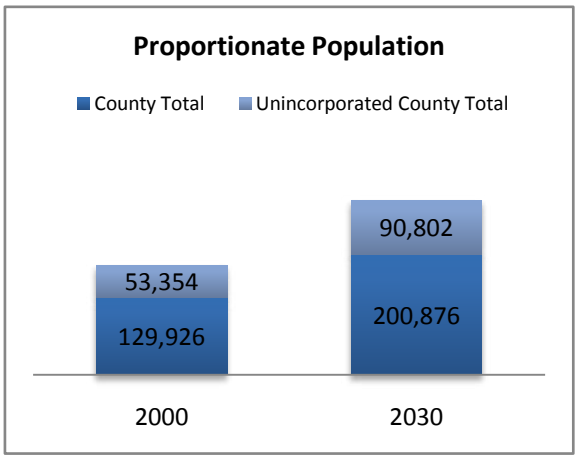


Figure 2-2: Dwelling Unit and Employment Projections

	Dwelling Units							Employment						
	2010	2015	2020	2025	2030	Total Change 2010-2030	Percent Change 2010-2030	2010	2015	2020	2025	2030	Total Change 2010-2030	Percent Change 2010-2030
Total County								**64,250**	**67,083**	**69,916**	**72,750**	**75,583**	**11,333**	**17.6%**
City of Santa Fe								**54,162**	**56,161**	**58,127**	**60,060**	**61,960**	**7,799**	**14.4%**
Pueblos								**436**	**475**	**516**	**558**	**602**	**167**	**38.2%**
Total Unincorporated								**9,653**	**10,448**	**11,274**	**12,131**	**13,020**	**3,368**	**34.9%**
Unincorporated County by Area:														
Total Units	**27,027**	**30,634**	**34,063**	**37,274**	**39,222**	**12,195**	**45.1%**	**9,653**	**10,448**	**11,274**	**12,131**	**13,020**	**3,368**	**34.9%**
El Centro	8,571	10,950	12,883	14,606	15,645	7,074	82.5%	4,904	5,341	5,797	6,272	6,766	1,862	38.0%
El Norte	7,977	8,304	8,881	9,472	9,747	1,770	22.2%	2,666	2,849	3,036	3,229	3,428	762	28.6%
Estancia	3,839	4,053	4,368	4,684	4,838	999	26.0%	741	808	877	950	1,025	283	38.2%
Galisteo	6,640	7,328	7,930	8,512	8,991	2,351	35.4%	1,341	1,450	1,563	1,680	1,802	461	34.4%

2.2.2 FUNCTIONAL POPULATION

Santa Fe County will have to serve more than its resident population, shown in Table 2-1. The total number of persons to be served is known as the functional population. The functional population includes full-time residents, seasonal residents, visitors and tourists, and those commuting into Santa Fe County to work. The function population for 2010 to 2030 is shown in Table 2-3:

Figure 2-3: Functional Population Projections

	2010	2015	2020	2025	2030	Change (2010-2030)	Percent Change (2010-2030)
Growth Management Areas							
El Norte	20,438	21,198	22,219	23,271	23,946	3,509	17.17%
El Centro	23,008	27,862	32,303	36,605	39,912	16,904	73.47%
Galisteo	15,666	16,986	18,247	19,502	20,567	4,900	31.28%
Estancia	10,368	10,902	11,550	12,209	12,662	2,294	22.13%
Total Incorporated	102,596	108,260	114,433	121,160	128,079	25,482	24.84%
Total Unincorporated	69,479	76,948	84,319	91,587	97,086	27,607	39.73%
Total County	172,076	185,208	198,752	212,747	225,165	53,089	30.85%

Seasonal housing units provide occupancy for only limited portions of the year. The U.S. Census tabulates the number of seasonal housing units as vacant housing for seasonal, recreational use, but it does not tabulate the seasonal population. Seasonal population figures are derived by calculating the number of housing units held for occupancy only during limited portions of the year, adjusted by regional vacancy assumptions.

Seasonal Housing Units			
	2010	2020	2030
Total County	**2,989**	**3,513**	**4,046**
Santa Fe Urban Region	**1,780**	**2,042**	**2,306**
Total Unincorporated	**1,208**	**1,957**	**1,740**
El Centro	364	886	621
El Norte	407	487	541
Estancia	172	220	236
Galisteo	265	365	342

2.2.3 EXISTING LAND USE TRENDS

Figure 2-6 shows the distribution of existing land uses in the County in 2008. **Map 2-1** shows the location of these uses.

2.2.3.1 EXISTING RESIDENTIAL LAND USE

Quantity of Residential Land. Residential development, defined as development at densities of at least 1 dwelling unit per 40 acres, currently occupies about 66,842.8 acres in the unincorporated County, or about 6.1 percent of the 1,088,678.2 acres that are subject to the County's zoning jurisdiction (this excludes city and pueblo lands). While the County includes a substantial urban area, most of the County still consists of undeveloped or sparsely populated land. In 2008, approximately 91 percent of the entire County consisted of undeveloped or sparsely populated land; within the unincorporated portion of the County, this percentage was almost exactly the same.

Density of Existing Residential Development. Within the unincorporated portion of the County, residential densities are very low and consist mainly of large-lot (2.5- to 40-acre) development. Residential densities in the unincorporated County are low compared to typical suburban densities. The average gross density in the unincorporated County (dwellings per total development project site area) was about .37 dwellings per acre (1 dwelling per 2.72 acres) in 2008. By comparison, the average gross density in the County's three municipalities is about 2.34 dwellings per acre – about 6 times the average density in the unincorporated County.

The character of residential development has been determined by examining distribution of developed lot sizes (i.e., net density). About 32 percent of all dwellings in the unincorporated County are located on lots of greater than 2.5 acres, and 64 percent are located on lots greater than 1 acre. Only 36 percent of dwellings in the unincorporated County consist of net densities 1 dwelling per acre or higher..

Multi-Family Housing Development. Multi-family housing (apartments, condominiums, townhouses, and duplexes) comprised about 23 percent of the housing stock Countywide in 2000 (US Census), but only about 7 percent of the housing stock in the unincorporated County. Multi-family housing occupies only about 400 acres out of the total 67,000 acres in the unincorporated area. Most of the land that is currently developed for multi-family housing in the unincorporated County is located in the City of Santa Fe annexation area.

Excess Residential Zoning. The 1999 General Plan and 1996 Land Development Code did not do enough to manage growth or prevent sprawl development The County's existing zoning regulations allow densities of up to 2.5 acres per dwelling unit anywhere in the County so long as water is imported or a geo-hydrologic study is prepared that shows a 100 year ground water supply. Under existing zoning, 42,125 to 83,043 new dwellings could be created. While not sustainable, this amount of residential development could accommodate growth for between 53 and 110 years.

Vacant Lots. There are an estimated 11,395 vacant parcels and platted lots currently in the unincorporated County which could accommodate about 16 years of growth, based on growth trends and the projected demand for single-family housing. If vacant parcels greater than 40 acres are not considered, the number of vacant lots would be 10,061, which corresponds to a 14.0-year supply. In several areas of the County, antiquated lots are not buildable under current zoning regulations and lack adequate public facilities and services to support development on these parcels. In these areas, the SLDP provides for redevelopment incentives for individual lot owners to consolidate lots into adaptive reusable residential or economic development parcels.

Excess Vacant Lots. The supply of vacant lots in an urban county normally does not exceed a 5-year supply. This situation is different in Santa Fe County where a 14-16 year supply of vacant lots exists. Land development costs are low in unincorporated Santa Fe County, because most residential development is accessed by unpaved roads and is not served by central water or sewer. Since development costs are minimal, speculative development tends to occur, which leads to an oversupply of vacant lots. Such an oversupply creates a wide geographic distribution of potential development sites which precludes compact development that can be efficiently served by facilities and services.

2.2.3.2 EXISTING COMMERCIAL LAND USE AND ZONING

Commercial Land Supply. The number of existing commercial acres in unincorporated Santa Fe County is approximately 2,402.1 acres. This is equivalent to about 36.9 acres of commercial land per 1,000 population in the unincorporated area. This ratio is somewhat misleading since much of the land in the unincorporated area classified as "commercial" for taxation purposes consists of undeveloped land on the same parcel as land that is physically developed for commercial uses.

Much of the existing commercial land in the unincorporated County is located within existing communities and districts. Commercial land uses in the unincorporated area tend to consist mainly of neighborhood-serving stores and services. The main concentration of community and regional level commercial uses in the unincorporated County is along State Road 14 in the Community College District. There are also community-level shopping centers located in the Eldorado development, and along U.S. 285, immediately south of Pojoaque and small commercial uses in communities.

There are currently about 1,316.9 acres of land available for commercial land uses in the unincorporated County, based on the existing zoning. Of these 1,316.9 acres, about 446.0 acres are located in Traditional Communities, 221.8 acres are located in the Santa Fe Community College District, and 649.1 acres are located elsewhere. Within the Traditional Communities that allow commercial uses in an extensive portion of the community, the amount of available commercial land in the community was based on the number of acres needed to serve the projected build-out population of the particular community. **Figure 2-3** summarizes the amount of land available for commercial development Countywide.

Figure 2-4: Commercial Zoned Land (Countywide)

Jurisdiction	Commercial Zoned Acres Available (6/16/09)
Unincorporated Santa Fe County	1,316.9
City of Santa Fe*	2,385.6
City of Espanola**	222.5
Town of Edgewood**	1,533.8
Pueblos	205.0
TOTAL	5,663.8 acres

*Including proposed City of Santa Fe annexation area. **Portion in Santa Fe County only.

2.2.3.3 EXISTING INDUSTRIAL LAND USE AND ZONING

Industrial Land Supply. Based on the Assessor's parcel and building structure data, there are only 11.0 acres of existing industrial land in unincorporated Santa Fe County. An examination of building types (from aerial photographs), reveals that 258.6 acres of "commercial" land actually consists of industrial or warehouse development which has been misclassified in the parcel or building structure data. The number of existing industrial acres appears to be about 269.6 acres. This is equivalent to about 4.1 acres of industrial land per 1,000 persons in the unincorporated area. Much of the existing industrial land in the unincorporated County is located along State Road 14, in the vicinity of Interstate 25, within or close to the Santa Fe Community College District.

Industrial Land Locations. There are currently about 989.0 acres of land available for industrial land uses in the unincorporated County, based on the existing zoning. All of this industrial-zoned land is located in the Santa Fe Community College District ("SFCCD"), within the "employment centers" (including the Media District) that are

identified on the SFCCD master plan. The commercial zoning districts in Santa Fe County allow limited small light industrial uses; however, it is not possible to determine how much of this commercially-zoned land is actually available for industrial development.

Sufficiency of Industrial Land. Since industrial land tends to serve mainly regional, sub-regional, and community-level markets, it is desirable to examine the total amount of industrial land available not only in the unincorporated County, but also in the cities of Espanola and Santa Fe and the Town of Edgewood. **Figure 2-4** summarizes the amount of land available for industrial development Countywide, including the cities.

The amount of industrial land that is typically needed in a jurisdiction ranges from 10 to 20 acres per 1,000 residents, with an average of 12.5 acres of industrial development per 1,000 residents. Santa Fe County has only minimal industrialization. The Albuquerque area is expected to be a center for the growth of high-tech industry in the next 20 years, which may impact Santa Fe County. In addition, Santa Fe County is emerging as a center for movie production, which will also increase the demand for supporting industrial uses. Since the existing industrial development of 4.1 acres per 1,000 residents is relatively low in terms of providing adequate employment opportunities for new residents, the average of 12.5 acres per 1,000 residents is used in this analysis. The current Countywide industrial zoning could accommodate a population of 213,047, whereas the projected 2030 population for the entire County is 200,876. Therefore, the supply and future demand for industrial land appears to be only slightly less than adequate. The current industrial zoning in unincorporated the County can accommodate a population of 79,116, at rate of 12.5 acres per 1,000 residents, whereas the projected 2030 population for the unincorporated County is 99,738. An additional 257.8 acres industrially-zoned land would therefore be needed in the unincorporated County, based on the ratio of 12.5 acres/1,000 residents.

Figure 2-5: Industrial Zoned Land (Countywide)

Jurisdiction	Industrial Zoned Acres Available (6/16/09)
Unincorporated Santa Fe County	989.0
City of Santa Fe*	1,674.1
City of Espanola**	0.0
Town of Edgewood**	0.0
Pueblos	0.0
TOTAL	2,663.1 acres

*Including proposed City of Santa Fe annexation area.**Portion in Santa Fe County only.

2.2.3.4 EXISTING PUBLIC, INSTITUTIONAL, AND UTILITIES LAND USE AND ZONING

There are approximately 4,948.3 acres of land in the unincorporated County that are developed for public, institutional, and utilities uses. Land uses in this category consist mainly of federal, state, and county offices, community centers, schools, and places of worship. The largest developed sites in this category include:

The State prison (650.6 acres) and the National Guard Amory (349.5 acres) located on State Road 14, south of the Interstate 25 interchange. The Glorieta Conference Center operated by a religious organization and located on 2,172.6 acres along Interstate 25, east of Glorieta Pass. The landfill managed by the Solid Waste Management Authority (SWAMA), located on about 160 acres, to the west of the Tres Arroyos planning area and adjacent to the Caja del Rio unit of Santa Fe National Forest.

The County's existing zoning allow public, institutional, and utilities in a broad range of zoning districts, mainly designated as "community service facilities", so the adequacy of the supply of land for such uses is not a concern. The main challenges with the location of these uses are:

- Encouraging the location of schools, community centers, government offices, places of worship, and other institutional uses within communities, to serve as a focal point for the community and afford easy access to residents; and
- Ensuring that potential land use compatibility and environmental conflicts are taken into consideration in the location of utility uses, such as landfills, solid waste transfer stations, wastewater treatment plants, power lines and substations, and solar- or wind-power generation sites.

2.2.3.5 EXISTING AGRICULTURAL LAND USES AND ZONING

Land in Agricultural. It is difficult to quantify the exact acreage of agricultural land use and the acreage currently devoted to specific types of agriculture in Santa Fe County. However, an approximate number of acres in agricultural use can be derived or inferred from GIS data that has been collected in the past. Agricultural land uses in the County can be grouped into three major categories:

Traditional Agriculture. Traditional agriculture that employs acequia irrigation and is located in the valleys of the northern and central portions of the County. Based on the acreage identified as consisting of "Traditional Irrigated Valley[1]", there are about 8,483.0 acres of traditional agriculture in Santa Fe County. Much of this agriculture consists of the growing of vegetables, fruit, and specialty crops.

Modern Agriculture. Modern agriculture that employs pivot (groundwater) irrigation, mainly located in the southern end of the Estancia Basin. Based on the acreage identified as consisting of "Agriculture" in the Estancia Basin in the vegetative land cover data compiled as a part of the New Mexico ReGAP habitat study[2], there are about 8,696.7 acres of modern agriculture in Santa Fe County. Generally, modern agriculture in Santa Fe County consists of the growing of feed crops (*i.e.,* hay and alfalfa).

Ranching and Grazing. Ranching and grazing uses are located in all parts of the County, but mainly in the Galisteo and Estancia Basins. Livestock grazing potentially occupies up to about 520,514.4 acres of private land in the unincorporated County, based on the area of parcels that are either (a) vacant and over 40 acres in size, or (b) developed for a single dwelling and located on parcels of over 160 acres in size. In addition, an estimated 157,515.9 acres of federal land and 79,562.8 acres of state land are potentially used for grazing, based on the area of parcels that are either (a) Owned by the Bureau of Land Management, (b) Owned by the New Mexico State Land Office, or (c) located in the Caja del Rio and Glorieta Mesa units of Santa Fe National Forest. Furthermore, there are about 85,637.3 acres of undeveloped land in the pueblos that are largely used for grazing. Altogether, there are about 843,230.3 acres in the unincorporated County that are potentially used for grazing.

Appropriate Locations for Agricultural Uses. The County's current zoning regulations permit agricultural uses in all zoning districts. Agriculture functions as a "default" land use on undeveloped parcels. Protection of agricultural uses, particularly the high-value agriculture found in traditional agricultural areas, from encroachment by development is a challenge of land use planning and regulation in the County. The subdivision and development of land in rural areas tends to fragment agricultural lands, which reduces the long-term viability of the agricultural economy and leads to compatibility conflicts between developmental and agricultural uses.

[1] Source: "Landscape Character Types" Map, from "Santa Fe County Visual Resources Inventory & Analysis" (Design Workshop, Inc. 1995).

[2] Source: New Mexico Fish and Wildlife Research Unit at New Mexico State University (1996).

2.2.3.6 EXISTING CONSERVATION LAND USES AND ZONING

Conservation Uses. Santa Fe County has a considerable percentage of its land area devoted to conservation uses, largely due to the acreage that is occupied by the Santa Fe National Forest, as shown in **Figure 2-5**. Currently, there about 278,210.6 acres of public and private conservation lands in the unincorporated County, which occupy 25.6 percent of the 1,088,678.2 acres that are under the County's land use and zoning jurisdiction.

Location of Conservation Uses. Conservation uses are not specifically addressed in the County's Land Development Code; however, since these restricted conservation uses typically do not involve private development of buildings, structures or active land uses, such uses generally are available in all zoning districts. Development that occurs on Federal reservations (including National Park and National Forest Service lands) is generally not subject to limited local government zoning rules. Local government open space uses are also allowed in all zoning districts as "community service facilities" under the County' s current Land Development Code ("LDC"). Within private development projects, preservation of open space areas are often required by the LDC in order to protect environmentally sensitive areas such as habitats, habitat corridors, floodplains, wetland and riparian areas, steep slopes, ridge tops, archaeological, cultural and historic resources. The protection of areas of high scenic value or environmental sensitivity by limiting development will be a key facet of the SLDC.

Figure 2-6: Conservation Land Uses (2009)

Existing Conservation Uses	Acres
U.S. National Forest Service Land	241,368.0
U.S. National Park Service Land	1,068.7
U.S. Federal Dam and Reservoir Sites	2,115.8
New Mexico State Parks	349.5
Santa Fe County Open Space*	5,203.4
City of Santa Fe Open Space*	324.3
Private Conservation Organization Land**	11,527.5
Natural Open Space Tracts in Private Development Projects	16,253.3
TOTAL:	**278,210.6**

*Within unincorporated Santa Fe County
**Acquired by the Nature Conservancy or Audubon Society – much of this land consists of property for which conservation easements have been acquired by these organizations, rather than fee-simple ownership.

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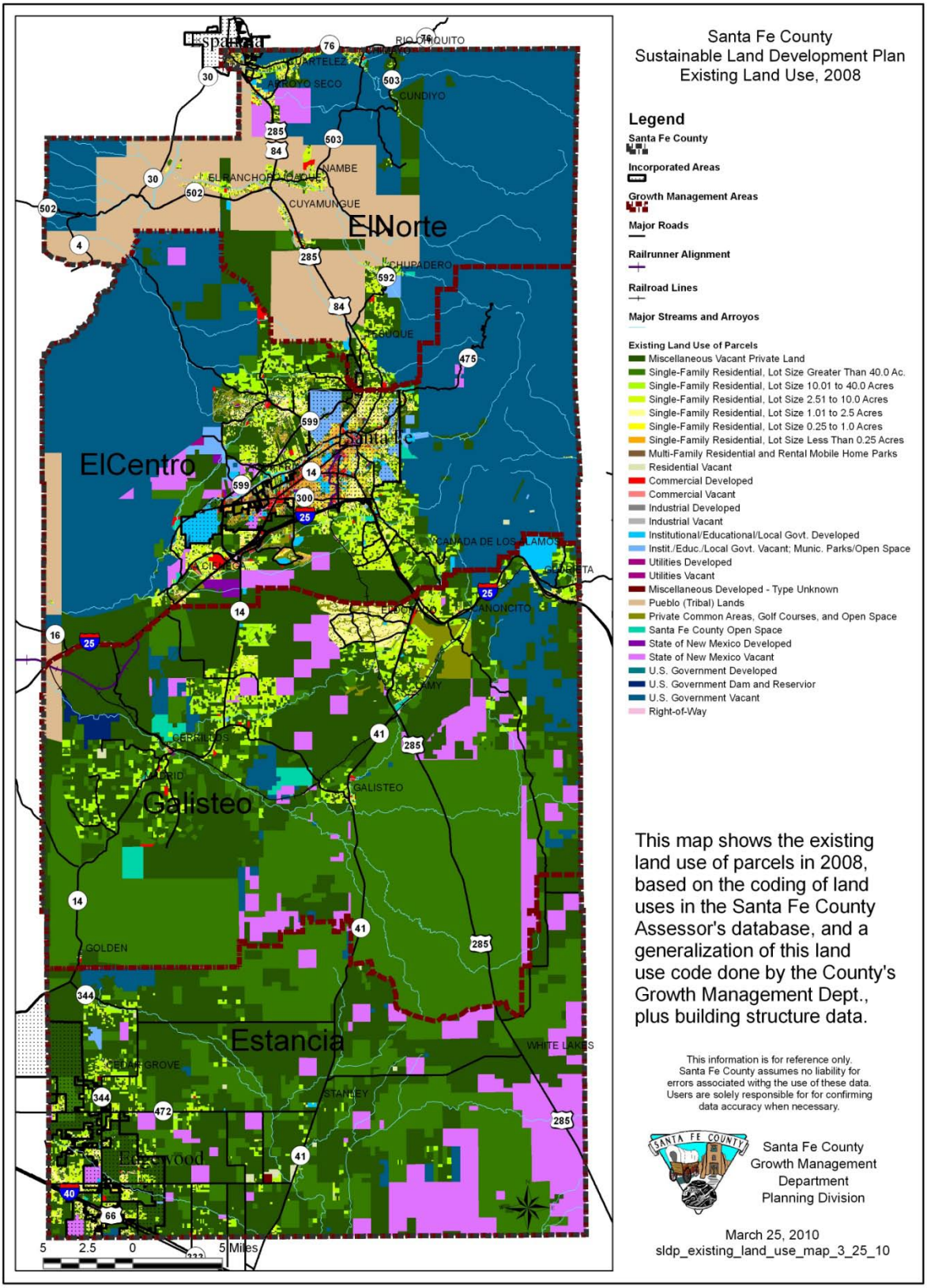
Figure 2-7: Existing Land Use

Existing Land Use	El Norte		El Centro		Galisteo		Estancia		Total County	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
RESIDENTIAL DEVELOPMENT (includes mobile/manufactured homes on individually-owned lots, but does not include rental mobile home parks)										
Single-Family Residential, Very Low Rural Density, Greater Than 40.0-Acre Lots	2,324	1.0	7,500	2.4	169,579	43.3	86,522	29.5	265,925	21.7
Single-Family Residential, Low Rural Density, 10.01- to 40.0-Acre Lots	1,391	0.6	5,259	1.7	12,558	3.2	4,750	1.6	23,959	2.0
Single-Family Residential, Estate Density, 2.51- to 10.0-Acre Lots	3,612	1.6	10,894	3.5	8,191	2.1	4,968	1.7	27,666	2.3
Single-Family Residential, Very Low Urban Density, 1.01- to 2.5-Acre Lots	1,874	0.8	4,299	1.4	4,700	1.2	1,248	0.4	12,122	1.0
Single-Family Residential, Low Urban Density, 0.25- to 1.0-Acre Lots	1,091	0.5	716	0.2	223	0.1	196	0.1	2,225	0.2
Single-Family Residential, Moderate Urban Density, Less Than 0.25-Acre Lots	64	0.1	393	0.1	19	0.0	0.2	0.0	475	0.1
Multi-Family Residential Developed (Including Rental Mobile Home Parks)	39	0.1	338	0.1	19	0.0	0	0.0	396	0.1
All Residential Developed in Unincorporated Area (40-Acre Lot Size or Less)	8,070	3.6	21,900	6.9	25,710	6.6	11,163	3.8	66,843	5.5
NON-RESIDENTIAL DEVELOPMENT										
Commercial Developed	421	0.2	1,572	0.5	603	0.2	65	0.1	2,660	0.2
Industrial Developed	0	0.0	11	0.0	0	0.0	0	0.0	11	0.0
Utilities Developed	0	0.0	176	0.1	2	0.0	0	0.0	178	0.1
U.S. Government Developed	117	0.1	13	0.0	16	0.0	5	0.0	149	0.1
State of New Mexico Developed	2	0.0	1,060	0.3	16	0.0	0	0.0	1,078	0.1
Institutional, Educational, and Local Government Developed	247	0.1	963	0.3	2,251	0.6	83	0.1	3,544	0.3
Open Space Tracts, Urban Parks, Golf Courses, and Community Assoc. Property	64	0.1	2,126	0.7	4,870	1.2	36	0.1	7,095	0.6
Right-of-Way (Both Improved and Unimproved)	578	0.3	4,965	1.6	2,848	0.7	268	0.1	8,659	0.7
Miscellaneous Developed - Type Unknown	4	0.0	20	0.1	11	0.0	202	0.1	237	0.1
All Non-Residential Developed in Unincorporated Area	1,433	0.6	10,905	3.5	10,616	2.7	659	0.2	23,611	1.9
All Developed Land in Unincorporated Area (Excluding Res. Dev. on Lots Greater than 40 Acres)	9,503	4.2	32,806	10.4	36,326	9.3	11,822	4.0	90,453	7.4
VACANT AND UNDEVELOPED LAND										
Miscellaneous Vacant Private Land	21,735	9.7	49,844	15.8	131,710	33.6	122,606	41.9	325,894	26.6
Residential Vacant	77	0.1	503	0.2	637	0.2	909	0.3	2,126	0.2
Commercial Vacant	7	0.0	163	0.1	15	0.0	0	0.0	186	0.1
Santa Fe County Open Space	125	0.1	968	0.3	4,062	1.0	47	0.1	5,203	0.4
U.S. Government Vacant	107,262	47.9	181,789	57.6	20,943	5.4	4,731	1.6	314,726	25.7
U.S. Government Dam and Reservoir	0	0.0	0	0.0	2,116	0.5	0	0.0	2,116	0.2
State of New Mexico Vacant	3,621	1.6	7,580	2.4	23,002	5.9	44,408	15.2	78,611	6.4
Institutional, Educational, and Local Government Vacant	805	0.4	2,167	0.7	67	0.1	400	0.1	3,438	0.3
All Undeveloped Land in Unincorporated Area (Excluding Municipalities and Pueblo Lands)	135,956	60.7	250,514	79.3	352,133	89.9	259,623	88.6	998,225	81.6
All Land in Unincorporated Area (Excluding Municipalities and Pueblo Lands)	145,458	65.0	283,319	89.7	388,458	99.2	271,444	92.7	1,088,678	88.9
LAND NOT SUBJECT TO COUNTY LAND USE AND ZONING JURISDICTION										
Pueblo Lands Total	76,549	34.2	6,754	2.1	3,068	0.8	0	0.0	86,371	7.1
Pueblo Lands Developed Acres	704	0.3	30	0.1	0	0.0	0	0.0	734	0.1
Municipalities Total	1,853	0.8	25,750	8.2	0	0.0	21,435	7.3	49,038	4.0
Municipalities Developed Acres	597	0.3	14,885	4.7	0	0.0	6,563	2.2	22,045	1.8
All Land Not Subject to County Land Use and Zoning Jurisdiction	78,402	35.0	32,505	10.3	3,068	0.8	21,435	7.3	135,409	11.1
All Undeveloped Land, All Jurisdictions	213,057	95.2	268,104	84.9	355,200	90.7	275,748	94.2	1,110,855	90.8
All Developed Land, All Jurisdictions	10,803	4.8	47,720	15.1	36,396	9.3	17,131	5.9	113,232	9.3
Total, All Land Uses, All Jurisdictions	223,860	100.0	315,824	100.0	391,524	100.0	292,879	100.0	1,224,087	100.0

Map 1: Existing Land Use



2.2.3.1 SUSTAINABLE LAND DEVELOPMENT SUITABILITY MODEL

The Sustainable Land Development Suitability Model (SLDSM) is a Geographic Information Systems (GIS-based) land use model. The SLDSM was created to provide a consistent, systematic, technically defensible system for land use planning in the County. The model measures a wide variety of factors, such as hydrology, distance to surface water, habitat value, distance to infrastructure and other environmental and community factors. Data was obtained from various local, State, Federal and private entities. A map showing the overall score for development suitability is created by summing the value of these factors at each point on the map. The presumption is that areas with a higher land development suitability score are more suitable for more intensive land uses, and that areas with a lower land development suitability score are more suitable for less intensive land uses. The model is intended to aid decision-making by assessing the impact of land uses on the County's natural, cultural, archaeological, economic, infrastructure and other community resources. The development suitability score needs to be considered in conjunction with other factors, however, such as the amount of projected growth County-wide, the distribution of densities that is desired, the location of man-made and natural features, existing land use and parcelization, individual areas with particularly severe development constraints, and the physical location of public facilities. The model factors are shown in **Figure 2-7,** and the composite development suitability is shown on **Map 2-2.**

As expanded and improved datasets become available through enhanced public information, the development review process and other venues, the model should be updated to provide the fullest and most accurate information available. The model should be updated on an annual basis, or more often as necessary due to the availability of updated data. Through accurate and relevant data availability the County can make informed land use decisions.

The suitability model is not sufficient to regulate individual proposals for the physical development of property. It may be used to identify the preferred location of open space to be preserved where open space will need to be preserved regardless of the suitability rating. For proposals that contain plans for the physical development of property, such as master plans, subdivision plans, site plans, and conditional use applications, more accurate information gathered from site surveys or data that is to be included in the Official Map series is typically needed to evaluate these development plans, in order to determine areas where environmental constraints may prohibit or severely restrict development such as steep slope areas, floodplains and arroyos.

The suitability model may be used as part of the review of potential amendments to the Future Land Use Map and the Sustainable Development Areas map and proposed rezonings, particularly large-scale rezonings.

Full documentation regarding the suitability model, including a description of the input data layers, is available from the Santa Fe County Growth Management Department, in document titled "Sustainable Land Development Plan, Volume III: Sustainable Land Development Suitability Analysis" (Planning Works, LLC, October 1, 2009).

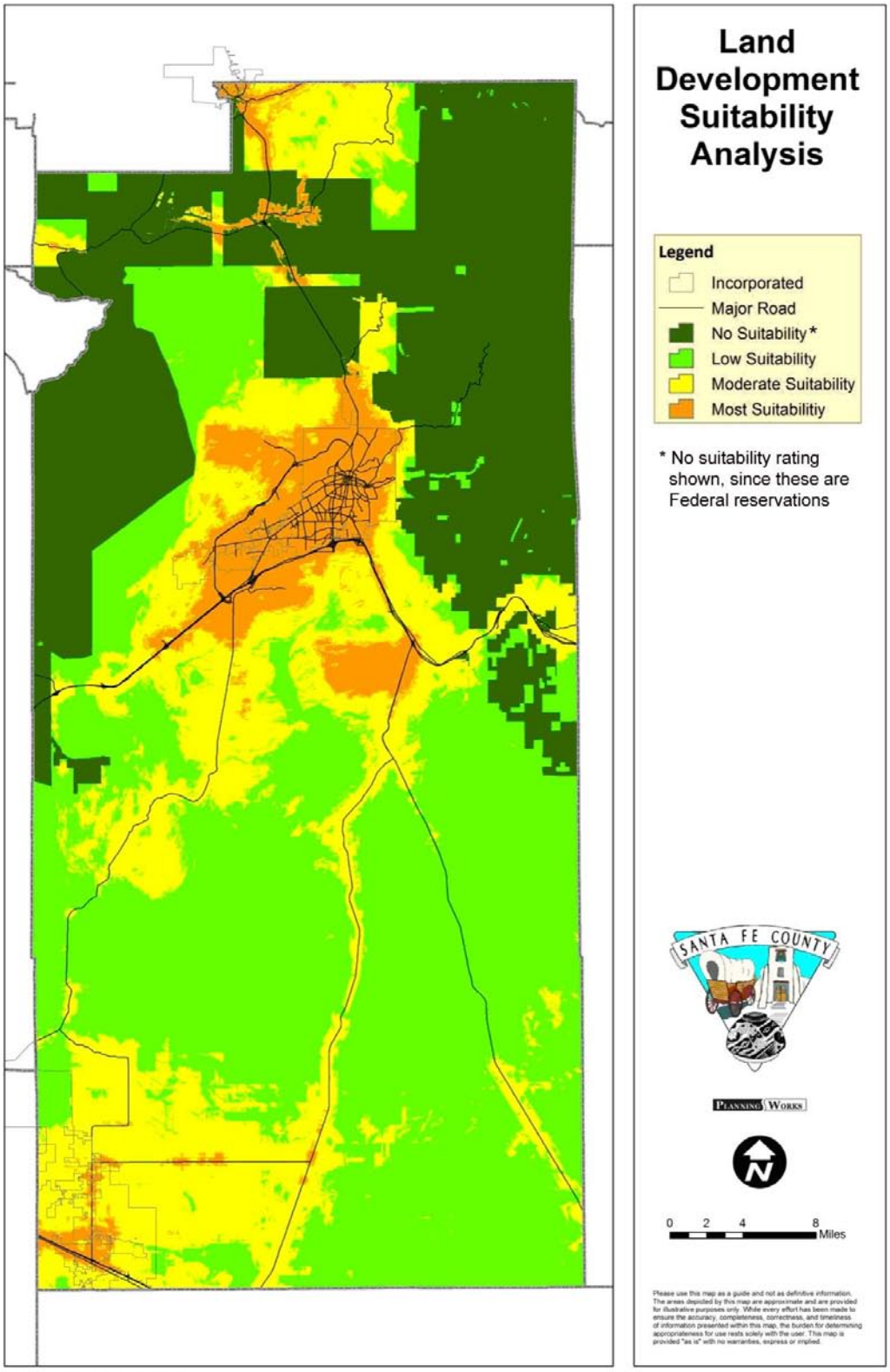
If the use of the Sustainable Land Development Suitability Model is required in the land development code, either for the purpose of evaluating rezonings and land use map amendments, or for determining the preferred location of open space in development projects, then it may be desirable to weight the factors based on input from a cross-section of County residents. The suitability model is designed so that re-weighting of factors can be easily done, to produce a revised suitability map, which could then be referenced in the land development code.

Figure 2-8: Suitability Analysis Factors

Factor Number	Factor Name
Factor Group 1 - Identify lands suitable for crops	
1.1	Identify soils most suitable for irrigated crops
1.2	Identify soils most suitable for low-intensity livestock \ Range Production
1.3	Identify current areas of irrigated crops (Traditional Irrigated Valley, Modern Agricultural Areas)
1.4	Precipitation
Factor Group 2 - Identify farms / ranches to be protected	
2.1	Identify farms / ranches production
Factor Group 3 - Identify lands suitable for protecting native plant and animal species	
3.1	Identify lands with high amphibian species richness
3.2	Identify lands with high reptilian species richness
3.3	Identify lands with high bird species richness
3.4	Identify lands with high mammal species richness
3.5	Identify lands with undisturbed natural grasslands
3.6	Identify lands with undisturbed Pinon-Juniper Woodlands
3.7	Identify lands with undisturbed forested areas
3.8	Focal Species Richness
Factor Group 4 - Identify lands suitable for protecting surface and groundwater quality	
4.1	Identify lands proximal to natural springs
4.2	Identify lands proximal permanent water bodies
4.3	Identify lands proximal drainage buffers
4.4	NM GAP Wetlands and Riparian areas
4.5	D.R.A.S.T.I.C. Model
4.7	Identify lands near existing domestic water wells
4.8	Arsenic Contamination
4.9	Water Fair Data
4.10	Hydrologic Zones (Groundwater Availability)
4.11	Groundwater Storage (Water Budget)
Factor Group 5 - Identify lands with important physical characteristics	
5.1	Identify lands within the 100-year floodplain
5.2	Identify steep slopes
5.4	Identify lands prone to fire (Fire Hazard)
5.6	Identify lands with septic limitations
5.7	Identify soils with high erodability
5.8	Identify landslide hazards
5.9	Earthquake Risk
5.10	Identify soils suitable for development (dwellings without basements)
Factor Group 6 - Identify lands suitable for resource based recreation	
6.1	Identify existing and potential trail corridors
6.2	Identify existing resource-based parks and recreation (community parks)

Factor Number	Factor Name
Factor Group 7 - Identify areas of cultural, historical and archaeological importance	
7.1	Identify lands proximal to recorded archaeological, historical, and paleontological sites of demonstrated or potential significance , Identify lands proximal to major Pre-Columbian pueblo sites and zones of high archaeological or paleontological potential
7.4	Proximity to National Register of Historical Places
Factor Group 8 - Identify lands with scenic value	
8.1	Identify scenic highways and railroads
8.3	Identify lands within Delphi-based scenic landmarks, outcrops, peaks, gaps and geologic features (GWCI)
8.4	Combined Scenic Quality - Visual Resources Inventory Analysis)
Factor Group 9 - Identify lands proximal to infrastructure and investment	
9.1	Identify lands proximal to community / public water system
9.2	Identify lands proximal to community / public wastewater system
9.3	Identify lands proximal to paved highway interchanges
9.4	Identify lands proximal to paved roadway
9.5	Identify lands proximal to fire station
9.6	Identify lands proximal to public or private primary or secondary school
9.7	Identify lands proximal to health care facilities
9.8	Proximity to Rail Runner Stops
9.9	Proximity to Commuter Bus Routes
9.10	Proximity to major non-interstate roads
9.11	Proximity to local roads as defined by staff
Factor Group 10 - Identify land use and economic compatibility	
10.1	Identify lands proximal to designated conservation areas and open space
10.2	Identify lands proximal to areas of anticipated annexation
10.3	Identify lands proximal to areas designated as future growth areas
10.5	Identify lands proximal to existing residential uses (structures) and churches
10.6	Identify lands proximal to existing non-residential uses (structures) business
10.7	Value of Land Improvements
10.8	Parcel Density
10.9	Identify lands proximal to areas of dense population
10.10	Identify Areas of Jobs \ Housing Proximity
10.12	Proximity to Municipal Boundaries

Map 2: Land Development Suitability Analysis



2.2.4 FUTURE LAND USE OBJECTIVES

In the urbanizing areas of the County, compact, mixed-use development served by adequate facilities are a priority. While the County has a variety of traditional and contemporary communities that promote principles of sustainability, many land use and development patterns are resource-intensive, expensive to serve and consumptive of land. A diversity of housing options should be considered. While rural, large lot development is a popular lifestyle option, the public and private costs of such development are excessive and do not position the County or its residents to attain sustainability. The vast majority of housing will, in the future, be built in the primary and secondary SDA areas. In order for these development patterns to be sustainable, several objectives need to be established to achieve a desired future land use scenario. These objectives include mixed uses, land use and transportation connections, jobs and housing balance, flexibility and certainty, and land use compatibility.

2.2.4.1 MIXED USES

Mixed use allows for development to provide for a variety of uses within traditional neighborhood and village type settings. Mixed uses bring flexibility into the development process, deviating from the typical single-use categories of future land uses or zoning districts to combine compatible uses in planned ways. Mixed use developments are often intended to capture specific benefits, such as reducing auto dependency by providing for walkable mixes of commercial and residential uses inclusion of sustainable development practices, and greater use of urban design. Mixed use development is integral to achieving appropriate land use and transportation goals and objectives.

2.2.4.2 LAND USE / TRANSPORTATION CONNECTIONS

Transportation is an important and costly component of a county's infrastructure base that has a profound influence on its land use patterns and rate of growth. Consideration of traffic demands is a critical aspect of an overall growth management sustainable framework. Impacts to both local streets and neighborhoods and the region's arterials and highway system have been considered in the formulation of the SLDP and the CIP for the location and timing of road improvements.

Transportation is inextricably linked to land use. Countywide development patterns and site specific lot design influence the availability and efficiency of various transportation modes. The SLDP proposes that development intensity/density, street lay-out, connectivity and access, and public improvement requirements are some of the many components that contribute to the viability of transportation options and should be considered in the SLDC.

Moderate to high-density compact, corridor or centers mixed use development is widely regarded as a land use pattern that maximizes transportation options. The benefit of mixed use and higher density residential development include land conservation and increased mobility options, including but not limited to car pooling, biking, walking, bus or fixed-route transit. Mixed uses allow people to live, work and shop in the same neighborhood, reducing their need to travel long distances in the course of daily living. Increased mobility options reduce household transportation costs, reduce pollution and traffic congestion and increase interaction between neighbors.

Increasing congestion and escalating energy costs will likely serve as an incentive to use modes of transportation other than single occupancy vehicles. It is important to avoid development patterns that preclude transit options as they become more necessary in the future, including large-lot residential development, non-contiguous growth and leap-frog development. Transit is neither cost effective nor convenient in very low-density neighborhoods.

2.2.4.3 JOBS / HOUSING BALANCE

The jobs- housing balance within a community or development has implications for residents and employers as well as for service providers. A balanced community has employment options for residents so that they can live and work in the same community; and an educated workforce for employers so that they are able to hire employees who are vested in their community and in their job. Communities with an imbalanced ratio of jobs to housing are unsustainable for both residents and employers. Commercial uses generate more revenues for the County than residential uses, and an imbalanced land use mix negatively impacts the ability of service providers to maintain levels of service.

The SLDP creates the opportunity for planned growth areas to develop with a balanced jobs to housing ratio from the outset to reduce traffic congestion, support revenue generation and provide a high quality of life for residents. While the build-out land use mix is ultimately important, it is also important to encourage jobs / housing balance during the initial phase of development in growth areas. Critical to the achievement of jobs / housing balance is the designation of appropriate sites for non-residential development on the Future Land Use Map (Map 2-4).

2.2.4.4 FLEXIBILITY / CERTAINTY

The factors that influence development of growth areas continually evolve. From rapid technology advances to natural resource limitations to lifestyle preferences, innumerable factors will contribute to public and private decision-making over the planning period. The SLDP creates the framework to ensure economic, environmental and renewable energy sustainability while providing flexibility for the County to respond to changing conditions.

The balance between flexibility and certainty is a key aspect of the SLDP. The public, developers, County staff and decision-makers perform their roles more effectively when there is certainty in the Plan policies and development review process. The knowledge that the process will occur in a predictable manner helps participants remain focused on creating quality development rather than navigating a confusing and unpredictable process, while flexibility allows them to create the best possible development without the burden of excessive regulation that stifles the ability to create a high quality product.

The SLDP and the SLDC create the path to develop mixed uses, new urban forms and building design as matter of right in a single concurrent hearing process. Variances, base district rezoning and conditional use permits are not required to build flexible developments. The specific plan, planned district and opportunity zones allow development to proceed without Euclidean zoning restraints.

2.2.4.5 LAND USE COMPATIBILITY

One of the primary goals of the SLDP is to ensure compatibility among various land uses in order to preserve and protect the health, safety and general welfare of the County. Ensuring compatibility provides predictability and security by protecting property values and public and private investments in property improvements. Land use compatibility provides appropriate edges between communities, ensures adequate transportation network capacity and establishes connectivity between existing communities and new development. A significant policy of the SLDP provides that when a use is authorized in a base or planned district zone, the use itself is deemed compatible with the adjoining area. The remaining compatibility issues relate to the availability of adequate facilities to serve the proposed use; the studies, reports and assessments on environmental impact, traffic, adequate public facilities, fiscal impact, water availability and quality and plan consistency; and protection of residential areas through open space and buffering site design. Site design plays the most significant role in assuring land use compatibility. Factors must include transitioning between land use types, intensities, and densities using buffers and floor area ratios; conserving environmental assets using standards to preserve open space and to limit impervious surfaces; providing adequate vehicular and pedestrian traffic circulation and connectivity; mitigating potential nuisances, such as signage, excessive noise, smoke, heat, light, vibration or odors detectable to human senses off the premise; and, designing for public safety.

In order to best manage future growth, a number of growth scenarios were identified and analyzed to quantify the amount of land consumed per capita and the degree of dispersion that characterizes common patterns of development. The final future land use plan reflects the outcome of stakeholder and community input and analysis.

2.2.4.6 LAND DENSITY TRANSFER PROGRAM

Transfer of development rights and other land density transfer mechanisms support the goals of the SLDP. These include but are not limited to Purchase of Development Rights, Transfer of Development Rights, and/or Exchange of Development Rights.

Transfer of Development Rights (TDR) is a conveyance of development rights by deed, easement, or other legal instrument, authorized by ordinance or regulation, to another parcel of land and the recording of that conveyance. Transfer of development rights also allows a property owner to sell development rights from their property to a private developer who transfers those rights to develop the real estate.

A successful land density transfer program will require an implementation element to establish clear administrative procedures. A land density transfer should be established if such use will implement: the goals, policies and standards of the SLDP and any area, specific or community plan; the findings, purposes and intent of the SLDC; under the circumstances, the public interest underlying the proposed use of TDR is clearly benefitted; and the transfer and acceptance of the TDR is authorized by the base or planned zoning district of the transferring and receiving tracts, parcels or lots and complies with all other applicable standards of the SLDC.

2.2.4.7 CONSERVATION EASEMENT

A Conservation easement is designed to: retain or protect natural, scenic, or open space values of real property or assure its availability for agricultural, forest, recreational, or open space use; protect natural resources; maintain or enhance air or water quality; or preserve the historical, architectural, archeological, or cultural aspects of real property.

2.2.5 FUTURE LAND USE AND GROWTH MANAGEMENT SYSTEM

The future land use and growth management system for the SLDP consists of the following elements:

1. Sustainable Development Areas establish future service areas. The SDA concept is defined below.
2. The Future Land Use Map establishes categories for anticipated development patterns.
3. The Preliminary Official Maps identify private and public lands that the public may have a future need.

2.2.5.1 SUSTAINABLE DEVELOPMENT AREAS

The Sustainable Development Area (SDA) concept recognizes that different areas of the County face different needs and solutions related to growth and development. The SDAs establish future service areas, target and leverage public and private funding and investment to priority growth areas, and identifying areas in which urban/suburban-level growth is expected to occur within the next 20 years. SDAs serve as an incentive for compact development.

While individual geographical or functional areas may need specialized strategies for dealing with growth, they must still be viewed in terms of their interrelationships with other areas and with the County as a whole. The fundamental premise of SDAs is that the County can be divided into geographical sub-areas based upon functional distinctions within the growth management system. The delineations of the SDA system relate strongly to the goals and objectives to be achieved through the growth management system.

Improvement districts or impact fees may be instituted in one SDA or part of an SDA but not at the same level as in another SDA, which may already have water, sewer or road capacity. Santa Fe County has identified three SDA's to plan for and accommodate new development through 2030, shown on **Map 2-3**.

SDA-1 identifies where new development is likely and reasonable to occur within the next 10 years. Infrastructure is planned, budgeted or reasonably available. New infrastructure may be installed provided that there is required participation by new development to fund. These primary growth areas are largely undeveloped and along with existing communities are the primary location targeted for new growth. Adequate facilities and services will be required for any development in SDA-1, including approved public or private water and wastewater systems, urban road improvements, and urban service levels for public safety, fire and emergency medical assistance. Service providers should plan and construct facilities in these areas to meet the needs of development at these urban intensities.

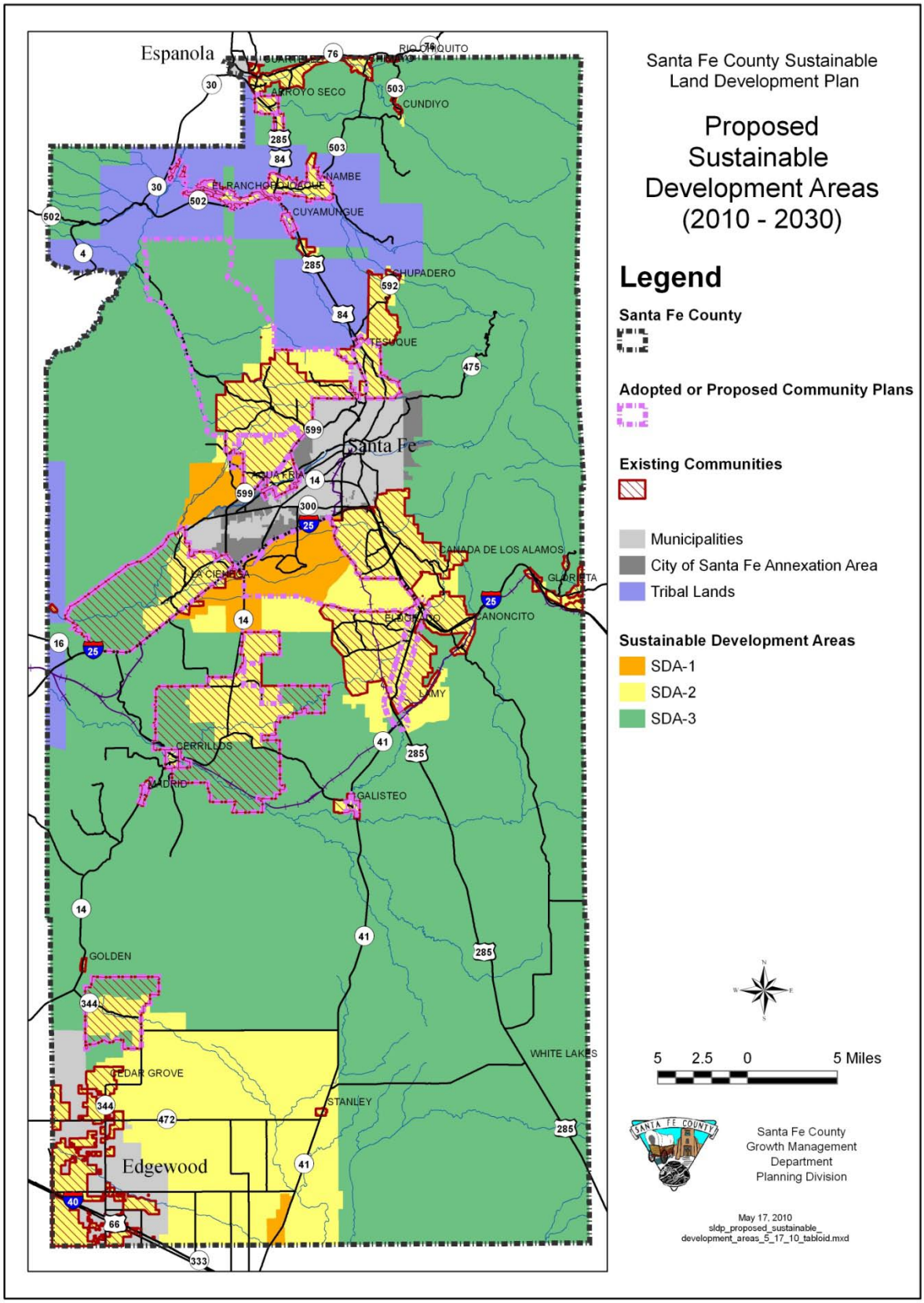
In **SDA-2**, new development is likely and reasonable to occur in these areas over the next 10 to 20 years and in some cases, as infill within existing communities within the next 10 years. Infrastructure may not be currently available, but it is planned and identified in the short- or long-range Capital Improvement Plan. Infrastructure may be reasonably available (it may be close, in time or location) and funding alternatives may be identified, but participation by new development would be required. These secondary growth areas are not expected to develop at urban intensities until public or private facilities, primarily water, sewer and improved roads, are installed, which is not intended to occur until years 10 to 20 of the SLDP planning term. Clustering may be required , but some large lot development may be permitted provided that significant open space is provided and total development capacity occurs at the maximum density identified on the future land use map.

In **SDA-3** areas, there are no plans to provide urban or suburban facilities and services. Infrastructure is not available or budgeted and any use that requires infrastructure to be provided solely at expense of new development. Urban and suburban development is not likely and reasonable to occur in more than 20 years, if at all. This area contains agricultural and equestrian development, natural resources, wetlands, hillsides and areas identified as environmentally sensitive.

In SDA-1 and SDA-2, the County can work cooperatively with the municipalities, communities and service providers to extend facilities necessary for development . The County is committed to working with each of its municipalities to ensure that growth and development improves the quality of life.

The County is committed to working with the existing communities through Community Planning Comittees, Community Organizations, and Registered Organizations. The County recognizes that the existing community planning areas have specific land use criteria and infrastructure needs established through their community plans and planning district ordinances. The communities identified infrastructure needs should be incorporated as part of the CIP process . Future planning may include community, district or area planning which may identify specific land uses and infrastructure needs for communities.

Map 2-3: Sustainable Development Areas



2.2.5.2 FUTURE LAND USE MAP

The Future Land Use (FLU) Map identifies the anticipated development patterns for the County. The map, together with the binding principles, goals and policies contained in the SLDP, will provide guidelines for legislation, zoning, administrative regulations, area and specific plans, and development applications affecting the County's future development. The classifications and graphical representations designate how the County will develop into the future. FLU categories are not zoning densities.

The future land use plan for any adopted, existing or new community, area, or district plan as shown on Map 2-3 will be an amendment to the Countywide FLU Map shown in Map 2-4 and will supersede the Countywide Future Land Use Map. The County anticipates that a district plan may be established for all or a portion of the Estancia Growth Management Area (shown on Map 2-1), excluding any previously adopted community plans. Open space protection and clustering requirements may be substantially reduced, compared to the remainder of the County, due to the substantially lesser extent of significant scenic resources and significant wildlife habitat in this area. Open space protection in the Estancia Growth Management Area will be oriented toward an interconnected system of bridle trails that will serve the lifestyle of its residents and protection of the 100-year flood plain where development is already largely prohibited by the County's land development regulations.

Specific densities will be determined through the SLDC. **Figure 2-8** describes the land use classifications used in the FLU Map **Map 2-4**. The FLU map is not the County's official Zoning Map but rather a graphical representation for future growth patterns in an area which depicts where different types of development should occur. The SLDC text and Zoning Map will determine in a more detailed manner, consistent with the FLU Map, the specific development uses, densities and area requirements that apply to a particular property. The Zoning Map will be a component of the SLDC, which is a legal document that delineates the requirements for each category of land use. Each will have a specific set of area requirements regarding site coverage, setbacks, height, parking, landscaping, open space and buffers.

2.2.5.3 ZONING AND ZONING INCENTIVES

Based on the Future Land Use Map and the SDA map, the County will be zoned into base zoning districts for agricultural-rural, residential, commercial and industrial uses, consistent with future land uses identified in Figure 2-8. Intensity and density standards shown in the Future Land Use categories will be applicable to all base zoning districts. In addition, the SLDC will provide zoning for planned development districts (commercial, office and industrial, mixed use; opportunity centers; traditional neighborhood and transit oriented development), resource protection overlay zoning districts for environmentally sensitive lands (flood hazard areas, wetlands, streams, rivers, riparian corridors, hillsides and steep slopes), supplemental use regulations for a wide variety of alternative uses, including but not limited to, adult uses, religious land uses, signs, solar and wind farms, construction of telecommunication facilities and electrical renewable energy transmission lines; principal and accessory uses and home occupations; bulk and area regulations; registration of non-conforming uses; variances, beneficial use determinations and home occupations.

Incentives will be established to encourage planned development districts, conservation and cluster subdivisions, use of renewable energy and other sustainable development and design. Incentives in the form of density bonuses will be defined through the zoning standards of the SLDC, based on the provision of location within SDAs, planned development, clustering, design and sustainability features. The following incentives are examples of greater density bonuses – as each is incentive is utilized, a greater density bonus may be authorized:

- Development is clustered;
- Extensive open space is provided;
- Energy for the proposed development site is provided by wind or solar power;
- Development meets green building standards; and
- Within SDA1 and SDA2, additional incentives may be available for mixed use, TOD, TND, Opportunity Centers and Planned Development Districts.

Map 2-4: Future Land Use

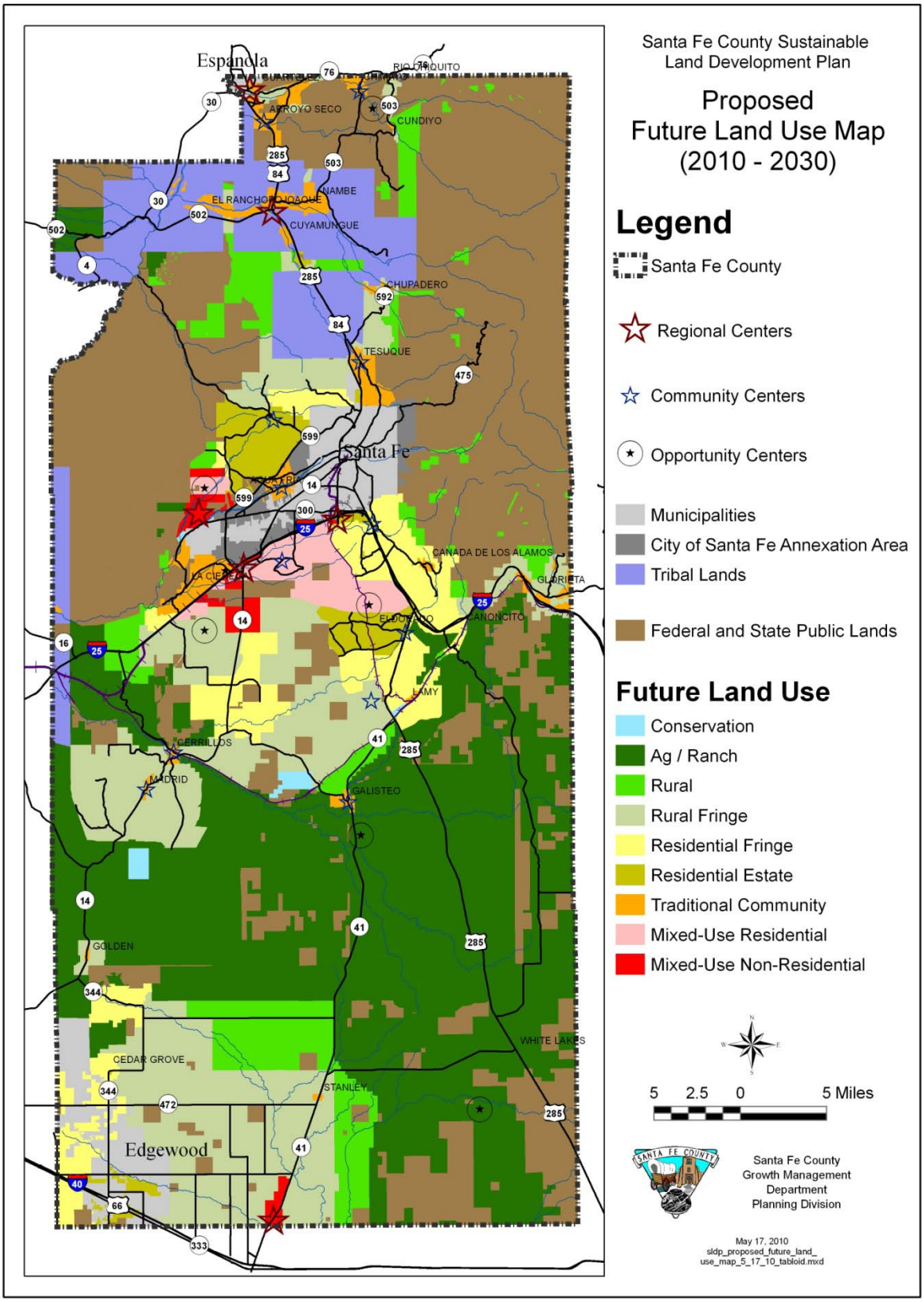


Figure 2-9: Future Land Use Categories

Future Land Use*	Purpose / Intent
Rural/Agricultural/Conservation	
Conservation	Santa Fe County Open Space
Ag / Ranch	Agricultural, ranch and equestrian uses. Also may include eco-tourism and resource-based activities.
Rural	Agricultural uses, such as the growing of crops and raising of livestock, along with equestrian and very large lot residential uses. Also may include eco-tourism and resource-based activities.
Rural Fringe	Intended to allow for minimal residential development while protecting agricultural and environmental areas that are inappropriate for more intense development due to their sensitivity. Review factors to be based on balance between conservation, environmental protection and reasonable opportunity for development.
Residential:	
Residential Fringe	Rural homes on large lots, sometimes as part of rural subdivisions (a subdivision of only a few lots and very low densities). Provides intermediate steps in development density between more typical open space lands and low residential densities.
Residential Estate	Single-family large lot residential development, consistent with contemporary community development. May include limited agricultural use secondary to residential.
Traditional Community	Single-family residential development, consistent with traditional community development. Primarily limited to existing traditional community planning areas.
Mixed Use	
Mixed Use Residential	Primary Uses are Residential. Provides a mix of residential and commercial developments requiring minimum densities to support the commercial uses. Residential, educational, non-profit, public and private uses and commercial uses are developed within a radius, which should be easily accessible by multiple forms of travel, including pedestrian travel, biking, public transit and automobiles. Commercial uses in these centers primarily support nearby residential developments.
Mixed Use Non-Residential	Primary Uses are Non-Residential. Provides a mix of commercial, office, light industrial, manufacturing and warehousing. Residential uses may be appropriate in certain locations to include multi-family residential, live-work, and artistic opportunities that may require light industrial capabilities. Transportation facilities should be readily accessible.
Activity Centers:	
Community Centers	Neighborhood or community scale shopping centers and personal and professional services conveniently located near residential areas. Includes businesses which are agriculture and natural resource-based, Intended to be designed and integrated as part of mixed use / planned development.
Regional Centers	Larger, regional scale shopping centers, which may be anchored by department or home improvement stores or other large-scale anchors, and employment centers. Intended to be designed and integrated as part of mixed use / planned development.
Opportunity Centers	Unique, site- or purpose-specific uses, not likely to be replicated in other locations, benefiting from locational attributes, such as wind, natural resources, viewsheds or recreational/environmental amenities. Non-residential uses range from energy, to eco-tourism, to supporting other economic development activities.

2.2.5.4 PRELIMINARY OFFICIAL MAP

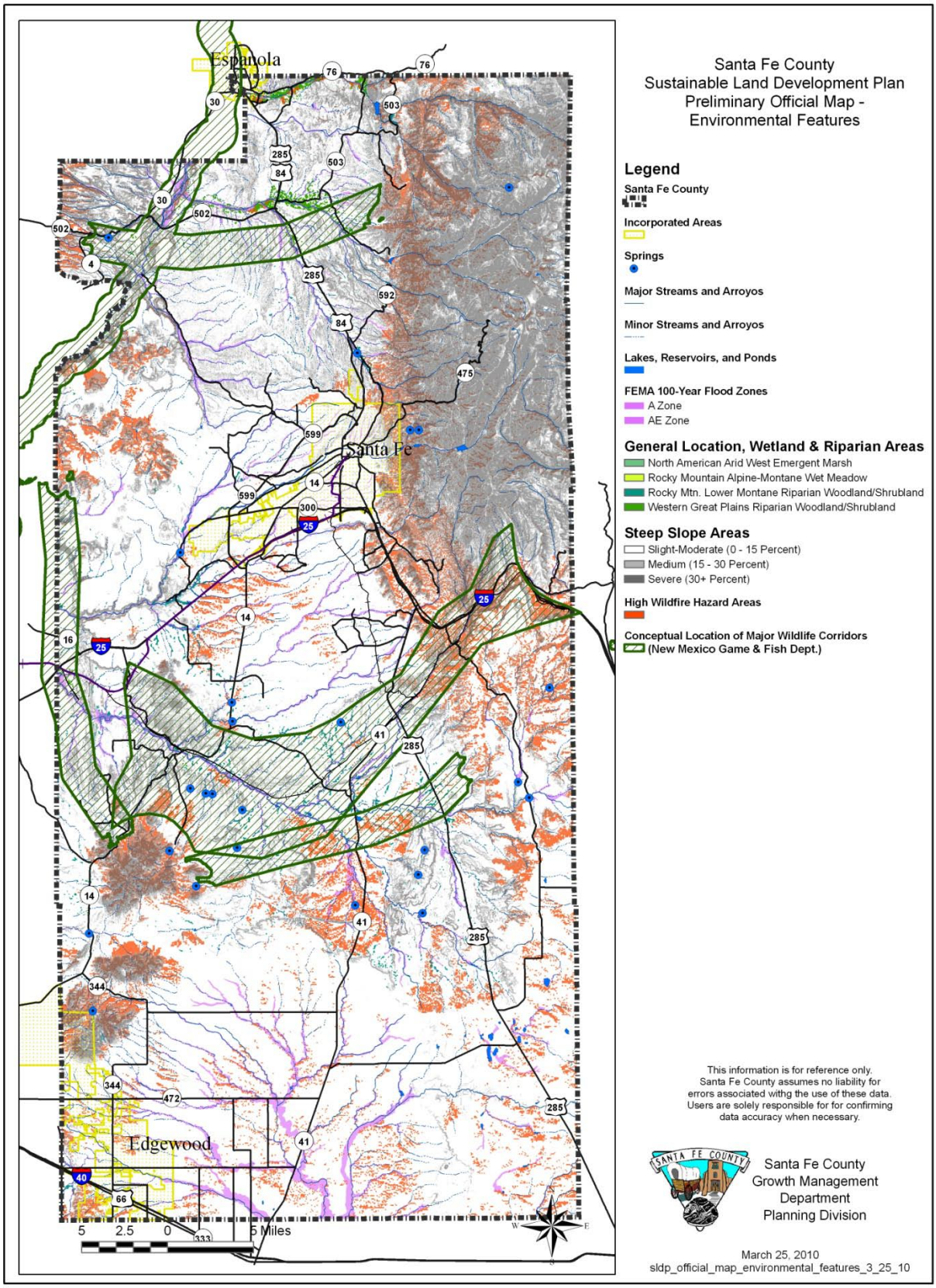
The Santa Fe County Preliminary Official Map is shown as a series of maps, **Maps 2-5 A, B, C, and D.** The Preliminary Official Map identifies the location of lands which the County has identified as necessary for future public streets, recreation areas, and other public facilities. The Preliminary Official Map, establishes the location of existing and proposed streets, open space, parks, other public lands and facilities, waterways and floodplain, informing property owners and developers of planned public improvements and land and easement acquisitions. The Preliminary Official Map identifies private and public lands for which the public may have a current or future need, identifies and protects future improvements and extensions of the municipal road network and provides notification of the location of potential public improvements and acquisitions, thus preventing construction within future rights-of-way and other future public areas and conservation easements. This should coordinate public and private goals because property owners will be informed early in the capital improvements planning process of long-range County goals for public facilities and services which allows development plans to be adjusted.

The Preliminary Official Map is not a zoning map or the future land use map, it does not imply County responsibility for opening, maintaining or improving mapped roads or facilities. The inclusion of proposed right-of-way's, easements or other public facilities on the map does not constitute the opening or establishment of the street, the taking or acceptance of land or obligate the County to improve or maintain such streets or land until the time of dedication or purchase. The Preliminary Official Map is not a taking of land; it does not prevent use of all land rights on mapped parcels. Inclusion of a parcel within the Preliminary Official Map indicates the need for additional review to ensure that the proposed use or development is compatible with existing or planned County facilities, and that development will not preclude efficient building or operation of such facilities. A final Official Map or map series based on more refined data will be adopted as part of the SLDC. The model should be updated on an annual basis, or more often as necessary due to the availability of updated data.

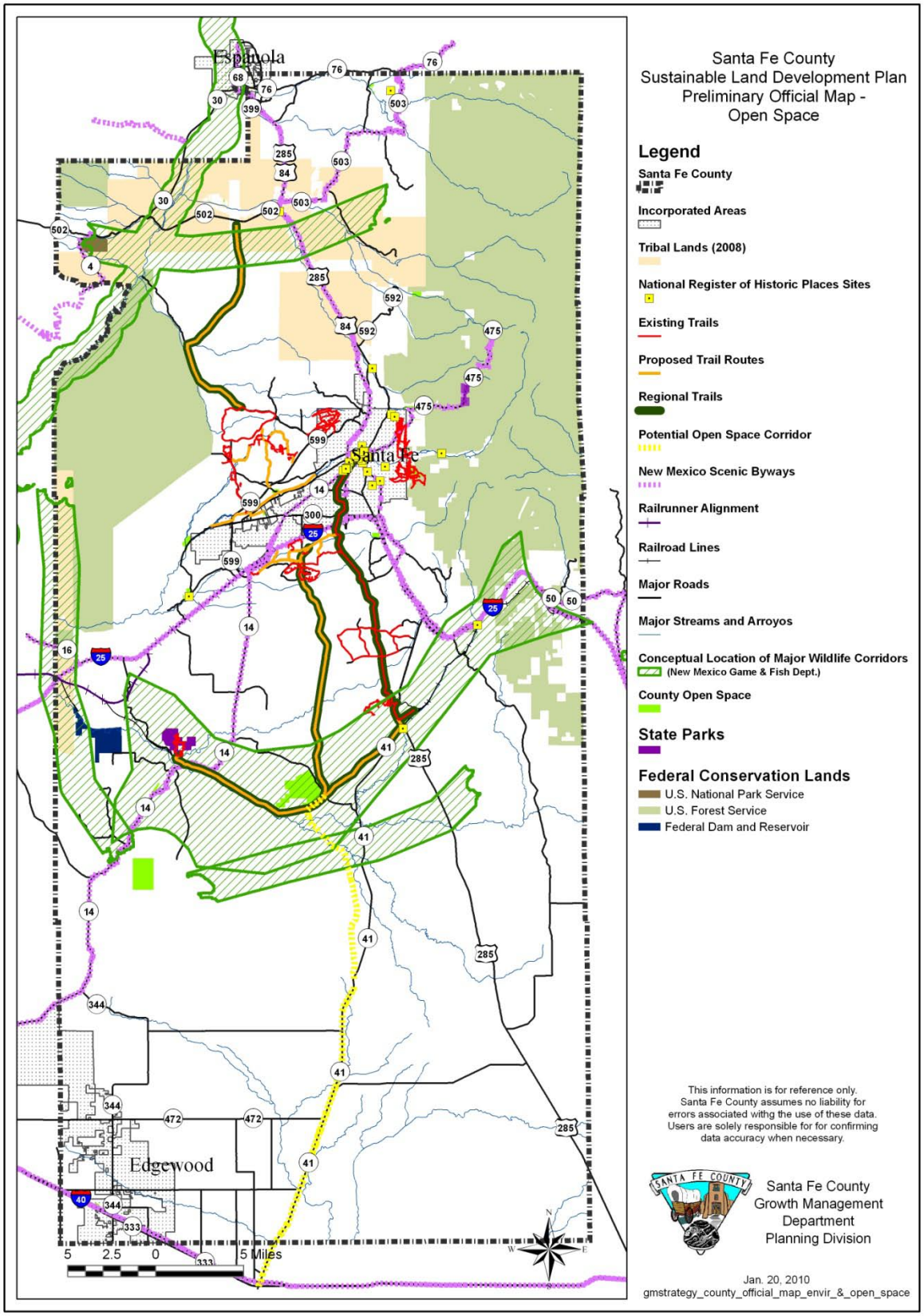
The Preliminary Official Map Series includes the following maps:

- Official Map A: Environmental Features
- Official Map B: Open Space
- Official Map C: Transportation
- Official Map D: Public Facilities and Capital Improvements

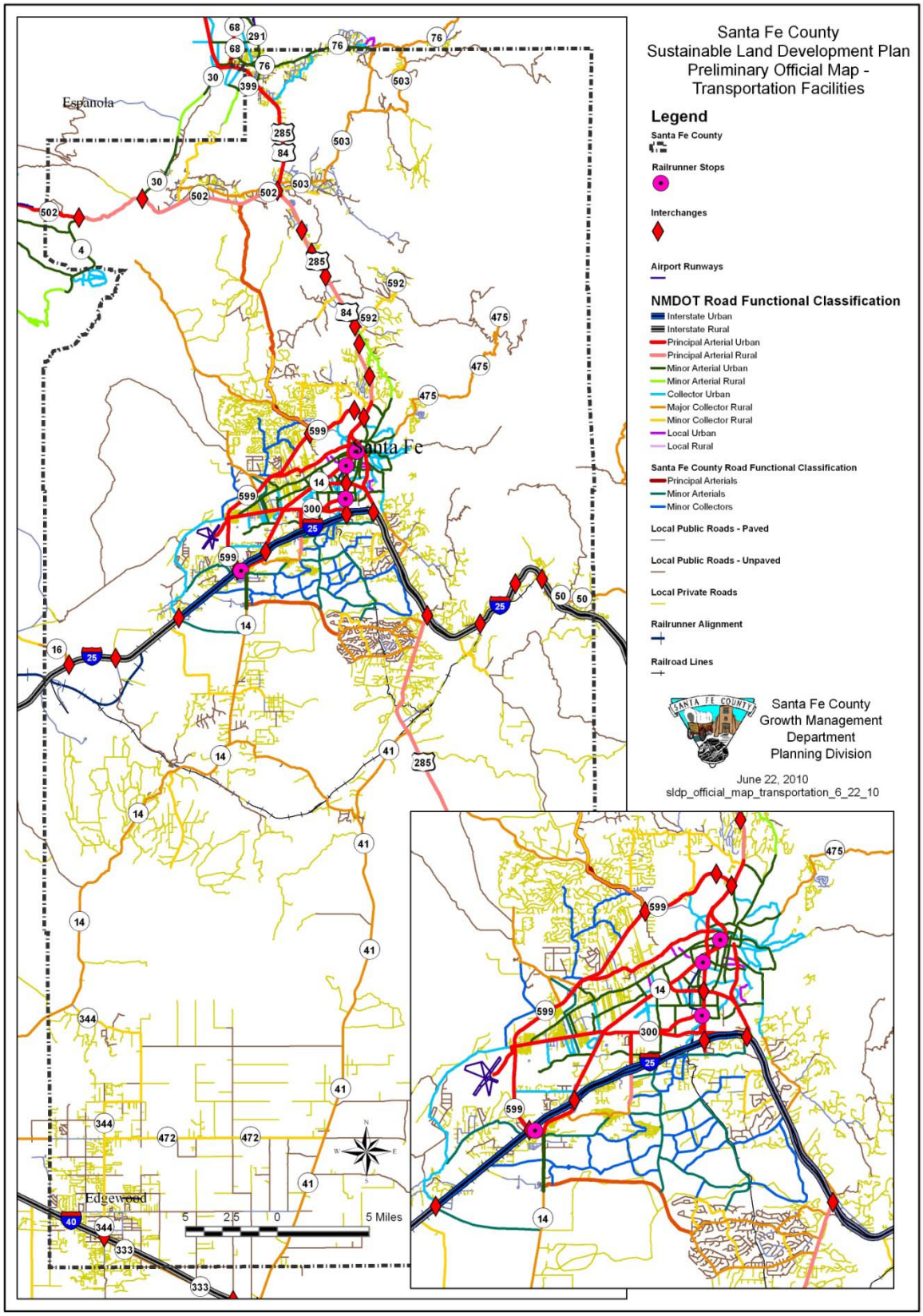
Preliminary Official Map 2-5 A: Environmental Features



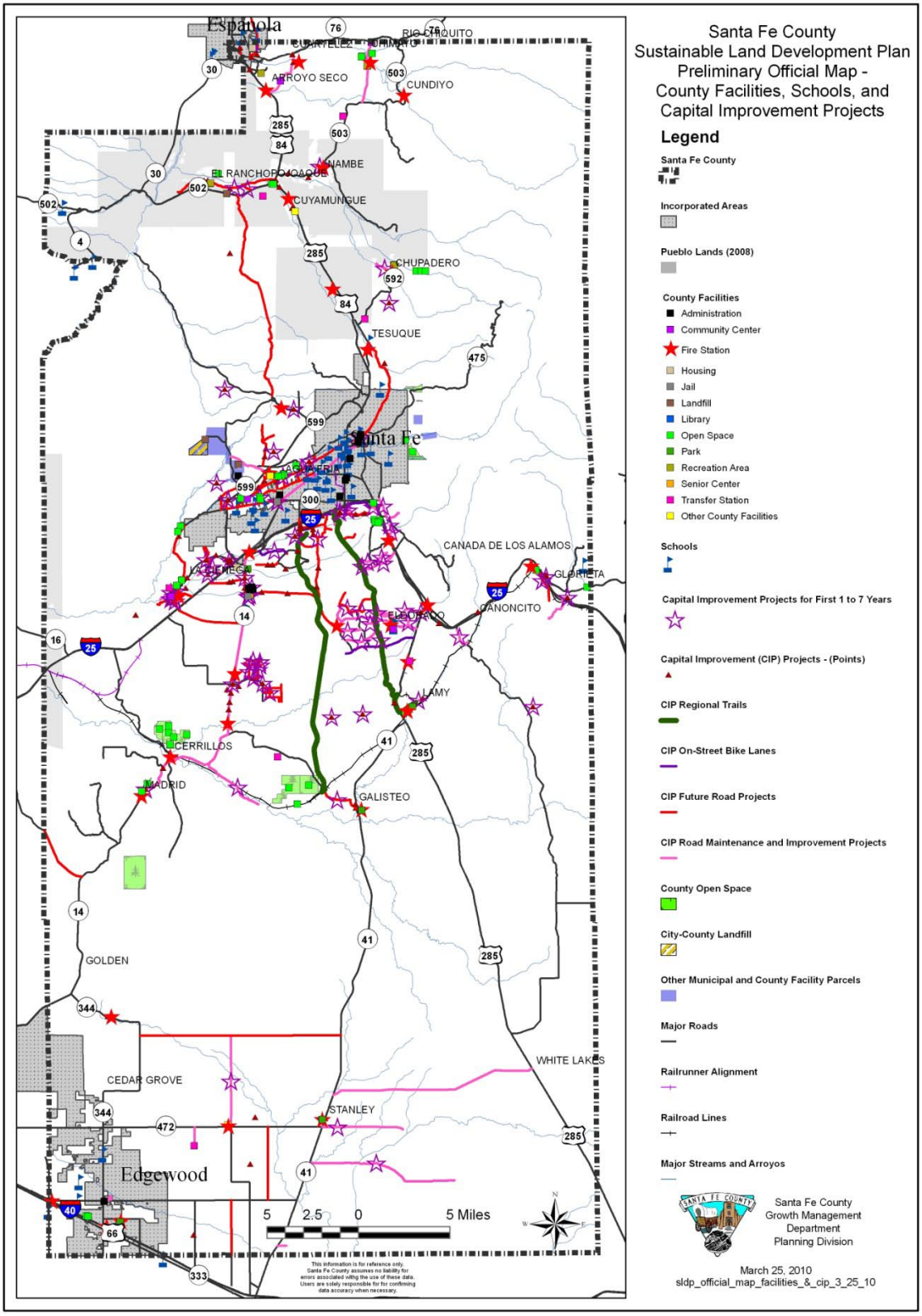
Preliminary Official Map 2-5 B: Open Space



Preliminary Official Map 2-5 C: Transportation



Preliminary Official Map 2-5 D: Public Facilities/Capital Improvements



2.2.6 OIL AND GAS

The County's existing Oil and Gas Element is incorporated into the SLDP by reference and will be recognized in the SLDC as a Development of Countywide Impact. The Oil and Gas ordinance will be incorporated into the SLDC without substantial changes, although it is expected that some aspects of the oil and gas ordinance will apply to other types and kinds of development and not just be limited to oil and gas development.

2.2.7 MINING

The County's existing mining ordinance will be incorporated into the SLDC and will be recognized as a Development of Countywide Impact. The mining ordinance should be incorporated into the SLDC without substantial changes, although it is expected that some aspects of the oil and gas ordinance may also be made applicable to mining. Sand and gravel mining of an area in excess of 2 acres may also be recognized as a DCI and subject to the requirements of the existing mining ordinance and SLDC. Sand and gravel mining of an area of 2 acres or less should be regulated in accordance with the existing sand and gravel regulations.

2.2.8 DEVELOPMENTS OF COUNTYWIDE IMPACT ("DCI'S")

Developments of Countywide Impact (DCI's) are those that have potential for far-reaching effects in the community. DCIs are developments that would place major demands on Adequate Public Facilities; that would have a major impact on the Capital Improvements planning and budget; and/or that have potential to affect the public health, safety, and welfare beyond impacts on immediately neighboring properties. Types of developments regulated as DCI's will be established in the SLDC and may include, but are not limited to:

- oil and gas drilling and associated activities as established in Oil and Gas Ordinance;
- mining, quarrying, and excavation of soil or gravel products for commercial use;
- major reshaping of land surfaces;
- feedlots and factory farms
- solar and wind farms.

Regulation of DCI's are necessary to protect the health, safety and welfare of the citizens, residents and businesses of Santa Fe County from the harmful or hazardous adverse impacts or effects of, or nuisances resulting from, mineral, ore, rock, sand, gravel, limestone, bedrock, landfill, mining, quarrying, excavation or fill activities; regulation of DCIs is also necessary to preserve the quality and sustainability of life, the economy, infrastructure, environment, natural resources and natural landscapes consistent with the SLDP, any Area, Specific or Community Plan, the CIP and the Official Map.

DCI's should be regulated in order to protect degradation of air, surface and ground water; soils, environmentally sensitive lands; and visual and scenic qualities. DCIs have the potential to expand greenhouse gas emissions and aggravate global warming; and create adverse noise, light, odor and vibration; explosive hazards; and adverse traffic congestion.

Developments of countywide impact require special regulation and application processes to ensure: short and long-term compatibility both on and off-site through an environmental impact review; an adequate public facilities and services assessment; a fiscal impact analysis ; an analysis to ensure preservation of archaeological, historic and cultural resources; an analysis to ensure protection of the quantity and quality of surface water, streams, rivers, acequias, aquifers and groundwater; and an analysis geared to preventing nuisances or adverse impacts and effects upon adjacent properties and neighborhoods.

Regulation of DCI's is also important for the protection of the scenic vistas of Santa Fe County, its natural landscapes, environment, flora habitats, wildlife corridors and habitats, environmentally sensitive areas, hillsides, wetlands, rivers and streams, flood hazard areas, archaeological, historical and cultural resources. Regulation of DCIs will protect these resources from public nuisances and will protect the long term usefulness of adjacent properties.

DCIs should be regulated generally: to protect the health, safety and welfare of the citizens, residents and businesses of Santa Fe County from the harmful or hazardous adverse impacts or effects of, or nuisances resulting from, mineral, ore, rock, sand, gravel, limestone, bedrock, landfill, mining, quarrying, excavation or fill activities. DCIs should be required to fully mitigate all adverse land use impacts and effects. Regulation is also necessary to preserve the quality and sustainability of life, the economy, infrastructure, environment, natural resources and natural landscapes consistent with the SLDP, any Area, Specific or Community Plan, the CIP and the Official Map.

2.2.8.1 RESOURCE EXTRACTION.

Resource extraction includes activities designed to mine, extract, quarry or remove minerals, ore, rock, sand, gravel, limestone, bedrock or landfill for commercial purposes; or any excavation activity that utilizes a crusher. Resource Extraction that destroys highly productive and valuable crop land should be strictly limited.

2.2.8.2 SUBSTANTIAL LAND ALTERATION ("LAND ALTERATION").

Substantial land alteration removes substantial amounts of primarily earth with mineral, ore, rock, sand, gravel, limestone, or bedrock material.

2.2.8.3 MINOR LAND ALTERATION ("GRADING").

Minor land alteration is a development activity that removes primarily earth with insignificant amounts of mineral, ore, rock, sand, gravel, limestone, or bedrock material and meets or land disturbing activities removing primarily earth, with only insignificant amounts of mineral, ore, rock, sand, gravel, limestone, or bedrock . Minor land alteration should not be regulated as a DCI.

2.2.8.4 OTHER POTENTIAL DCI'S:

Junkyards and Automobile Graveyards. Junkyards and automobile graveyards should be regulated as DCIs. At such facilities are collected junk, articles, or materials, including junked, wrecked, or inoperable vehicles. These vehicles contains hazardous materials such as oils, greases, solvents, gasoline, lead, and acid, as well as less hazardous materials like steel, rubber, glass, aluminum, plastics and other materials.

Solid Waste Facilities. Solid waste facilities should be regulated as DCIs. These facilities include sanitary landfills regulated by the New Mexico Environment Department, solid waste convenience centers, transfer stations, recycling centers, and the like. Such facilities contain many hazardous or dangerous substances, and can in many cases be considered a public nuisance from the perspective of adjoining properties. They feature dust, vapors, odors, methane gas, and undesirable traffic. These facilities must be strictly regulated as DCIs to prevent deleterious impacts on surrounding property, erosion for property values, and creation of public nuisances. Such facilities can also create environmental hazards that must be carefully studied and for which all available information must be developed for good decision making.

Other potential DCI's may be identified and regulated through the SLDC in order to protect degradation of air, surface and ground water; soils, environmentally sensitive lands; and visual and scenic qualities.

2.3 GOALS, POLICIES AND STRATEGIES

Goal 1: Land use and development should comply with the binding principles for sustainable land development established in this Plan.

Policy 1.1: All levels of County decision-making must consider sustainability, conservation of resources, energy and green development policies to ensure that resources are available to sustain future generations.

Strategy 1.1.1: Eliminate Hydrologic Zoning and replace with a more sustainable zoning system.

Strategy 1.1.2: Adopt a Sustainable Land Development Code (SLDC) to implement the SLDP.

Goal 2: Sustainable land development should provide for rational development patterns, land use compatibility and adequate facilities and services at adopted levels of service.

Policy 2.1: Establish Sustainable Development Areas (SDA) to maintain a balanced, sustainable land use pattern based on the availability, timing, adequacy and equitable funding of necessary infrastructure and services.

Strategy 2.1.1: Require new development to demonstrate the availability of adequate facilities and services at adopted levels of service, including adequate water supply.

Policy 2.2: Establish SDA-1 as priority growth areas to accommodate new compact development that is likely and reasonable to occur within the next 10 years.

Policy 2.3: Establish SDA-2 to accommodate development that is likely and reasonable to occur in the next 10 to 20 years and in some cases, as infill within existing communities within the next 10 years.

Policy 2.4: Establish SDA-3 areas to protect agricultural land, environmentally sensitive land and conservation areas.

Policy 2.5: Provide for a balanced and sustainable transition between new development and rural, agricultural and conservation areas.

Policy 2.6: Ensure consideration of the cumulative impacts of development within the area, availability of services, access to the properties, natural resources, and environmental constraints on the property to include existing agricultural, ranch and equestrian uses as part of the development review process.

Strategy 2.6.1: Require studies, reports and assessments to provide a solid basis for development review decisions.

Policy 2.7: Require that development provides adequate infrastructure as required by the SLDC. Infrastructure will be considered "available" if any one of the following is true: (i) Infrastructure is constructed and available for use, (ii) Infrastructure is privately funded and guaranteed through an appropriate surety instrument, or (iii) Infrastructure is funded for construction and scheduled for completion within two years.

Policy 2.8: Reduce per capita land consumption in the County by directing growth and requiring compact development patterns in primary growth areas.

Goal 3: The County will honor existing community plans and ordinances and continue the community planning process.

Policy 3.1: Recognize and integrate community plans, zoning and land use criteria in the SLDP and SLDC and ensure that the SDLC zoning map accommodates all current updated community plan and ordinances, zoning, and land use criteria as amended.

Policy 3.2: Amend SLDP to integrate new community plans that are approved by the Board of County Commissioners.

Policy 3.3: Community, Area and District Plans will establish community preferences for different areas in the County.

Goal 4: The County will use the Sustainable Development Areas Map, Future Land Use Map, Official Map, and Capital Improvement Plan to guide land use, development review and infrastructure provision.

Policy 4.1: The Santa Fe County Official Map, which may be shown as a series of maps, should be used to ensure the coordination and connectivity by identifying the location of lands which the County has identified as necessary for future public facilities.

Strategy 4.1.1: Create and maintain an Official Map to include up to date and accurate information on the following:

i. Existing and Proposed ROW (streets, widenings, extensions, openings or closings);
ii. Bikeway routes (trails and along existing roads);
iii. Proposed public parks, playgrounds, and open space reservations;
iv. Pedestrian ways and easements;
v. Railroad and transit rights-of-way and easements (including those that may be vacated or abandoned and have potential use as trails);
vi. Environmentally critical areas (such as unique and scenic areas, or endangered habitats;
vii. Flood control basins, floodways, and areas prone to flooding external of the FEMA floodplain;
viii. Stormwater management areas and drainage easements;
ix. Potential public well sites or groundwater resources areas;
x. Historical and archaeologically significant areas;
xi. County Utility Service Area; and
xii. Sites planned for public facilities (such as County buildings, law enforcement and fire stations, libraries, community centers, and schools)

Policy 4.2: The County should ensure that the Official Map is regularly updated to reflect any changes in development patterns or infrastructure and service provision, and, prior to amendment ensure consistency with SLDP goals, objectives, policies and priorities in the County.

Policy 4.3: The County should create a Capital Improvement Program which is regularly updated to identify areas where infrastructure and services will be provided.

Goal 5: Clarify zoning regulations and streamline the development review process.

Policy 5.1: Ensure that oil and gas, mining, and sand and gravel mining regulations are incorporated into SLDP and SLDC.

Strategy 5.1.1: Incorporate oil and gas ordinance in SLDC.

Strategy 5.1.2: Incorporate existing mining ordinance to include sand and gravel mining over two acres into SLDC.

Policy 5.2: Create a new class of Overlay Zoning District Classifications required for application of developments of countywide impact ("DCIs") including but not limited to oil and gas drilling, mineral excavation, rock, shale, limestone, gravel and sand quarrying, landfills and major land excavations.

Policy 5.3: Establish a hearing officer process for DCI applications and for beneficial use determinations to avoid potential takings claims.

Policy 5.4: Provide for financing and regulatory mechanisms including adequate public facilities review to determine whether development applications should be approved, denied or conditionally approved through the use of development agreement financing or timing and phasing.

Policy 5.5: Provide for comprehensive zoning of all land in the County, including: base zoning districts, community planning districts, planned development districts, mixed use districts, activity centers and overlay zoning districts.

Policy 5.6: Adopt new supplementary zoning use regulations for solar and wind farms, renewable energy transmission lines, telecommunications, adult uses, signs, junkyards, non-conforming uses, home occupations, airstrips, auto-oriented businesses, group homes, self storage, utilities, affordable, workforce and senior housing.

Policy 5.7: Allow for development of family compounds as an alternative to family transfers.

Goal 6: Ensure that all new development is sustainable by requiring "green" building and development techniques.

Policy 6.1: Require environmentally responsible building, site, neighborhood and community design, improvement and development standards.

Strategy 6.1.1: ***Develop a Pattern Book to identify existing settlement and building patterns, sustainable site design, building and development techniques*.**

Strategy 6.1.2: **Encourage the design of greenhouses and vegetable gardens into residential development.**

Goal 7: Development patterns should be compact to minimize sprawl and land consumption, provide transit options and meet mixed use objectives through the development of appropriate land use tools and land transfer techniques.

Policy 7.1: Development in priority growth areas should include central, mixed use walkable centers and places, and include a reasonable jobs/housing balance. Development should be served by adequate facilities at established levels of service.

Policy 7.2: Develop clustering provisions for development or conservation subdivisions.

Strategy 7.2.1: ***Develop information about alternative compact development patterns to promote further acceptance of clustered and planned development.***

Policy 7.3: Develop additional application criteria for concept plans to assure proper fit with surrounding development, infrastructure and environmental characteristics.

Policy 7.4: Allow mixed-use development and direct large scale commercial development to well-defined, compact nodes and centers and prohibit strip commercial development or spot commercial zoning.

Policy 7.5: Enhance pedestrian, bicycle and vehicle connections between stations area and surrounding residential areas, including bike lanes and crosswalks at major intersections.

Policy 7.6: Reduce negative impacts of parking areas by reducing overall parking requirements, establishing maximum parking limits, encouraging shared parking, placing parking behind and to the side of buildings, and using permeable paving and other techniques.

Policy 7.7: Incentivize planned development that provides opportunities for a wide range of residential lifestyles, work environments, and neighborhood and regional retail, entertainment, and services, compact, mixed-use, transit-oriented neighborhoods, and infill developments.

Policy 7.8: Develop a strong identity and character for transit-station areas and pedestrian-oriented places through high quality architectural and streetscape design, local and regional design elements, public art, pedestrian-oriented signage and lighting, sidewalks and crosswalks, bicycle parking, and other pedestrian amenities.

Policy 7.9: Improve streetscapes and create a sense of arrival at key gateways in communities, transit-station areas, pedestrian-oriented places, major transportation corridors and other community focal points.

Policy 7.10: Establish standards for transit-oriented development (TOD), including mixed use development to incorporate features of TOD design elements where appropriate.

Policy 7.11: Create a land density transfer program that may include exchange of development rights, transfer of development rights and or purchase of development rights.

Strategy 7.11.1: ***Assess the viability for establishing a density transfer program.***

CHAPTER 3: ECONOMIC DEVELOPMENT ELEMENT

The County should seek to generate economic activity which enhances our quality of life, provides jobs for our residents, especially our youth, enriches community life and promotes values such as a healthy environment, protection of social and cultural resources, self-reliance, self- sufficiency and entrepreneurship. A healthy, sustainable economy is an important goal and is supported through strategies that focus on performance standards to protect County resources. Support for workforce development to enhance opportunities for both employers and employees; maximize infrastructure investments to support economic development; and recruit industries beneficial to the County, including agriculture, media, clean technology and renewable energy.

3.1.1 *KEY ISSUES*

1. **Conventional approaches to economic development have not produced a diversified economy**. Changing macroeconomic conditions have been dramatically changed and the conventional economic base approach to economic development is challenged. The effects of the national recession, credit and foreclosure crisis, the downturn in construction and housing activities, and increasing unemployment rates have resulted in stagnation in the local economy.

2. **Lack of occupational diversity**. 70% of the local employment can be traced to 4 major industries and the risk of further economic downturns may create greater job loss and decrease productivity.

3. **There is a lack of resources and strategies to prepare for impacts and effects of climate change.** The anticipated economic impact of climate change is significant.

4. **Deficient essential infrastructure to support appropriate economic development activities.** Inadequate infrastructure such as broadband, energy impacts the region's ability to provide services and support appropriate economic activities including ecology-based tourism.

5. **Need for appropriate business services and support for small business and home businesses.** As economic conditions and models are changing, many businesses, especially small entrepreneurial entities will require resources to assist them in transitioning into viable operations. Equally important is the need for an environment, tools and incentives that will support opportunities related to emerging industries, technology transfers, and workforce development. Small businesses are an important aspect of the local economy.

6. **Need a workforce trained for an emerging economy**. Economic development is dependent upon an educated, trained and responsive workforce. In particular, skills in emerging industries including green technologies and alternative energy are needed.

7. **Need for resource development and partnerships to support local economy.** Limited resources require better coordination in both cost sharing and revenue and capital generation. Regional partnerships and alignment need to be further developed.

8. **Food security and local agricultural production has not been adequately addressed in the region.**

3.1.2 KEYS TO SUSTAINABILITY

1. **The strategic development of cluster industries** such as the "green" industry, arts and culture, film, agriculture, outdoor recreation and ecotourism. Other industries that fit the principles of sustainability should also be supported.

2. **Provision of employment-generating land uses and residential uses in mixed use development** should be balanced to maintain a mix of jobs and housing to provide for the needs of both employees and employers.

3. **Support and encourage local and small businesses that create employment opportunities in the County;** including but not limited to retail, office, media and film, consulting, finance, arts, manufacturing, green industry and industrial uses.

4. **Local, regional and community participation are critical** to strengthen partnerships to lower costs and share limited resources. Common and shared needs will positively impact the integration of economy, environment and community necessary for regional sustainability. Specific examples include strengthening partnerships with local and regional entities and organizations to develop targeted, shared approaches to economic development.

5. **The County needs to prepare for anticipated environmental and economic impacts and address the effects of climate change.**

6. **Provide tools and incentives to support opportunities related to emerging industries, technology transfers, and workforce development in collaboration with public and private entities.**

7. **Adequate economic development activities are needed** to complement existing and future development patterns.

8. **Support existing and future development opportunities, including youth and young adults to obtain training** to support professional career development are important, along with programs to retain young professionals.

9. **Support adequate economic development services.** Specific examples include promoting entrepreneurial and small business capacities and supporting key cluster industries.

10. **Support incentives for economic development for targeted industries and other appropriate development** in accordance with principles outlined in SLDP.

11. **Damage to the natural, scenic, and cultural environment has significant impacts on visual and natural resources** which results in reduced real estate values in this market.

3.2 CRITICAL FINDINGS

To support a sustainable economy, the County must consider current economic, environmental and demographic conditions, develop and support local and regional relationships, and recruit industries best suited to developing in the County. The County, in its effort to aid the attraction, expansion and retention of economic investment, has identified several key structural components necessary to develop a sustainable local economy which include target industries such as green industry and media/film, workforce and education, infrastructure, incentives and partnerships.

3.2.1 PARTNERSHIPS

Partnering with other governmental agencies and non-profit organizations allows for coordination and cooperation on a regional basis, strengthening economic development outreach and ensuring future economic activity is diversified and appropriate to area communities and regions/supported by these groups. Partnerships create a stronger front, allowing more targeted approaches and a greater ability to seek out desired businesses. Santa Fe County worked with the New Mexico Economic Development Department (NMEDD) and has been recognized as a Certified Community for Economic Development through the State. Santa Fe County has established several partnerships both locally and regionally in an effort to encourage economic development to include the following.

- Relationships with non-profit organizations such as the Regional Economic Development Initiative (REDI); North Central New Mexico Economic Development District (NCNMEDD); United Way of Santa Fe County; Santa Fe Business Incubator; Santa Fe Community College; Santa Fe Alliance; Santa Fe Chamber of Commerce; Estancia

Valley Economic Development Association (EVEDA), Regional Development Corporation (RDC) and the Northern Rio Grande National Heritage Area are important for the region.

- The County was a participant in the Regional Economic Development Initiative which resulted in the development of a Regional Economic Development Strategic Plan with Los Alamos County, Rio Arriba County, the Cities of Santa Fe and Española, and other local governments. This initiative has resulted in several cooperative agreements.
- The County has also worked with the Santa Fe Community College to develop a memorandum of understanding regarding the film industry and partnered with the College's Center for Community Sustainability. .

3.2.2 LEADING INDUSTRIES

The majority of the jobs in the County are in the Government and education sectors followed by leisure and hospitality and retail trade. There is a lack of diversity in employment in the County. Employment growth by industry has followed national trends. Two sectors (Educational and health services; Leisure and hospitality) added most new jobs to the local economy, while a number of other industries reported net job losses (retail trade; information; wholesale trade; professional and business services; financial activities; and miscellaneous other services), with a significant loss of jobs in the construction industry. Two industries remained unchanged from year-to-year (manufacturing and transportation; transportation, warehousing and utilities)[3]. Leading industries in the County, including major local and regional employers, can be found in **Figures 3-1** through **3-3**.

Figure 3-1: Employment by Industry (July 2009)

Industry	Number of Employees	Percent of Employment
Government	17,000	27%
Educational and Health Services	9,700	15%
Leisure and Hospitality	9,100	14%
Retail Trade	8,700	14%
Professional and Business Services	5,200	8%
Mining, Logging and Construction	3,700	6%
Other Services	3,500	6%
Financial Activities	2,700	4%
Wholesale Trade	1,200	2%
Information	1,100	2%
Manufacturing	900	1%
Transportation, Warehousing and Utilities	700	1%

Source: Department of Labor Workforce Solutions July 2009

[3] Source: New Mexico Workforce Solutions

Figure 3-2: Leading Industries by Total Revenue (2002)

Industry	Total Revenue
Retail Trade	$1,809,469,000
Health Care and Social Assistance	$501,417,000
Wholesale Trade	$463,678,000
Accommodation and Food Services	$376,204,000

Source: U.S. Bureau of the Census, 2002 Economic Census.

Figure 3-3: Major Local Employers

City and County of Santa Fe	Employees	Sector
State of New Mexico	7,643	Government
Santa Fe School District	1,850	Education
US Federal Government	1,750	Government
City of Santa Fe	1,459	Government
St. Vincent's Hospital	1,250	Medical
Santa Fe Community College	717	Education
Presbyterian Medical Services	531	Medical
County of Santa Fe	490	Government
Cities of Gold Casino	470	Gaming
Camel Rock Casino	425	Gaming
Thornburg Companies	150	Financial
Santa Fe Natural Tobacco	125	Manufacturing

Source: New Mexico Development Alliance, 2009.

3.2.3 EDUCATION, EMPLOYMENT AND JOB GROWTH

Santa Fe County, as **Figure 3-4** shows, has a slightly higher percentage of adults who are high school graduates than both the state and nation. However, the County has a much higher rate of persons with a bachelor's degree or higher than both the state (+13.6%) and the nation (+10.9%).

Figure 3-4: Educational Attainment (2007)

Level	Santa Fe County	New Mexico	United States
Percent High School Graduate or Higher	85.7%	82.3%	84.5%
Percent Bachelor's Degree or Higher	38.4%	24.8%	27.5%

Source: U.S. Bureau of the Census, 2007 American Community Survey

Job growth is anticipated to be constricted in the County in the near term as projected for the nation's economy as a whole. New jobs are currently projected to occur in occupations such as personal and professional services in the near future. According to the State, the fastest growing occupational categories in the state include personal care; healthcare services; education; community social services; and protective services.

The most recent employment data available for Santa Fe County show declines in line with much of the country. The County unemployment rate increased from 3.3% in May of 2008 to 5.5% in May of 2009 and was up to 6.7% in September 2009.

3.2.4 TARGET INDUSTRIES

The County has designated several target industries which identify desirable business types for the County. Target industries should be supported for future economic development. The industries sought are described briefly below.

3.2.4.1 "GREEN" INDUSTRY – ENERGY AND WATER CONSERVATION TECHNOLOGY

Santa Fe County has long been known for its emphasis on sustainability. With this local mindset and availability of renewable resources such as solar and wind energy potential, the County has a unique opportunity to capitalize on these strengths. To encourage the development of "green" jobs, the County has partnered with the City of Santa Fe, the Santa Fe Community College, the Santa Fe Business Incubator and Local Energy to develop a Center for Community Sustainability. The Center will provide a local venue for the development of these technologies, identify and support businesses that develop and deploy renewable energy and conservation technologies, provide workforce training and education in these industries, and work to make the County a national leader in the development of these industries. Specifically the industries targeted include renewable energy, energy efficiency, water conservation, and sustainability systems. The County is working to develop a thriving economy based on renewable energy and water conservation.

3.2.4.2 ARTS AND CULTURE

Since the 1970's, the arts, culture and tourism industry in Santa Fe County has experienced explosive growth. Visitors are attracted to Santa Fe's archeological, architectural, cultural and natural beauty. Bird watching, astronomy and observation of the night sky, kayaking, hiking and horseback riding, along with other wildlife and naturalistic pursuits draw significant numbers of tourists to Santa Fe County. The County's artistic communities, Native American Pueblos and historic sites are also important tourism draws. Santa Fe is home to such assets as an amazing concentration of artists, galleries and cultural outlets, including the Indian Market, Spanish Market, the Desert Choral, the Santa Fe Symphony, and the Santa Fe Opera. The area is also considered by many to be the Native American art capitol of the United States. The County desires to not only encourage further tourism in these industries, but also the protection of the very resources which people come to visit and enjoy.

Nearly four of every ten dollars flowing into Santa Fe County (which includes the City of Santa Fe) and one in every six workers are directly or indirectly employed by the arts and culture industry (2004 study by University of New Mexico Bureau of Business and Economic Research). The arts and culture industry accounts for $1.1 billion in revenues and accounts for 17.5% of all jobs within the County (including the City of Santa Fe). Further, of all the revenue generated by arts and culture in Santa Fe County an estimated 78% comes from sources outside the County. This means that instead of competing for money already within the community, these businesses actually bring in outside dollars, generating new incomes and creating new jobs.

3.2.4.3 FILM/MEDIA

Because of its cultural and artistic appeal, and beautiful natural scenery, Santa Fe County has become home to a growing and important film industry. Economic development incentives from the State of New Mexico have also helped to create a favorable environment for film production in the County. From 2003-2007, 32 motion pictures were shot in Santa Fe County and the production expenditure of these projects was at least $173 million. Because of secondary impacts based on economic multipliers derived from studies conducted by the State, the total motion picture economic impact within the County during the same period is estimated to be $520 million. A study done for the State in early 2009 by Ernest & Young found that the economic activity created by the film production tax

credit program not only results in additional jobs and spending within the state and its counties, but additional revenues for local and state governments. For counties the additional tax revenue alone has shown to be $0.56 for every $1.00 spent by the state on the credits.

The County developed a Media District to specifically target and support the development of the industry. With the creation of the media district the County is in a proactive position to create and support economic development opportunities in the media and film industries. The County is also in the process of identifying the infrastructure needs for the area, such as expanded broadband and special utility needs, and identifying potential funding sources for the needed improvements. Santa Fe County approved an economic development ordinance to support Santa Fe Studios as a public/private economic development project.

Workforce development is an important aspect for the continued success of the film industry. Several entities support education and workforce training programs for the film industry in the County, including Santa Fe Community College, the Institute for American Indian Arts (IAIA), and the College of Santa Fe. Santa Fe Community College currently provides training to students to prepare them for work in the film industry and has formed a working partnership with the local film technicians' union to provide training and mentoring for students. Additionally, the Santa Fe Community College Training Center, a non-profit organization, was established to meet the needs for job training in the film industry and plans to develop film production, film scene design, construction and training options within its curriculum. Numerous other regional film resources include the College of Santa Fe, offering a comprehensive program that integrates film, video and digital production with critical studies and writing, including a stand-alone documentary studies program.

3.2.4.4 AGRICULTURE

Agriculture is an important industry throughout the County. In addition to local farmers' markets, there are opportunities for value added agriculture and local food production.

The majority of mid-size and large farms and ranches within the County process and sell products nationally without value added production. The lack of local processing infrastructure and local markets reinforces this trend and hampers the local economy. Supporting agriculture production requires enhanced local markets and policies that support agriculture, such as allowing on-site farm stands, supporting community farmers' markets, and value added food production and infrastructure to support food processing.

3.2.4.5 ECOTOURISM AND OUTDOOR RECREATION

Visitors are attracted to Santa Fe's archeological, architectural, cultural and natural beauty. Ecotourism is an important industry that creates jobs by drawing businesses and visitors to the area. Conservation of open space and environmentally sensitive areas is important for ecotourism because visitors and residents are drawn to areas with a high quality of life with open spaces in and near to urban areas. Since the 1970's, the tourism industry in Santa Fe County has experienced explosive growth. Within Santa Fe County, tourism is a significant and clean industry with great influence over the County and regional economy. Protection of these unique environmental and cultural resources will ensure that our competitive advantage in tourism is preserved and enhanced to ensure the viability of tourism.

Ecotourism is the fastest growing segment of a $699 billion dollar tourism industry, and a significant amount of tourist activity in Santa Fe County can be regarded as "ecotourism." Ecotourism includes all tourist activities that have a reduced impact on the natural environment, encourage education and awareness of the environment and culture of a place, and that improve the welfare of the local people. These types of activities include scenic trips, such as visiting National, State and County parks and wildlife preserves, educational and awareness trips, such as guided tours, and volunteer trips, as well as canoeing, hiking, and other outdoor adventures. Ecotourism is increasing in popularity in concert with the growing popularity of green products, sustainable development and environmentally friendly alternatives to conventional standards of the past. Because of the sustainable culture encouraged in Santa Fe County, the favorable climate and abundant outdoor recreation opportunities, ecotourism

can be a fast growing and important economic development component for the County in the near future, provided that it "fits" with the environmental and community constraints.

The County's artistic communities, Pueblos and historic sites are also important tourism draws. It is important to note that promoting developing ecotourism is only one component of a successful ecotourism development program. First and foremost, a healthy environment with connected, protected and accessible natural areas is critical. For the County to protect its ecotourism assets, it must prevent development, including oil and gas development, from infringing on a critical mass of natural preserves.

Outdoor recreation is an important draw for ecotourism in the County. The high desert climate, with four attractive seasons and abundant sunshine, along with expansive open spaces and a rural, outdoor culture provide numerous opportunities for recreational activities such as tennis, hiking, golfing, skiing, horseback riding and resort activities which are already prevalent in the County. Opportunities related to outdoor recreation include further development of ranch and agricultural heritage sustaining activities in the Estancia Valley and other areas, outfitters and existing guest ranches in the County.

3.2.5 INFRASTRUCTURE

A key to attracting and keeping both existing industries and the target industries described above is the development of twenty-first century infrastructure within the County. Without adequate infrastructure, other community and economic activities are weakened and increasingly difficult to support. In assessing current strengths and weaknesses related to infrastructure, the County has identified regional infrastructure development in broadband, renewable energy and agriculture infrastructure, as key to advancing the local economy into the future.

3.2.5.1 BROADBAND

New Mexico ranks 45th out of the 50 states in broadband access. Further, 75% of the download speed in the state falls below the nations' average, rendering access and capacity in this information-age society and economy more difficult. Broadband provides a conduit to open and accessible government, enhanced business competitiveness and an improved quality of life, through improved delivery of services such as health care, education and public safety. Because of the importance of access to quality broadband connections, and its ties to numerous quality of life issues, the County has identified the provision of a strong broadband infrastructure as the number one infrastructure priority.

3.2.5.2 RENEWABLE ENERGY

To offset the high cost of energy production, distribution and consumption the County desires to foster a "green grid" infrastructure. Focusing on energy efficiency, energy conservation, and the development of "green" energy production, distribution and consumption within the County itself, the County is currently working to make these infrastructure improvements more likely to occur through the development of a Renewable Energy Financing District. The District, created to provide viable financing options to address the barrier of high upfront costs of renewable energy development, offers an alternative financing method with long-term and low cost financing, including repayment through a special assessment on property tax bills. In addition to a benefit to industry, this district will also allow residential and commercial property owners to be able to make renewable energy improvements in an accessible and affordable manner. Property owners will be able to opt into the district, therefore making participation a voluntary measure.

3.2.6 TOOLS AND INCENTIVES

In collaboration with regional partners and other local government entities, Santa Fe County offers the tools and incentives listed in **Figure 3-5** as part of its economic development program. The County either facilitates the program listed or offers assistance in explaining how the program works and how to apply/receive the award.

Figure 3-5: Available Tools and Incentives

Assistance With Local Economic Development Act (LEDA)	Solar Market Development Income Tax Credit
Assistance with local real property acquisitions and development processes	Bio Fuels Production and Sales Tax Incentive
Potential partnership with funding and resources development in support of targeted industries	Manufacturers' Investment Tax Credit
New Mexico Business Bonds	High Wage Job Tax Credit
Industrial Revenue Bonds	Technology Jobs Tax Credit
Community Development Incentive Act (Property Tax Exemption)	New Mexico 9000 ISO Compliance for Small Business
New Mexico Job Training Incentive Program (JTIP)	Investment Tax Credit for Manufacturers (Investment Credit Act)
Agribusiness Production Tax Deductions and Exemptions	Child Care Corporate Income Tax Credit
Call Center Capital Equipment Tax Credit	Cultural Property Preservation Tax Credit
New Mexico Rural Job Tax Credit	Rural Software Gross Receipts Tax Deduction
Film Investment Program	Distilling and Brewing Preferential Tax Rate
Film Production Tax Credit	Energy Efficiency and Renewable Energy Bonding Act
Renewable Energy Production Tax Credit	Income Tax Exemptions for Certain Taxpayers
Alternative Energy Product Manufacturer's Tax Credit	Expand Renewable Energy Production Tax Credit
Advanced Energy Tax Credits	Biomass-related Equipment Tax Deduction
Wind Energy Equipment Gross Receipts Tax Deduction	

3.3 GOALS, POLICIES AND STRATEGIES

Goal 8: Pursue a diverse and sustainable local economy that integrates environmental and community needs and supports the local workforce and provides new opportunities for local employers and residents.

Policy 8.1: Adequate public facilities, services and housing should be provided efficiently to support compatible economic development.

Strategy 8.1.1: ***Continue to assess and enhance the capacity of the broadband infrastructure to provide enhanced connectivity for economic development, public safety, law enforcement, health care, and e-government services to include Community College District, and other important areas of the County including rural areas.***

Policy 8.2: Direct economic development to Opportunity Centers and major transit-oriented development sites served by facilities and services through requirements and incentives.

Policy 8.3: Identify capital facility needs necessary to promote economic development in the Media District and other economic development areas in support of targeted industries and include these projects in the CIP as they are identified and funding is procured.

Policy 8.4: Identify appropriate locations throughout the County for economic development uses, industrial uses, large institutions and regional uses.

Policy 8.5: Coordinate land use and zoning to require and incentivize a broad mix housing types to address workforce housing.

Policy 8.6: Require planned developments in SDA 1 and SDA 2 to include a broad mix of housing types, with a range of housing costs in support of workforce housing needs.

Policy 8.7: Require mixed-use development that balances employment-generating land uses with residential land uses to attain a balance of jobs and housing.

Policy 8.8: Support efforts to provide a high quality workforce through workforce development and leadership training.

Strategy 8.8.1: ***Conduct a study to identify available and needed workforce skills for current and future businesses.***

Strategy 8.8.2: ***Coordinate with other entities on programs to retain young professionals in Santa Fe County.***

Policy 8.9: Coordinate with Santa Fe County educational programs and institutions to provide effective core education and lifelong learning opportunities for all residents.

Strategy 8.9.1: ***Support efforts to establish workforce training programs with the Santa Fe Public Schools, Santa Fe Community College, St. John's College, College of Santa Fe, University of New Mexico and Los Alamos National Laboratories that focus on targeted industries such as media, renewable energy, technology and value-added agriculture.***

Strategy 8.9.2: ***Coordinate with the Los Alamos National Laboratory on workforce development and small business mentoring in the region to develop new technology businesses.***

Strategy 8.9.3: ***Coordinate with educational programs and institutions in the County to provide effective core education and lifelong learning opportunities for all residents.***

Policy 8.10: Support development of industries with sustainable wages and high quality work environments, including cluster industries such as value-added agriculture, technology, renewable energy and new media.

Strategy 8.10.1: ***Coordinate with community organizations and institutions to develop detailed information on business financing and incentive programs and make this information available to business prospects.***

Strategy 8.10.2: ***Support efforts to recruit place-neutral export businesses such as consulting to capitalize on high quality of place in Santa Fe County.***

Strategy 8.10.3: ***Coordinate development of promotional materials and conduct proactive, targeted recruiting to develop and strengthen industry clusters and exports.***

Strategy 8.10.4: ***Develop incentives to encourage renewable energy, sustainability-related, and environmentally clean industries to expand or locate in the County.***

Policy 8.11: Arts, Culture and Tourism should be supported as a critical component of the County's economy, through support of local arts, art-related business and cultural events.

Strategy 8.11.1: ***Coordinate tourism and eco-tourism development efforts with the State Tourism Department, the Cities of Santa Fe, Rio Arriba County, EVEDA, the Northern Rio Grande National Heritage Area and other local organizations.***

Strategy 8.11.2: ***Explore the potential for the creation of a Galisteo Basin Archeological Center.***

Strategy 8.11.3: ***Provide infrastructure to serve and support the County's tourist destinations.***

Policy 8.12: Agriculture, ranching and community-based agriculture will be supported and protected as a critical component of the County's economy.

Policy 8.13: Rural and agriculture dependent commercial and industrial uses should be supported at appropriate locations in rural and agricultural areas.

Policy 8.14: Provide infrastructure to serve and support the County's tourist destinations.

Strategy 8.14.1: ***Coordinate with communities and assess arts and culture industry to determine needs for supporting events and activities that attract and serve tourists.***

Policy 8.15: Santa Fe County should be maintained as an "artistic" community, through support of local arts, art-related businesses and cultural events.

Strategy 8.15.1: ***Coordinate with the City of Santa Fe and local communities on the development of artisan studios and additional places for the display of art, such as sculpture exhibitions, open air markets and community arts venues.***

Policy 8.16: Small business development, enterprises, compatible home based businesses and studios should be supported.

Policy 8.17: Support incentives to encourage local businesses to retrofit buildings to achieve code compliance.

Policy 8.18: Coordinate with local banks, mortgage companies, venture capital programs, and the small business administration to develop strategies for providing assistance to local businesses.

Policy 8.19: Support adequate telecommunications, cellular service and high speed internet and require new development to provide high speed communication infrastructure where applicable.

Policy 8.20: Community-based economic development should be supported including development of local products, labor and markets.

Strategy 8.20.1: Support Santa Fe Business Incubator and efforts to support start-up businesses, especially in smaller communities.

Policy 8.21: Coordinate and communicate rural community needs to economic development organizations and agencies.

Policy 8.22: Support partnerships and coordination to promote regional economic development.

CHAPTER 4: AGRICULTURAL AND RANCHING ELEMENT

This chapter looks at the issues facing agriculture and ranching practices in Santa Fe County today including food security, diminishing farms and ranches due to financial constraints and development pressures and limited resources and incentives. Recommendations to maintain and improve agriculture, ranching and acequia systems are addressed, including tools and incentives to preserve and support agricultural and ranching practices, and ways the County can proactively look at addressing food security needs and sustainable food systems. The County's keys to sustainability lie in developing a thriving community-based agricultural system that supports the local production of agricultural products in as many forms as possible, including community gardens, programs to educate its citizens in how to be successful growers, water catchment systems, and through the development of as many markets for the sale of local food as possible.

4.1.1 KEY ISSUES

1. **Diminishing farm size and profitability**. The size of farms in the County has decreased and the County has lost large amounts of agricultural land to the subdivision of arable land and development. Agriculture is an important part of the local economy, but farming operations often operate at a loss. Profitability is increasingly difficult as the high cost of farm land and ack of incentives for agricultural production contribute to the decline of farming and ranching practices.

2. **Need for enhanced food security and local food sustainability.** Santa Fe County faces a broad range of food supply issues including diminishing agricultural production trends, natural resource constraints, availability and access to processing and distribution facilities, origins and destinations of food imports and exports, and efficiency of transportation from farm to plate. More support is needed to ensure that local agricultural systems are operating at a sustainable level where all residents are able to access affordable healthy food.

3. **Limited water supply and water quality issues.** The scarcity of water may limit agricultural productivity. Limited water supply and multiple demands and priorities on water results in the transfer of water rights away from arable land to other sources. Degradation of water supply and quality due to development threatens traditional agriculture as well. Large scale farming itself is a leading source of groundwater and surface water pollution due to fertilizers, pesticides and soil erosion, and best management practices must be employed.

4. **Shifting climate patterns.** Higher ambient air temperatures, fluctuations in wind patterns, evapo-transpiration and other interrelated weather patterns have contributed to prevailing drought conditions, altering or creating local microclimates. These shifting patterns will have long term effects on agricultural and acequia practices.

5. **Fragmentation of agricultural land and development pressure.** Development pressures contribute to the break-up of large farms and ranches and the fragmentation of the agricultural areas make on-going agricultural operations less viable. As large ranches are developed, the trend has been to large-lot development. Farm and ranchland transition to other uses as aging farmers retire.

6. **Encroachment on agricultural lands.** Prime agricultural lands (class I) are limited, and land consumptive development patterns encroach into agricultural areas and contribute to land use incompatibilities.

7. **Lack of recognition of acequia governance and of their fundamental landscapes.** The loss of institutional knowledge of acequia systems occurs as newcomers move into an area and do not see the value of participating in its governance. There are a wide variety of issues impacting acequia systems, including the loss of cultural knowledge and traditions, acequia abandonment, small family lot transfers, acequia water rights transfers, and encroachment and fencing off of easements.

8. **Vulnerability of acequia systems.** Unresolved and on-going issues affecting the acequias include constant pressure for development and water rights issues. The preservation of acequia landscapes will depend upon the availability of and protection of agricultural land, surface water flow and a continuance of the historic traditions of acequia communities. The lack of data and mapping of acequia systems further contribute to the lack of knowledge and vulnerability.

4.1.2 KEYS TO SUSTAINABILITY

1. **Support and promote local agricultural and value-added specialty products** through marketing, local purchasing programs, farmers markets and community supported agriculture programs, including local purchasing for County facilities.

2. **Maintain agricultural operations** first, and then ensure preferred development patterns if and when ranches are developed. Traditional agriculture should be preserved and supported through technical assistance, preferential taxation, protection of water resources, local capacity building and other support.

3. **Protect agricultural and ranch lands through a variety of incentives and tools** which can be used to maintain agricultural and ranch uses, including transfer and purchase of development rights programs, conservation and development easements and state and federal income tax credits and deductions to allow farmers and ranchers to receive economic benefit from their property while maintaining it in agricultural use.

4. **Promote the use of clustering lots, homes and structures to preserve,protect and support agricultural uses**. Leap frog development should be discouraged as they not only break up agricultural land, but also have adverse effects on ongoing agricultural operations and the fiscal resources of the County. Development should be directed into compact areas to preserve a critical mass of agricultural land.

5. **Support local food systems and food security**, including seed and food sovereignty. Support local food systems through individual, community and school gardens, farmers' markets, community kitchens, regional composting programs, food banks, food distribution and emergency facilities. Agricultural production can be increased to meet the need for local food security with the utilization of partnerships and collaboration with existing organizations and agencies focusing on these initiatives.

6. **Protection of water availability for agriculture**. Residential and commercial water users should emphasize conservation and water quality protection in order to support the availability of water for agricultural uses. Supporting the use of rain collection and water conservation are viable options. The use of rain fed agriculture where collected water is used to irrigate crops is an option for the future of community-based agriculture.

7. **The recognition of acequia governance and acknowledgement of their fundamental landscapes** as viable land-based agro-economic systems is the key to their survival. The connection of land, water and culture is exemplified in acequias where the cultural identity of a community is able to link past and present. Protect acequia infrastructure through coordination with acequia associations and parciantes regarding easements, buffer zones and water rights issues.

8. **Map acequia water courses and their associated landscapes** to better understand the connectedness of the system. The County should develop a comprehensive hydrographic layer of the acequias areas. This will help the County and the acequias maintain the acequias as viable watercourses that contribute to the sustainability of our communities. Coordinate with the New Mexico Acequia Association and other State wide acequia organizations on acequia system related issues and opportunities.

9. **Establish partnerships through the Food Policy Council** as well as other local and regional organizations in the agricultural sector will help the County to be proactive in respect to agricultural sustainability, food systems and food security. The County should continue to assist the Food Policy Council's by identifying funding sources to support the mission of the Council.

4.2 CRITICAL FINDINGS

Agriculture and ranching practices have maintained historic settlement patterns and economic base in Santa Fe County, especially in traditional communities. Preserving and protecting agricultural and ranching in the County is crucial to sustaining the diversity of cultures, local economy and the overall quality of life for residents of the County. Acequias support agro-economic systems and have been the key to the survival of local communities and cultural continuity.

4.2.1 FARMS AND RANCHES

New Mexico agricultural dates back over a thousand years to aboriginal times. Pueblo Indians in the upper Rio Grande area cultivated fields of small crops such as corn, beans, and squash. During colonial times the Spaniards planted fields and extended irrigation ditches or *acequias*. The Spanish colonists cultivated other crops that diversified the native diet and expanded agricultural productivity. The majority of their farming techniques were subsistence based and a bartering system was created which led to the sharing and exchanging the cultivated products.

The arrival of the railroad in 1880 resulted in significant changes in the basic subsistence pattern of farming and ranching. Some new techniques, tools, and seeds from the east coast were introduced and a cash economy developed. Traditional methods, customs, and indigenous seeds are still being used among contemporary agricultural and ranching communities in Northern New Mexico. According to the 1950 Census of Agriculture, there were 895 farms in the County in 1950 which consumed almost 1 million acres of land.

Acequias support agro-economic systems and have been the key to the survival of local communities and cultural continuity. The connection of land, water and culture is exemplified where the cultural identity of a community is able to link the past and future where acequias exist via a topographical setting that conforms to the lay of the land. Other more recent cultural imprints are the homesteading settlement patterns in parts of the County.

4.2.1.1 AGRICULTURE AND RANCHNG PARTNERSHIPS

The following organizations, groups and government entities include those that Santa Fe County has either partnered with in the past, or has the potential to collaborate and partner with in the future regarding agriculture, ranching, and acequia related initiatives and projects: community based agriculture groups (La Cienega/La Cieneguilla, Tesuque, Pojoaque Valley, Santa Cruz, Agua Fria, La Bajada, Chimayo, Galisteo and Edgewood/Stanley); Santa Fe Alliance; Santa Fe Farmers Market Institute; Beneficial Farms; Santa Cruz Farms; New Mexico Acequia Association; Agriculture Revitalization Initiative; Farm to Table; Pojoaque Valley Irrigation District; Santa Cruz Irrigation District; Santa Fe Downs/Pojoaque Pueblo Community Farmers Market; United Way of Santa Fe County; Santa Fe City and County Advisory Council on Food Policy; Food Depot; Kitchen Angels; NM Food Gap Task Force; NMSU Cooperative Extension Services; Institute of American Indian Arts; Santa Fe Community College Tribal governments and Land Grant Associations.

4.2.1.2 AGRICULTURE PRODUCTION

According to the 1998 Agriculture and Ranching study commissioned by Santa Fe County, agricultural production consisted of small-scale livestock production and field and orchard crops in the north, and larger farms and ranches in the southern part of the County. Cattle and horses made up the majority of the common livestock. The majority of crop production consisted of alfalfa, but there were orchard and vegetable crops as well. Overall, the study concluded that the economic returns for farming and ranching have continued to decrease, making it difficult to pursue farming and ranching as a livelihood. **T**he majority of agricultural land is used for livestock, mainly cattle and calves. Corn is the top crop item in acreage, with 4,357 acres being used for corn while 3,644 acres was used for forage including hay.

Active ranching and farming operations in the County include:

- Traditional agriculture employs acequia irrigation and is mainly located in the valleys of the northern and central portions of the County. Crops include alfalfa and hay, vegetables, fruit, and specialty crops. The scale of traditional agriculture ranges primarily from small family farms and gardens to larger acreages for forage crops.
- Modern agriculture that employs pivot (groundwater) irrigation, mainly located in the southern end of the County in the Estancia Basin.
- Ranching and grazing uses, which are located in all parts of the County, but are mainly concentrated in the Galisteo and Estancia Basins. Livestock grazing potentially occupies up to about 520,514 acres on private land in the unincorporated County. The exact number of acres currently used for grazing is unknown, and depends on the availability of forage, the market for livestock products, and state and federal policies with respect to grazing on public lands.

4.2.1.3 FARM CHARACTERISTICS

Number and Size of Farms. According to the U.S. Department of Agriculture (USDA) 2007 Census of Agriculture, there were 489 farms in the County and 569,404 acres of land in agriculture. Eighty six percent of land in farms is identified as pasture land. The number of farms increased from 460 in 2002, while the total amount of land in farming decreased by 17% from 2002, when there was 683,508 acres of farm land. The average farm size also decreased during this time 22%, from 1,486 in 2002 to 1,164 acres in 2007. In 2007, there was an increase in smaller farms from 1 to 179 acres, while there was a decrease in larger farms from 180 to 499 acres from 2002.

The number of irrigated farms did not change from 2002 to 2007. However, the number of acres of land in irrigated farms decreased significantly from 351,952 acres in 2002 to 186,131 acres in 2007. In 2007, 106 farms were less than 10 acres, encompassing a total of 308 acres. (Source, 2007 Census of Agriculture USDA)

165 cattle farms were identified in the 2007 Census of Agriculture, an increase from 147 in 2002. The total number of cattle declined in 2007 to 7,797 head, down from 10,961 in 2002. The total number of beef cows also significantly decreased over this five year period from 7,729 to 3,871 beef cows in 2007.

Economic Impact of Agriculture. The market value of agricultural products sold including crop sales and livestock sales increased by 7% from $11,783,000 in 2002 to $12,614,000 in 2007. Crop sales were $8,591,000 (68%) while livestock sales were $4,023,000 (32%). The average per farm reporting sales was $25,795.

4.2.1.4 COMMUNITY-BASED AGRICULTURE

Community-based agriculture is a local food network that provides a locally based, self-reliant food economy - one in which sustainable food production, processing, distribution, and consumption is integrated to enhance economic, environmental and social health. Community-based agriculture can include programs and initiatives such as farmers' markets, community gardens, food co-ops, Community-Supported Agriculture (CSA), and seed saving and seed sovereignty initiatives.

Historically, community-based agriculture has been the backbone of community development since the settlements of the traditional communities. Overall, survival on the land depended upon being able to grow one’s own food. If a crop couldn’t be grown or gathered, residents would barter with relatives and neighbors. Traditional communities had knowledge about butchering and preserving, and there was local infrastructure in place to mill grains. Farmers know which crops grew best in their region, and seed saving was a part of the agricultural process. Over time, as more food became available in commercial outlets, surplus agriculture was shipped out of state. Cheap processed food was trucked in from the coasts, and the need for milling, butchering and other infrastructure started to decrease.

Santa Fe County is home to the state's oldest and largest farmers' market. Considered one of the top ten in the nation, its 150 farm and ranch families from 15 northern New Mexico Counties sell year-round in a permanent facility in the Railyard District. Of the 150 members of the Santa Fe Farmers' Market, more than a third of the sellers come from Santa Fe County. Other farmers markets have since been created in the County including La Cienega, Pojoaque and Eldorado, and in nearby Counties in Pecos, Dixon and Los Alamos, giving the smaller scale agricultural producers a viable means of making a living through direct sales. In 2009, gross annual sales at the Santa Fe Farmers' Market alone exceeded $2 million annually, serving more than 180,000 people annually.

As farm and ranch families have prospered at the farmers markets, other new and emerging markets started have to develop, such as opportunities for sales to schools through the Farm to School Program, to restaurants through the Farm to Restaurant program, and to local grocery stores that want to offer more local products. In addition, a new home processing rule may soon make it possible to provide salsas and other value added products to institutional sales, and as processing centers are created, the need for clean and bagged products will be easier to accommodate. As agriculture re-emerges as a viable economic opportunity in Santa Fe County, so, too, does the need for the infrastructure to support these emerging markets. There is a need for a regional transportation system to move the products from southern and northern farms to distribution areas or facilities. La Montanita Co-Op and the Rail Runner train system offer viable transportation opportunities to support a community-based agricultural system.

Community Supported Agriculture programs or CSAs are another mechanism of community-based agriculture in which a long-term relationship of mutual support is created between local farmers and community members. The buyer pays the farmer an annual membership fee to cover production costs on the farm. In turn, buyer members receive a weekly share of the harvest during the local growing season. Distribution is usually done at farmers' markets or parking lots, but many other options are emerging as the regional food transportation system develops.

CSA programs provide many benefits to community. They support the local economy by keeping money in the community. More money in the community means more jobs locally. Other benefits to CSA programs include putting the community back in touch with the local natural resources while reducing the environmental impact.

Community-based agriculture also depends on centuries-old agricultural traditions like acequia associations, which maintain surface water and irrigation rights on farmland used for centuries throughout the County. In a region where water is provided primarily by snow melt and run off, acequias are integral to the production of food and to maintaining a way of life that has existed here for centuries. Centuries of agriculture have also produced vast knowledge about the kinds of crops that grow best here. Seed saving and the cultivation of native crops ensure our food security and the continuity of our cultural traditions.

As local, grass fed meats become more popular, local ranchers are finding new markets emerging for their meat, through CSAs, local grocery store outlets, and farmers markets. Dairy products are a natural byproduct of livestock production, too, and many of these products can be sold in many venues.

Direct sales opportunities often have certain hours of commerce, and once completed, the excess food is donated to our local food assistance programs to support the hungry in Santa Fe County. The Women, Infant and Children (WIC) program and the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps) programs are also going strong at farmers' markets, making food available to the nutritionally underserved. And many more entities are working to bring local food into local governmental and private institutions, such as senior centers, hospitals and detention centers.

The County's keys to sustainability lie in developing a thriving community-based agricultural system that supports the local production of agricultural products in as many forms as possible, including community gardens, programs to educate its citizens in how to be successful growers, water conservation mechanisms, and through the development of as many markets for the sale of local food as possible.

4.2.2 LOCAL FOOD SUPPLY / FOOD SECURITY

Santa Fe County residents should have the ability to secure nutritious, culturally appropriate food through just and healthy systems. Locally produced food is key to food safety, multiculturalism, nutrition, environmental sustainability, community development and social justice. Many constituents in the County are struggling with poverty, rising food prices, poor nutrition, and low access to healthy food vendors. Contributing to low quality food systems are the degradation of watersheds, loss of farm land and its impact on diminished access to traditional food sources. Rising costs of land, fertilizers, feed, and other inputs as well as low global food prices are affecting local food production.

There are a variety of initiatives that should be explored to look beyond the current system and locate deficiencies in the local food supply. It is important to begin identifying where the food gaps lie and finding solutions that will address local food supply and food security. One known solution includes the use of food distribution facilities, which support the processing, preserving, storing and distribution of healthy food. Other solutions include identifying future public transit links as mentioned in the previous section, and creating a mobile market vendor system to be able to link communities to access healthy and affordable food vendors. The goal for these initiatives would be to lower the amount of miles traveled to get to healthy foods. Therefore it is important that the County support, through land use measures, grocery stores and food outlets that provide healthy affordable foods in rural and underserved communities.

Supporting the purchase of locally produced food not only supports the local economy, but also promotes healthier eating habits and healthy lifestyles. The County can take action at the local level by reframing the procurement process in order to allow for the option to purchase locally produced food, when available, for public institutions such as the adult and youth detention centers, senior centers, schools and future County facilities. The process should be focused on buying local and simplified in order to create single source procurement options.

4.2.2.1 SEED AND FOOD SOVEREIGNTY

The seed sovereignty movement has a global following for the protection of indigenous seeds and food sources. The purpose of protecting seeds and food sources is to maintain cultural practices and traditions while resisting a global industrialized food system, inappropriate food production and genetic engineering (GE) or modification of native seeds and plants.

This movement in New Mexico has been primarily spearheaded by the New Mexico Acequia Association and the Traditional Native American Farmers' Association, both of which make up the core of the New Mexico Food & Seed Sovereignty Alliance. Their mission and passion to this cause is important to Santa Fe County because this area has a rich history of traditional agricultural practices and is home to native crops where native seeds are still used today. In an effort to support seed sovereignty in Santa Fe County, Resolution 2007-9 was adopted in support of a *"Declaration of Seed Sovereignty: A Living Document for New Mexico."* It is Santa Fe County's goal to work in collaboration with other jurisdictional entities and communities in support of the preservation of native seeds and native food sources. It is our intent to not only maintain cultural and traditions throughout the County, but also support local initiatives for agriculture and economic development while maintaining healthy options for all residents.

4.2.3 EXISTING COUNTY AGRICULTURE POLICIES

The County has supported agricultural policies and adopted resolutions as part of their continuing support for agricultural preservation and the acknowledgement of the importance of future initiatives to support the protection of agricultural land. Some of the initiatives include the following:

- Resolution No. 1999-137: The 1999 Santa Fe County Growth Management Plan, adopted October 26, 1999, identified agricultural land as "a non-renewable resource" and stated that: "Protection and support of the farming and ranching lifestyle, the relationship of human activities to the land, and the open landscape which dominates is essential to the vision and preferred development scenario for Santa Fe County."

- Resolution No. 2000-60: "A Resolution Adopting the Open Lands and Trails Plan", adopted May 22, 2000, which identifies agriculture as a cultural and historic lifeway worthy of protection, and which plan was funded by General Obligation Bonds totaling $20 Million approved by the citizens of Santa Fe County on November 3, 1998, and again on November 7, 2000.
- Resolution No. 2002-82: "A Resolution Stating Concern Regarding Local Agricultural Conditions in Santa Fe County", adopted July 30, 2002, which, among other things, declared that "economic survival of agriculture and rural communities is vitally important to the general health and welfare of New Mexico".
- Resolution No. 2010-23: Establishes a clearly delineated Santa Fe County policy to encourage and assist landowners who choose to voluntarily protect the open space character of their agricultural land in perpetuity. This resolution recognizes the benefits of conservation easements, the state income tax credits and the federal income tax deductions for those landowners that voluntarily decide to protect and support these agricultural lands.

4.2.4 OTHER SUSTAINABLE AGRICULTURE POLICIES, TOOLS AND INCENTIVES

The following are land use tools that have been utilized in other communities in New Mexico and other states that may provide incentives and future direction for conserving arable agriculture and ranch land. Although not all of these tools may be viable options for Santa Fe County in the short term, they are worth exploring as possibilities for future land preservation initiatives in the long term.

4.2.4.1 PREFERENTIAL ASSESSMENT

Farmland is assessed for property tax purposes as agricultural lands The difference between the value of agricultural lands and the valuation as, for example, residential real property , can be great.

As part of Santa Fe County's policy encouraging the preservation of agricultural land, the County Assessor, consistent with the New Mexico Property Tax Code, currently makes available preferential tax assessment to property owners whose land is used primarily for agricultural purposes in accordance with applicable requirements. Such valuation is available to the landowner whether or not such land is leased, provided that the lessee of such land uses the land primarily for agricultural purposes in accordance with applicable requirements.

4.2.4.2 CONSERVATION EASEMENTS

An agricultural conservation easement (ACE) is a legal agreement restricting development on farmland. Land subjected to an ACE is generally restricted to farming and open space use (American Farmland Trust). An ACE provides permanent land protection but does not guarantee that a farm will remain a farm because it cannot require that land be actively farmed; the land may revert to open space.

4.2.4.3 PURCHASE AND TRANSFER OF DEVELOPMENT RIGHTS

Purchase of Development Rights (PDR) Purchase of development rights is a voluntary transaction in which a farmer receives a cash payment in return for signing a contract called a deed of easement, that restricts the use of the land to farming or open space. Most sales of development rights are permanent, though a deed of easement may specify a certain term such as 30 years.

Transfer of Development Rights (TDR) A TDR is a conveyance of development rights by deed, easement, or other legal instrument, authorized by ordinance or regulation, to another parcel of land and the recording of that conveyance. Transfer of development rights allow a farm owner to sell development rights from their property to a private developer who transfers those rights to develop the real estate.

4.2.4.4 LAND EVALUATION SITE ASSESSMENT

The Land Evaluation and Site Assessment (LESA) System developed by the USDA can be used to identify high quality farmland with long-term viability for agricultural production. The LESA system consists of two parts: 1) Land evaluation rating of land for farming; and 2) Site assessment rating of the surrounding economic, social and geographic features that measure development pressures on the farm and that indicate farm viability.

4.2.4.5 AGRICULTURE PROTECTION

Agricultural protection policies may be created to protect high-quality soils and separate conflicting agriculture and residential land uses. Agricultural protection policies can be created to support agricultural uses and can slow the conversion of farmland to other uses and prevent fragmentation of the farmland base into parcels too small to farm, specifically for the acequia based farming. Effective agricultural policies may be created to manage the land uses allowed in each zone; the number and size of new farm parcels; the number, size, and siting of nonfarm parcels allowed; and setbacks for residential buildings from property lines. Agricultural protectionpolicies could be used to support agriculture and achieve the following purposes:

- Preserve and support irrigated agricultural land by promoting the use of clustering lots, homes and structures to accommodate appropriate development.
- Ensure the integrity and conservation of irrigated agricultural land and water resources for future generations.
- Minimize and reduce potential contamination of underground and surface water supplies from the proliferation of septic systems associated with new development.
- Protect historic patterns and important visual qualities.
- Protect agricultural uses from the negative impacts of development and from uses that are not compatible with irrigated agricultural land.

4.3 ACEQUIAS

4.3.1.1 ACEQUIA HISTORY & BACKGROUND

Acequias in Santa Fe County are the oldest water management institutions in the United States. These earthen ditches, native engineering works used for irrigation date back to over 1,000 years. When Europeans arrived in northern New Mexico during the late sixteenth century, they quickly appreciated the efficiency of the water irrigation systems already in place. The landscape in the area encompassed a vast semi-arid territory rich in natural and mineral resources, but short on surface water resources. When Spanish c*onquistadores* conducted the first *entradas* into the Río Grande they realized that the construction of irrigation works or acequias would be critical for the establishment of communities and agricultural production. Spanish colonization policies required that officials of the crown, and settlers from the central valley of Mexico who accompanied them, must locate their communities in the vicinity of water resources essential to permanent occupation. The irrigation technology employed by the settlers was gravity flow by way of earthen canals or acequias that closely followed the contours of the sloping land form. The Spanish expanded the acequia system as more settlements were created.

The acequia irrigators known as parcientes formed their own water democracies operating outside of government in terms of their internal affairs: they elected their own officers, established rules, enforced them, and settled water disputes. The first water laws adopted by the Territorial Assembly of New Mexico in 1851-52 under United States jurisdiction were the Leyes de las Acequias, published in Spanish, guaranteeing the priority of water use for

irrigation and the application of existing ditch rules. As in the past, acequia communities today are still in charge of their day-to-day governance, and collectively maintain their irrigation works and repair their diversion structures when necessary.

Acequia irrigation systems in the upper Rio Grande area have supported human subsistence for hundreds of years. These systems also supported the social, political, and ecological systems in traditional communities throughout Santa Fe County. As a social institution, they have preserved historic settlements and local cultures spanning from the Spanish colonial period, through the Mexican and Territorial periods, to present day. From a political standpoint, as we see today, many of the acequia institutions have functioned as the only form of local government below the County level. As biological systems, acequias have supported soil and water conservation, aquifer recharge, wildlife and plant habitat preservation and energy conservation.

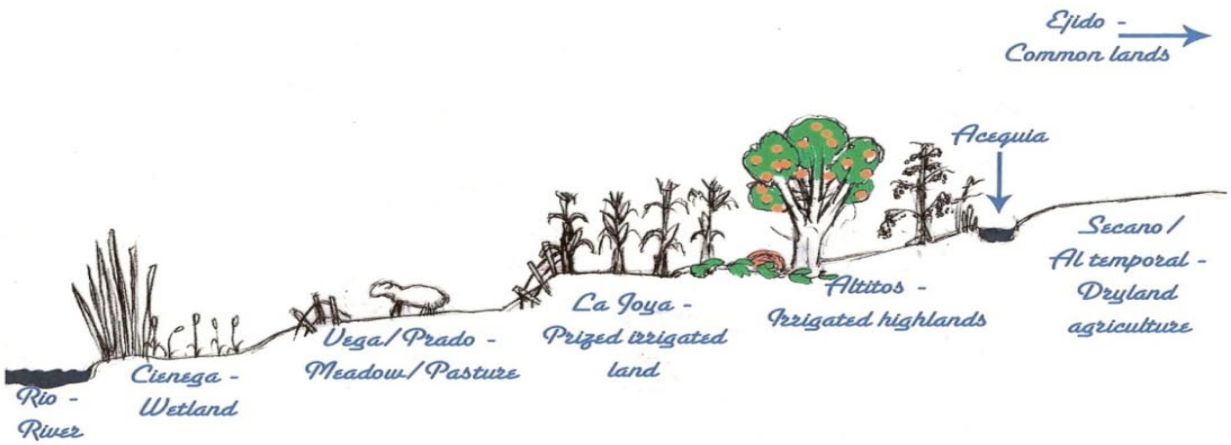
4.3.1.2 ACEQUIA LANDSCAPE

The *acequia* watercourse remains as the most distinguishing feature of the northern New Mexico village. Its relationship to the surrounding landscape is molded by the force of the water as it flows through the terrain; it defines the natural and human-made boundaries in a mosaic of gradual transitions. An *acequia* landscape allocates space for the built environment and agro-economy. In a sense, it sets the limits to growth by realizing the carrying capacity of land and water while nourishing the plant and animal life within the spatial corridor. The landscape associated with an acequia encompasses an upslope drainage area or watershed known as a catchment or basin.

The watershed begins with a collection area (watershed, cuenca) that eventually drains into a water course. The boundaries (lindes) of the watershed are delineated by the upslope area that drains towards the drainage channels. The hydrologic system of conveyance occurs through a drainage network or hierarchy of small streams, springs (ojos), and seepages (esteros). The Sangre de Cristo Mountains and foothills (lomitas) are the watershed environment that provide run off in the form of rain, snow and seepages. Surface water flows from first order streams onto second and third orders becoming a river at some point from where a portion of water is diverted onto a manmade hydrologic conveyance system which is the acequia. The main acequia (acequia madre) then follows the upper contours of the landscape providing irrigation water to the agricultural fields via a subsystem of gravity flowing laterals (linderos) and small ditches (sangrias).

Since water from the acequia requires gravity flow, the working landscape incorporates a system of terraces. A typical acequia terrace transect begins with the acequia madre diverting at the upper section (altitos) of the river providing irrigation to the lower terrace (irrigated highlands). The next level below is the prized irrigated land known as la joya or the jewel. Below la joya are the vegas or the meadows or pasture lands that are closer to the river and have a higher ground water level requiring little or no irrigation. The last level adjacent to the river is the cienega or wetlands. The river itself is a lush riparian corridor giving rise to flood plain vegetation or dense forested land known as a bosque.

The terraced systems of agricultural related functions are associated with a land division system that incorporates long narrow lots that are platted perpendicular to the river tributary valley. These field patterns are known as extensions or vara strips named after the Spanish unit of measurement used in laying out their width. The long lots provide a transect of the terrain allowing each homestead an equitable portion of the land with a cross section of all the natural elements essential for surviving in an arid landscape. Linear settlements known as corriedas or corridors are associated with the acequia alignments. Dwellings, sacred spaces, and commercial buildings typically characterize these linear communities. Collectively, the acequia landscape consists of the acequia, the long lot agricultural fields and the built environment consisting of dwellings, outbuildings, corrals, pens and other homestead related structures and objects.



Cross-section of acequia landscape

4.3.1.3 ACEQUIA GOVERNANCE

Acequias are recognized under New Mexico law as political subdivisions of the state. The acequia associations have the power of eminent domain and are authorized to borrow money and enter into contracts for maintenance and improvements. Acequia associations do not have the power to tax, so the expenses of maintenance and improvements are borne by the individuals served by the irrigation system.

4.3.1.4 ACEQUIAS AND WATERSHEDS

There are eight basins or watersheds in Santa Fe County (**Map 4-1**). The northern most watershed is the Cundiyo Basin extending into Rio Arriba. To the west is the Guaje Basin which lies adjacent to the Tesuque and Nambé Basins. At the eastern County line the Pecos Basin is extends into Santa Fe County although it drains easterly towards the Pecos River. Midway at the west County line lies the Caja del Rio Basin. The Galisteo Basin starts midway and extends south adjacent to the Estancia Basin. All of the *acequias* lie within the Cundiyo, Tesuque Santa Fe, and Nambé Basins. (**Figure 4-2)** Historically there were *acequias* in Galisteo but are no longer functional. Most of the irrigation in the Estancia Basin occurs via center pivot sprinklers. In 1987, the four major basins or watersheds contained 70 acequias with approximately 7,595 acres of irrigated land. There were 1,791 farmers with an average of 108.5 irrigated acres per *acequia*. Sixty-six of the *acequias* had active associations, although only 19 had bylaws on file with the State Engineers Office. **Figure 4-3** lists the total irrigated acres in 1999 and 2005 for the major river basins. The total surface water irrigated acres in Santa Fe County were 7,112 acres in 1999, which decreased by 1.5% to 7,005 acres in 2005.

Figure 4-1: Watersheds with Active Acequias

Watershed	Area/Acres	Streams/Rivers	No. of Acequias
Cundiyo Basin	191 sq mi/122,359 acres	5	20
Nambé Basin	204 sq mi/130,902 acres	4	17
Tesuque Basin	114 sq mi/72,948 acres	4	22
Santa Fe Basin	279 sq mi/178,755 acres	5	11
Total			**70**

Figure 4-2: Irrigated Agriculture (1999; 2005)

River Basin	Total Irrigated Acres 1999	Total Irrigated Acres 2005	Percent Change (1999-2005)
Pojoaque Valley Irrigation District	1,917	1,880	-1.9%
Santa Cruz & vicinity	4,600	4,425	-3.8%
Santa Fe & Vicinity	595	700	1.8%
Total	**7,112**	**7,005**	**-1.5%**

Source: Office of the State Engineer

4.3.2 WATER RIGHTS

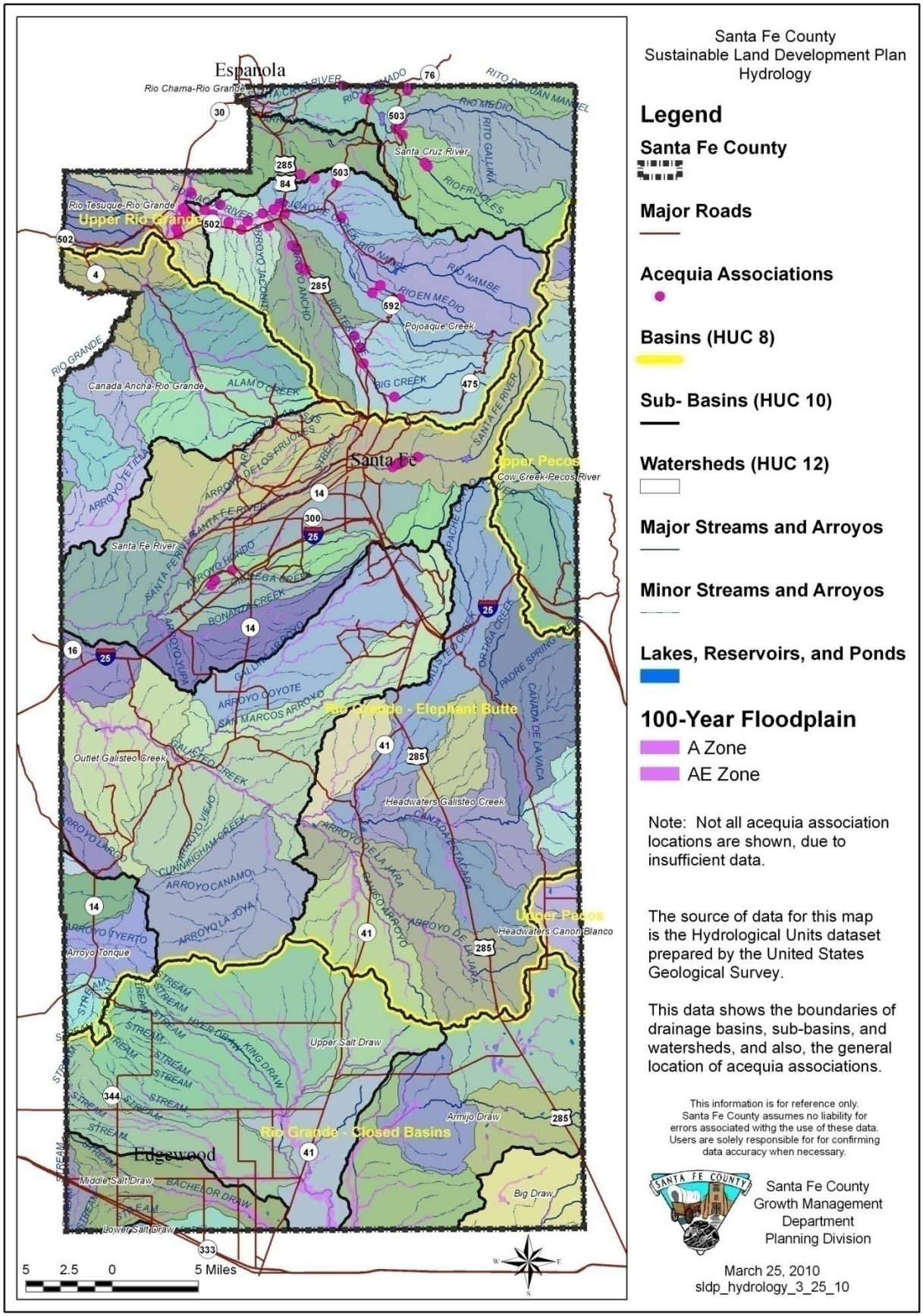
Most irrigation water rights in New Mexico were established by continuous irrigation of the land, often to the present. Surface water rights originating prior to 1907 do not need any kind of permit or paperwork to be considered valid today, as long there is continued use. The land does not need to be plowed or planted with crops to have a water right; for example, land that is irrigated only for pasture or for a lawn can have a valid water right. The only requirements are a man-made diversion from a stream and beneficial use associated with the irrigation. In 1907, the Territorial Assembly adopted a Water Code that diminished the sovereignty of acequias and the control and utilization of surface water. Water permits for the diversion and use of surface water became a State power (statehood was granted in 1912). Water and water rights were not tied to the land or communal resources, but were commodities that could be bought and sold privately. People who wanted to obtain a new surface water right after 1907 had to get a permit from the State Engineer, and could only get one by proving that there was surplus water in the particular stream system.

A "water right" differs from a "ditch right". A water right has to do with the state's rules and laws governing who can take water from a stream. A ditch right usually refers to the specific rules a particular ditch has about being in good standing with the acequia.

New Mexico has a type of water law called the "prior appropriation" system, which is found in most Western states. This system gives preference in times of water shortage to those water rights with the oldest priority dates. The priority date of a water right is the date the water was first put to "beneficial use" on the land. For most acequia-based water rights, this is the date the acequia was first constructed. In many regions of New Mexico the most senior water rights (i.e., those with the oldest priority dates) are held by tribal and by acequia *parciantes* because those are the oldest communities in those regions with a continuous history of irrigated agriculture. The priority dates of most acequias are in the 1600s-1800s, which reflect the dates those communities were settled. The preference that is given to senior water rights is recognized by the laws and Constitution of New Mexico.

If there is a shortage of water on a stream, and the water users do not have an established system for rationing or sharing the water, then the senior water right owners have the right to demand that junior water right owners reduce or stop their diversion of water so that the senior water users can get enough water. This is called a "priority call." These senior rights can be enforced if necessary by a court. There is also a provision in New Mexico law for priority administration, in which the State Engineer or a water master appointed by the State Engineer is legally authorized in times of shortage to allocate water in accordance with the different priority dates, if necessary by curtailing the use of junior water.

Map 3: Watersheds and Acequia Associations



4.4 GOALS, POLICIES AND STRATEGIES

Goal 9: Preserve, support, promote and revitalize agriculture and ranching as a critical component of the local economy, culture and character.

Policy 9.1: Protect agricultural and ranching uses by limiting incompatible development in agricultural areas.

Strategy 9.1.1: ***Require new development in rural or agricultural areas to provide open space buffers adjacent to agricultural uses and adjacent to scenic road as appropriate.***

Strategy 9.1.2: ***Develop standards to protect agricultural lands to prevent the spread of noxious and invasive species in coordination with the County Extension Office.***

Strategy 9.1.3: ***Develop an agriculture preservation policy that is directed towards maintaining small agricultural parcels, including "working land" (such as barns, greenhouses and other structures) as part of the developable land.***

Strategy 9.1.4: ***Promote the purchase of conservation easements for protection of agricultural land.***

Strategy 9.1.5: ***Create an inventory of agricultural lands and conduct a land suitability analysis to identify agricultural potential and determine high priority of protection for agricultural soils and other sensitive arable lands, especially historical agricultural land with water rights.***

Strategy 9.1.6: ***Create provisions allowing for the compatible accessory use of structures on agricultural lands.***

Policy 9.2: Support the practicality of agricultural uses to include financing tools to support viability of agriculture.

Strategy 9.2.1: ***Assess and develop resource tools such as cost sharing, temporary and permanent easements, beneficial taxation, improvement districts, development of impact fees and grants to support the viability of agricultural uses.***

Strategy 9.2.2: ***Coordinate with local communities and organizations to promote the development of agricultural products and markets, including the development of farmers markets, buy-local campaigns, and a local products website to market and distribute fresh goods.***

Policy 9.3: Protect agricultural operations from nuisance claims, and minimize negative impacts on agricultural, natural and community resources.

Goal 10: Support local food systems and food security.

Policy 10.1: Coordinate with local communities and organizations to establish an education and demonstration center to promote gardening, organic farming, food systems, traditional agriculture and practices through sustainability seminars in order to enhance local food production.

Policy 10.2: Support local initiatives and coordinate with agriculture-related organizations and stakeholders to support agriculture and economic development and maintain healthy food and lifestyle options for all residents.

Strategy 10.2.1: ***Support opportunities for organic farming.***

Strategy 10.2.2: ***Support the development of value-added agricultural products and projects in the County.***

Policy 10.3: Coordinate with government and other entities on agricultural initiatives.

Strategy 10.3.1: ***Coordinate with Tribal governments on agricultural initiatives.***

Strategy 10.3.2: ***Identify incentives that support farming and ranching in coordination with the County Agricultural Extension Office.***

Policy 10.4: Support local food systems and security through consideration of a broad range of food access and supply issues.

Strategy 10.4.1: ***Support provision of infrastructure and programming to improve food access in rural or underserved areas.***

Strategy 10.4.2: ***Support programs to encourage and educate individuals in growing food in their own or a community garden.***

Strategy 10.4.3: ***Support efforts to create mobile market vendors to sell and deliver fresh produce to low-income neighborhoods and rural segments of Santa Fe County.***

Strategy 10.4.4: ***Support creation of facilities for processing, preserving and storing food for food banks and emergencies.***

Strategy 10.4.5: ***Assess the viability to develop a purchasing option to consider a preference for locally grown produce for schools, senior centers, County Detention facilities, and other uses when locally grown produce is available.***

Strategy 10.4.6: ***Support programs for restaurants and private and community gardens to donate their surplus and/or leftover food to emergency food, homeless and other shelters or to area farms for their animals or composting.***

Strategy 10.4.7: ***Support Women Infant Children (WIC) and Supplemental Nutrition Assistance Program (SNAP) programs at farmers markets and alternative food outlets***

Strategy 10.4.8: ***Support State initiatives to establish a joint WIC-SNAP benefits card, in order to streamline the process of receiving and spending benefits.***

Strategy 10.4.9: ***Collaborate with other entities and communities in support of preservation of native seeds and native food sources.***

Strategy 10.4.10: ***Collaborate with existing disaster relief and food assistance organizations to distribute an emergency preparedness list of food items for all residents to keep in their homes.***

Policy 10.5: Support and incent local agricultural production.

Strategy 10.5.1: ***Support development of community gardens and other agricultural projects by providing water, land and infrastructure on County or public land where appropriate.***

Strategy 10.5.2: ***Allow the option for community gardens to be considered as part of the open space requirements for new development.***

Strategy 10.5.3: ***Support home-based food processing and small scale subsistence farming.***

Goal 11: Preserve and support community-based agriculture and the acequia system as an important part of the County's heritage and agricultural sustainability.

Policy 11.1: Revitalize the role of agriculture and acequias in the County, promoting awareness and support for agricultural uses and maintaining agricultural-based cultures and traditions.

Strategy 11.1.1: ***Develop education programs and outreach to support agriculture and ranching. Include materials on organic farming, year round farming and better range management practices.***

Policy 11.2: Protect water supply and appropriate use of water for agricultural uses.

Strategy 11.2.1: ***Support rebates and other incentives for agricultural use such as rain barrels, drip-irrigation, composting systems and water conservation techniques in areas where appropriate.***

Strategy 11.2.2: ***Support the use of rain fed agriculture where collected water is used to irrigate crops.***

Strategy 11.2.3: ***Support farming techniques and that facilitate the conversion from spray irrigation-based practices to lower water use systems such as no-till, drip irrigation, and or/greenhouse based agriculture.***

Policy 11.3: Develop and implement compatible acequia protection standards.

Strategy 11.3.1: ***Require acequia or acequia easements to be identified on plats and development plans.***

Strategy 11.3.2: ***New development should be setback from traditional acequia easements.***

Strategy 11.3.3: ***New development that is adjacent to an acequia must provide notice to the acequia associations.***

Strategy 11.3.4: ***Coordinate with the Acequia Associations to address issues in acequias, including the development of policies, management, and mapping of boundaries; and to identify sources of technical and financial assistance.***

Strategy 11.3.5: ***Require clustering of new development on acequia-irrigated agricultural land.***

Strategy 11.3.6: ***Provide notice of potential new development adjacent to existing acequias to impacted acequia organizations and irrigation districts and provide a process to allow input on development projects within 25' of an acequia.***

Strategy 11.3.7: ***Coordinate with the Acequia Associations to address issues in acequias, including the development of policies, management, and mapping of boundaries; and to identify sources of technical and financial assistance***

CHAPTER 5: RESOURCE CONSERVATION ELEMENT

The Santa Fe County landscape is endowed with a myriad of natural resources creating an environment of historic value, ecologic diversity, spectacular topography and scenic beauty. The early settlement patterns of the region are reflected in the abundant historic and cultural sites, archaeological sites, scenic corridors, trails and byways. The physical environment is ecologically as diverse reflected by the numerous eco-regions that contain a variety of geologic formations, soils, vegetation, wildlife and hydrologic resources. Collectively, the historic and cultural resources and the attributes of the physical environment form a landscape of natural beauty and of great economic value. Protection and conservation of the County's natural resources is key in maintaining the integrity of the environment. The overall goals are to protect the archaeological, historic and cultural resources, species, habitat and biodiversity, scenic beauty and environmentally sensitive lands. Preserving and supporting the conservation of these resources will enhance the character and function of communities, neighborhoods and rural areas.

5.1.1 KEY ISSUES

1. **Irreplaceable archaeological and historic sites are threatened.** The Galisteo Basin and other areas of the County contain a vast number of archaeological, cultural and historic resources and sites that are being threatened by erosion and other natural causes, development, vandalism, and uncontrolled excavations.
2. **Archaeological, historic and cultural sites are not well-documented**. Only a fraction of the known sites in the County have been mapped and documented, and any significant development has the likelihood to impact important sites and artifacts.
3. **The integrity of historic and traditional villages is eroding.** Communities in the County with unique histories, cultures, and traditions may be threatened by incompatible land uses and new development .The fabric and character of the communities is losing connection to its cultural attributes and agrarian patterns.
4. **Loss of community character**. New development at inappropriate locations, densities or intensities; poor impact mitigation; inadequate public facilities or services; inadequate buffering or performance standards; or other characteristics can create land use incompatibilities that threaten the character or viability of existing land uses, including agricultural or rural residential.
5. **Conflict exists between industrial resource extraction** including gravel mines, andnew residential and traditional communities desire for more sustainable land use such as tourism, community based eco / cultural–tourism and recreation.
6. **The scenic quality of Santa Fe County as a whole is very vulnerable.** Open landscapes, vast panoramas, and pronounced topography that contribute to the scenic quality of Santa Fe County are being threatened by uncontrolled development patterns.
7. **Lack of County staffing and expertise regarding historic and cultural resources.** There is a lack of information and documentation on acequias and important historic sites in traditional communities.
8. **Lack of emphasis on gateways, rural highways, scenic routes and corridors**. Gateways and corridors are extremely important to the first impression of a place. If the character of these areas is eroded by poorly planned development, the County may become less attractive to residents and as a tourist destination. These negative impacts on the counties Scenic and National Scenic Byways should be prevented to ensure a strong tourist trade and economic vitality in this area of the county.
9. **Maintaining the integrity of view sheds and scenic byways as a resource,** is a priority with regard to tourism, the arts, and the movie industry. Heavy industrial traffic and through truck traffic should be routed away from scenic byways.
10. **Environmentally sensitive lands are not well documented.** Detailed information and mapping of environmentally sensitive land is inconsistent and may not be documented on a local scale.

11. **Monitoring of hydrologic regimes, wildlife and arroyos lacks collaboration.** There is a lack of a coordination among county, state, environmental organizations and communities regarding the monitoring of impacts to environmentally sensitive lands.
12. **Wildlife habitats and migration corridors threatened.** Development that encroaches on wildlife habitats and migration corridors threatens endangered species and increases fragmentation of the landscape.
13. **Lack of wildlife habitat information and monitoring of migration and corridor patterns.** Information on wildlife habitats and corridors is scattered among various agencies and NGO's. There is no coordinated monitoring of wildlife activity throughout the private lands.
14. **Lack of coordination with transportation planning.** There is no coordination between planning and public works regarding the construction of roadways with reference to wildlife habitats, migration and corridor patterns and impacts to scenic resources. Strict coordination between planning and public works should be required with reference to Scenic and National Scenic Byways as well.
15. **Institutional barriers to small scale ecosystem restoration.** Existing Flood Plain Regulations hinder the efforts to implement small scale stream restorations
16. **Lack of impact studies on Resource Extraction such as sand and gravel.** The county should apply a more stringent review process for any resource extraction development.

5.1.2 KEYS TO SUSTAINABILITY

1. **The County must coordinate with stakeholders to identify**, map and protect archaeological, historic and cultural resources as well as develop and implement the Galisteo Archaeological Site Management Plan.

2. **The County should take an active role in providing staffing and resources** for the documentation of acequias and historic/cultural and visual resources throughout the county. The numerous cultural, natural, economic and community resources in Santa Fe County should be documented and protected from incompatible development.

3. **The County should preserve and enhance the unique natural, community and rural-area** character and design features in the County.

4. **Recognize change in character and economic base in areas** that have become more sustainable such as old mining towns that have evolved as tourist destinations or recreational areas.

5. **Development should be sited and designed to limit the impact on viewscapes that define the County as a tourist destination, such as near designated National Scenic Byways.** In addition to its scenic qualities, historic, cultural and archeological resources in Santa Fe County draw visitors to the area, making historic preservation a key element of the County's economy.

6. **Scenic vistas and the natural landscape as viewed from the highways should be protected.** The County should require the preservation of distinctive natural features such as vistas, arroyos, significant rock outcroppings and large trees in the development review process.

7. **Site mineral extraction and related industrial activities well away from existing communities and scenic byways.**

8. **The SLDP recommends quantifiable assessments and data to support decision-making by mapping of environmentally sensitive areas.** Use of GIS Conservation Suitability Analysis should be emphasized to protect environmentally sensitive areas.

9. **The SLDP recommends implementation of an integrated framework for protection of natural resources** that includes the use of Environmental Impact Reports and Impact Assessments to assess existing conditions, identify fiscal impacts, minimize and mitigate potential damage to the environment and monitor change.

10. **Adequate open space, riparian areas, vegetative and wildlife habitat areas and corridors must be protected to support biodiversity.** Wildlife habitats provide food, water, space and cover for the protection, hiding and reproduction of individual species.

11. **Protecting the natural environment is critical to public health as it is dependent upon clean air and water**. The built environment structures our daily lives; development that encourages healthy activity through provision of public recreation areas, open spaces, trails, sidewalks and other facilities for pedestrians and cyclists contribute to public health and quality of life. Development that supports social interaction through public spaces also contributes to mental and social health.

12. **Coordination with stakeholders for monitoring environmentally sensitive lands.** Collaboration with Federal, State, local agencies and non-governmental groups is essential for ongoing monitoring, documentation and protection of environmentally sensitive lands.

13. **The SLDP will require the use of Environmental Impact Studies for all new or expanding development in extraction of resources** such as sand and gravel to ensure the environmental impacts are minimized, mitigated and to ensure adequate public comment. E.I.S. report will identify incompatibilities with current land use in the area.

14. **Pursue financing of resource conservation through payment of ecosystem services.** Explore and develop opportunities for financing of resource conservation and stewardship through the mechanisms of Payment for Ecosystem Services.

5.2 CRITICAL FINDINGS

To preserve and enhance the unique heritage of the Santa Fe County, it is essential to preserve historic and cultural sites, landmarks and archaeological districts. Desecration or destruction of these resources would result in an irreplaceable loss to the public of their scientific, educational, informational, or economic interest or value. Historic preservation aims to identify, preserve, and protect sites, buildings, and structures that have significant cultural, social, economic, political, archaeological, or architectural history. The social and cultural benefits to historic preservation are numerous, and since Santa Fe County's historic and cultural resources draw visitors to the area, preservation is also an element of the County's economy. **Map 5-1** shows historic and scenic resources.

5.3 ARCHAEOLOGICAL, HISTORIC, CULTURAL AND COMMUNITY RESOURCES

5.3.1.1 ARCHAEOLOGICAL AND HISTORIC RESOURCES

Historic and archeological sites, landmarks and districts include, but are not limited to, structures which either are designated by the official register of cultural properties maintained by the New Mexico Cultural Properties Review Committee, or are properties which may contain historic or pre-historic structures, ruins, sites or objects.

All areas having known or probable archaeological sites designated as Archaeological Districts have been prepared under the direction of the New Mexico State Historic Preservation Division, and are based upon a data base maintained by that Division. In addition to the State Preservation designation of archaeological sites, the Galisteo Basin Archaeological Sites Protection Act was enacted on March 14, 2004 as Public Law 108-208 108 of the United States.

The Act stipulates protection of archaeological sites in the Galisteo Basin recognizing that the Galisteo Basin and surrounding area of New Mexico is the location of many well preserved prehistoric and historic archaeological

resources of Native American and Spanish colonial cultures. These resources include the largest ruins of Pueblo Indian settlements in the United States, spectacular examples of Native American rock art, and ruins of Spanish colonial settlements. This cache of archaeological resources are being threatened by natural causes, urban development, vandalism, and uncontrolled excavations. The purpose of this Act is to provide for the preservation, protection, and interpretation of the nationally significant archaeological resources in the Galisteo Basin in New Mexico. **Figure 5-1** includes the Galisteo Basin Archaeological Protection Sites enumerated in the Act. The general management plan for the sites is being developed by The Bureau of Land Management in consultation with the State of New Mexico, Santa Fe County, affected Native American pueblos, and other interested parties.

Figure 5-1: Galisteo Basin Archaeological Protection Sites

Site	Acres	Site	Acres
Arroyo Hondo Pueblo	21	Pa'ako Pueblo	29
Burnt Corn Pueblo	110	Petroglyph Hill	130
Chamisa Locita Pueblo	16	Pueblo Blanco	878
Comanche Gap Petroglyphs	764	Pueblo Colorado	120
Espinoso Ridge Site	160	Pueblo Galisteo/Las Madres	133
La Cienega Pueblo & Petroglyphs	126	Pueblo Largo	60
La Cienega Pithouse Village	179	Pueblo She	120
La Cieneguilla Petroglyphs/Camino Real Site	531	Rote Chert Quarry	5
La Cieneguilla Pueblo	11	San Cristobal Pueblo	520
Lamy Pueblo	30	San Lazaro Pueblo	360
Lamy Junction Site	80	San Marcos Pueblo	152
Las Huertas	44	Upper Arroyo Hondo Pueblo	12
Total Acreage	**4,591**		

The sites of significance in the Galisteo Basin are not only of historic importance. Members of Native American Pueblos throughout the County visit the Galisteo Basin on a regular basis to participate in cultural and religious ceremonies and gather plant material to be used ceremonially. It is of utmost importance to the Pueblo members to protect historic sites, preserve the sanctity of unmarked burial areas, preserve places of importance for ceremonies and prevent the loss of important wildlife and vegetation areas. Protecting the vital groundwater of the Galsteo Basin is also of utmost importance, as it is used ceremonially and is necessary for the preservation of plant, animal and human life in the Basin.

One of the primary challenges in protecting these sites is that only a fraction of sites have been surveyed, documented and mapped. It is accepted that the majority of important sites have not been identified and recorded, and that as development activities proceed in the Galisteo Basin area it is likely that new sites will be "discovered" and unearthed. The County must assess, identify and protect important cultural resources before and during exploration, construction and production phases. As findings are documented and mapped, it is important to add this data to a Countywide data base in order to maintain an updated record. This Plan establishes policies and strategies to identify, preserve and protect archaeological, historic and cultural resources. Historic sites are located throughout the County. **Figure 5-2** lists the places in the County that are listed on the National Register of Historic Places.

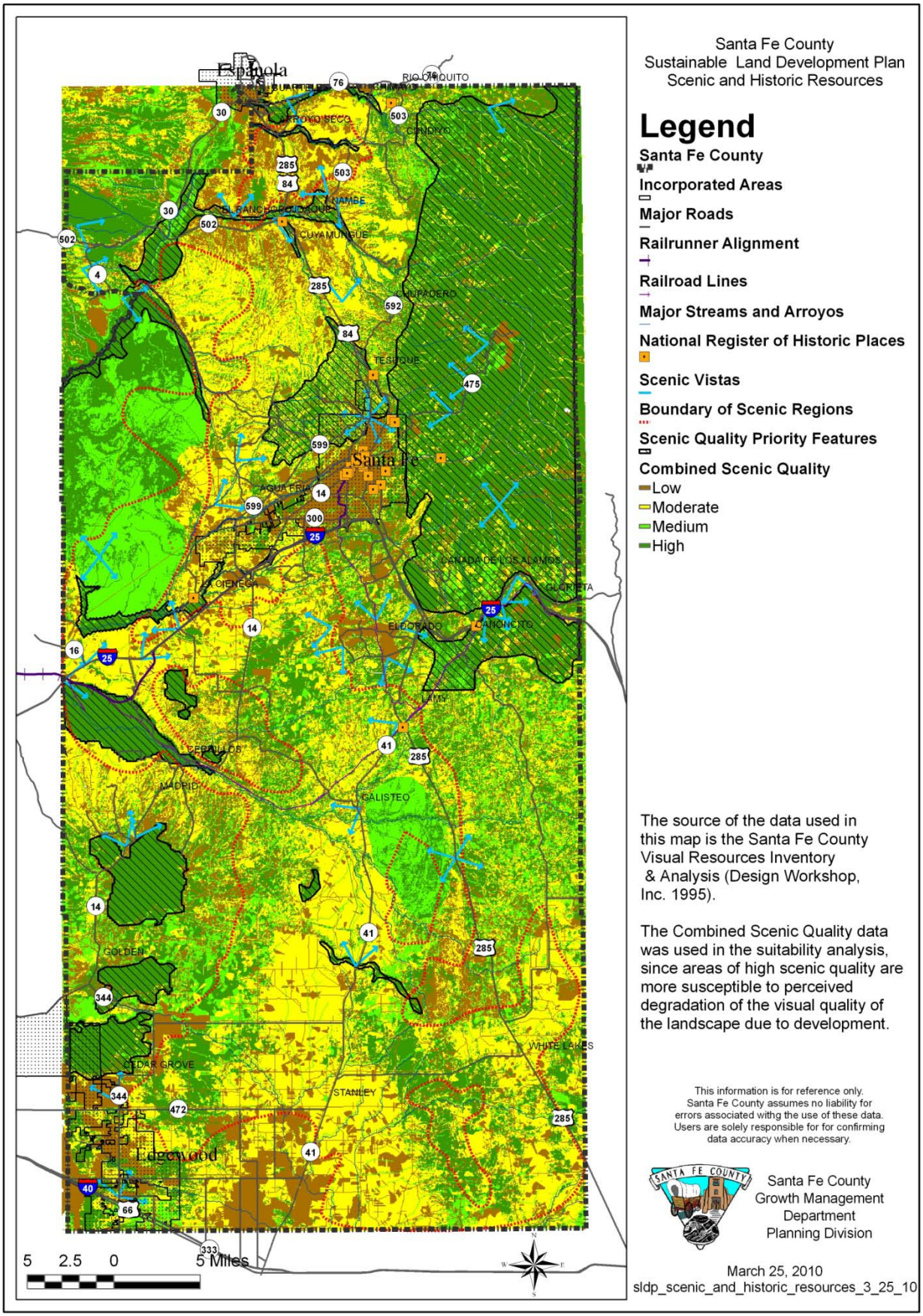
Figure 5-2: National Register of Historic Places (Santa Fe County)

Sites
Apache Canyon Railroad Bridge
Arroyo Hondo Pueblo
Barrio de Analco Historic District
Bouquet, Jean, Historic/Archaeological District
Don Gaspar Bridge
El Puente de Los Hidalgos
El Santuario de Chimayo
Fairview Cemetery
Glorieta Pass Battlefield
JB Jackson House, La Cienega
La Bajada Mesa Agricultural Site
La Iglesia y la Plaza de Santa Cruz de la Cañada
Las Golondrinas ranch Site & Acequia
Madrid Historic District
Nambe Pueblo
Navawi, White Rock
Nuestra Senoria de La Luz Church & Cemetery
Otowi Bridge Historic District
Otowi Suspension Bridge
Plaza del Cerro, Chimayo
Pflueger, John General Merchandise & Annex Saloon
Route 66 and National Old Trails Road Historic District at La Bajada
Roybal Ignacio House
San Ildefonso Pueblo
San Marcos Pueblo
San Lazaro Pueblo
Schmidt, Albert, House and Studio
Seton Village
Tesuque Pueblo

Figure 5-3: State Register of Historic Sites (Santa Fe County)

State Register Sites
Bouquet Ranch
Bouquet, Jean, Historic/Archaeological District
Black Mesa (Tunyo)
Cerrillos Opera House
Cienega Village Museum, Old
Cieneguilla Pueblo (LA 16)
Colina Verde ruin
Cundiyo
Galisteo Historic District
Galisteo Pueblo
La Bajada Ruin
Los Cerrillos Mining District
Madrid Boarding House
Mount Chalchihuitl Turquoise Mine
Nambe Archaeological District
Oratorio de San Buenaventura, Chimayo
Pigeons Ranch
Pueblo Blanco
Pueblo Colorado
Pueblo Largo
Santa Cruz Dam
San Cristobal, Pueblo of, Archaeological District
She Pueblo
Schmidt, Albert, Residence and Studio
Trujillo, Jose Raphael, House
Waldo Coke Ovens
West Otto Site

Map 4: Scenic and Historic Resources



5.3.1.2 NATIONAL HERITAGE AREA

A "national heritage area" is a place designated by the United States Congress where natural, cultural, historic and recreational resources combine to form a cohesive, nationally-distinctive landscape arising from patterns of human activity shaped by geography. These areas tell nationally important stories about our nation and are representative of the national experience through both the physical features that remain and the traditions that have evolved within them. It encompasses a mosaic of cultures and history, including eight Pueblos and the descendants of Spanish ancestors who settled in the area as early as 1598. The Northern Rio Grande National Heritage Area authorized by Congress, October 12, 2006 (Citation: Public Law 109-338, 120 Stat. 1783), stretches from Santa Fe to Taos, and includes the counties of Santa Fe, Rio Arriba and Taos.

Within the boundaries of Santa Fe County, there are many significant historic sites and a cultural landscape that reflects long settlement of the region. Planning staff from the County are participating in the management/environmental assessment of the three County areas that will eventually lead towards the creation of a cultural resource management plan.

5.3.1.3 VISUAL RESOURCES

Santa Fe County is filled with a variety of visual resources, ranging from small, definable places to vast, almost limitless plains and vistas. Some of the County's most significant resources are the views from the National Turquoise Trail Scenic Byway (State Highway 14). This highway offers a wonderful view of the basin for motorists who travel to and from Santa Fe and Albuquerque and make stops at local communities and tourist attractions (see **Map 5-1** for visual resources).

The Santa Fe County Visual Resources Inventory and Analysis, October 1995 report presented the following findings:

> **Scenic places valued by the public.** Major landforms such as the Sangre de Cristo, Ortiz, South and San Pedro Mountains; less well-known scenic areas, such as Diablo Canyon, Lamy train station and village, and Devil's throne near Waldo.
>
> **Scenic Vistas.** Important scenic points, such as those from Galisteo toward Ortiz and San Pedro Mountains, From 1-25 coming north up La Bajada looking toward Santa Fe and the Sangre de Cristo Mountains, and the 360-degree views from Tetilla peak near La Bajada.
>
> **Scenic roads and trails.** Scenic roads and trails, such as the El Camino Real, Hyde Park, Turquoise Trail (Highway 14), segments of Highway 285, 41, and I-25, and trails along Rio Medio and Rio Frijoles.

Because of its open landscapes, vast panoramas, and pronounced topography, the scenic quality of Santa Fe County as a whole is very vulnerable. Maintaining the integrity of view sheds is a priority with regard to tourism and the movie industry. This means that if development is not carefully planned it could easily degrade the County's scenic beauty and economic vitality.

5.3.1.4 HISTORIC ROAD NETWORK, SCENIC ROADS AND BYWAYS

Santa Fe County is deeply rooted in an early transportation network that includes the Camino Real de Adentro, the Old Spanish Trail, and the Old Santa Fe Trail. In more contemporary times, Route 66 traversed across the County. Currently there are several scenic byway designations inclusive of the historic trails and state roads. Collectively these historic trails and road systems provide a view of the early transportation systems that have evolved into the modern network of National, State and local roads. Scenic Byways in Santa Fe County include the Turquoise Trail National Scenic Byway, Santa Fe National Forest Scenic Byway, El Camino Real National Scenic Byway, and the Santa Fe Trail National Scenic Byway.

The Camino Real de Tierra Adentro. The Camino Real de Tierra Adentro is a 404-mile route from El Paso, Texas, to San Juan Pueblo, New Mexico. International significance of the entire route extends from Mexico City to New Mexico's respective Spanish colonial capitals at San Juan Pueblo (1598-1600), San Gabriel (1600-1609), and Santa Fe (1609-1821). During that period, the road formed part of a network of royal roads throughout Mexico that ran from Spanish capital to Spanish capital. When Mexican independence was achieved, El Camino Real ceased to be a royal road, because the Spanish crown had been ousted. However, the route continued in use during the Mexican National Period, as Mexican and Indian travelers, traders, settlers, soldiers, clergymen, and Anglo-American merchants continued their activities along it. Significance has also been found for succeeding periods, including the Mexican National Period (1821-1848), and part of the U. S. Territorial Period of New Mexico (1848-1882). (El Camino Real Tierra Adentro National Historic Trail Comprehensive Environmental Impact Statement. United States Department of the Interior National park Service Bureau of Land Management. April 2002)

El Camino Real de Tierra Adentro Map (NPS)

The Old Spanish Trail. The Old Spanish Trail was established during the Mexican time period in New Mexico, when in 1829 Antonio Armijo was the first person to go all the way to California and back in a single round trip. Initially this was a pack mule trail, not a wagon route, and carried woolen goods from NM to California and brought back horses and mules to NM. The mule caravan's last Mexican village was Abiquiu at which point the trail headed northward, not crossing into Mexican territory until reaching the San Gabriel Mission in California. These early traders carried up to 60,000 pounds of goods in a single trip and brought back thousands of horses and mules at a time. The Old Santa Fe trail was in use until the middle 1850's. Today the trail goes through 6 states and is about 1200 miles in length.

Old Spanish Trail Map (Old Spanish Trail Association)

There are about 400 miles of Spanish Trail in NM with three routes: the Armijo Route, the Main Route, and the north branch of the Main Route starting in Santa Fe County. In 2002 the Old Spanish Trail was designated a National Historic Trail and the Old Spanish Trail National Association continues to be an active group working to identify, preserve and educate folks about this most important part of our collective history and heritage.

Old Santa Fe Trail. The Santa Fe Trail was a 19th century transportation route through central North America that connected Missouri with Santa Fe. First used in 1821 by William Becknell, it served as a vital commercial and military highway until the introduction of the railroad to Santa Fe in 1880. Initially an international trade route between the United States and Mexico, it served as the 1846 U.S. invasion route of New Mexico during the Mexican–American War.

Old Santa Fe Trail Map (NPS)

The route crossed Comancheria, the territory of the Comanche, who demanded compensation for granting passage within a right-of-way. Americans routinely traded with the Comanche along the trail, sometimes finding the trade in Comancheria more profitable than that of Santa Fe.

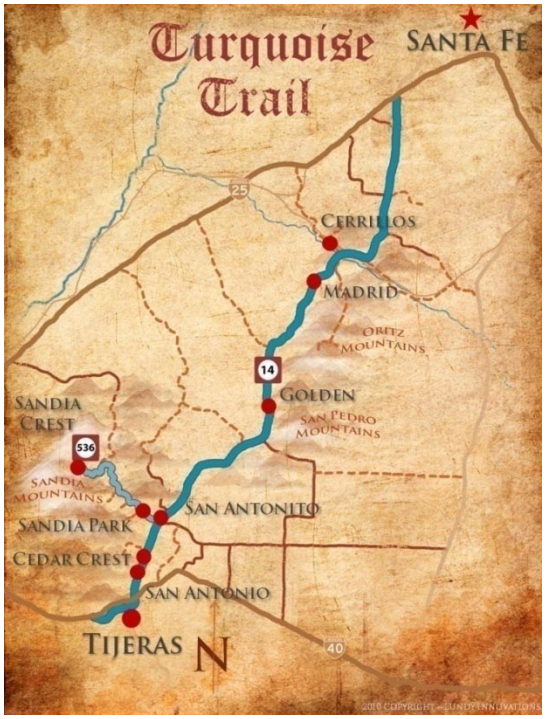
After the U.S. acquisition of the Southwest, the trail helped open the region to U.S. economic development and settlement, playing a vital role in the expansion of the U.S. into the lands it had acquired. This route, which is now a road, is commemorated today by the National Park Service as the Santa Fe National Historic Trail. A highway route that roughly follows the trail's path through the entire length of Kansas, the southeast corner of Colorado and northern New Mexico has been designated as the Santa Fe Trail National Scenic Byway.

Route 66. Route 66 was created in 1926 as part of the nation's first system of federal highways. Linking Chicago to Santa Monica, Route 66 was the shortest, best-weather route across the country, and it achieved its iconic status as the most famous highway in America though literature, film, television, and song. When Route 66 was first laid out in 1926, it followed the Old Pecos Trail from Santa Rosa through Dilia, Romeroville and Pecos to Santa Fe, then from Santa Fe it went over La Bajada Hill and down into Albuquerque. But in 1937, Governor Hannett lost re-election and blamed this on the politicians in Santa Fe. Before the new governor was sworn in, Hannett vowed to get even with Santa Fe and rerouted Highway 66 to Albuquerque, bypassing Santa Fe. Though the road was not quite finished by the time the new governor took office in January, bad weather conditions prevented the new governor from contacting the work crews to stop the project. By the time the new governor met with the work crews, the new road had been finished. Though the new alignment was a better route from an engineer's standpoint, it was shorter and more direct and eliminated some treacherous road conditions, it also took Santa Fe off the nations "mother road".

The route was decommissioned in 1985 and traffic was diverted to the interstates, and many of the locally-owned establishments that catered to travelers and gave the Route its character went into decline. In 2001, Congress recognized the significance of Route 66 through the creation of the National Park Service Route 66 Corridor Preservation Program, a federal program of technical and financial preservation assistance. Along the Route significant buildings and businesses are threatened by economic hardship, deferred maintenance, development pressures, and a lack of awareness of the importance of these recent-past resources. Individual states, private and public organizations and individuals have also taken action in recent years to protect the Route.

Route 66 has been named to the World Monuments Fund 2008 Watch List of 100 Most Endangered Sites. In particular, motels on Route 66 are particularly threatened and are listed as a category to the 2007 America's Eleven Most Endangered Places List by the National Trust for Historic Preservation. According to the National Park Services, these listings bring important attention to Route 66 around the nation and the world, raising awareness of its significance, history, challenges and successes. In Santa Fe County the pre-1938 alignments traverse across the County with the most prominent section located at La Bajada Mesa.

Turquoise Trail National Scenic Byway. The Turquoise Trail National Scenic Byway winds through rustic villages as quirky as the goblinesque rock formations that jut along the roadside. Follow the country back road between Santa Fe and Albuquerque and trace the Trail forged centuries ago by Native Americans, miners and Spanish Conquistadores. Named for the rich turquoise deposits found in the area, the Trail (NM14) is the back road that connects the two major metropolitan areas in the state as well as the two interstate highways I-25 and I-40. Traveling the Trail one gets lost in the majestic scenic views which carves its way through piñon, juniper and bizarre rock outcroppings while launching travelers and residents into the visions of the old wild west.



The scenic byway traverses through the south and west in the County and is 62 miles long including the road that curls through the majestic Cibola National Forest has plenty of eateries, shopping and services for the traveler, and many cultural and archeological sites along the way. Not to be missed is the six historic churches which still hold services along the Trail, and the many recreation areas.

Two organizations have done their share to protect and enhance the Turquoise Trail National Scenic Byway. The Turquoise Trail Association a business community organization credited for the designation of the national byway status, and the Turquoise Trail Preservation Trust (TTPT) a 501c3 whose leadership is charged with implementation of the Corridor Management Plan. Currently, the Trust designed gateway signage for both north and south ends of the Trail.

Atchison, Topeka, Santa Fe and Santa Fe Central Railways. The Atchison, Topeka and Santa Fe Railway (ATSF) was one of the larger railroads in the United States. The company was first chartered in February 1859. Although the railway was named in part for the capital of New Mexico, its main line never reached Santa Fe as the terrain made it too difficult to lay the necessary tracks. Santa Fe was ultimately served by a branch line from Lamy, New Mexico. The first tracks of the Santa Fe Railway reached the Kansas/Colorado state line in 1873, and connected to Pueblo, Colorado in 1876. In order to help fuel the railroad's profitability, the Santa Fe Railway set up real estate offices and sold farm land from the land grants that the railroad was awarded by Congress; these new farms would create a demand for transportation (both freight and passenger service) that was offered by the Santa Fe.

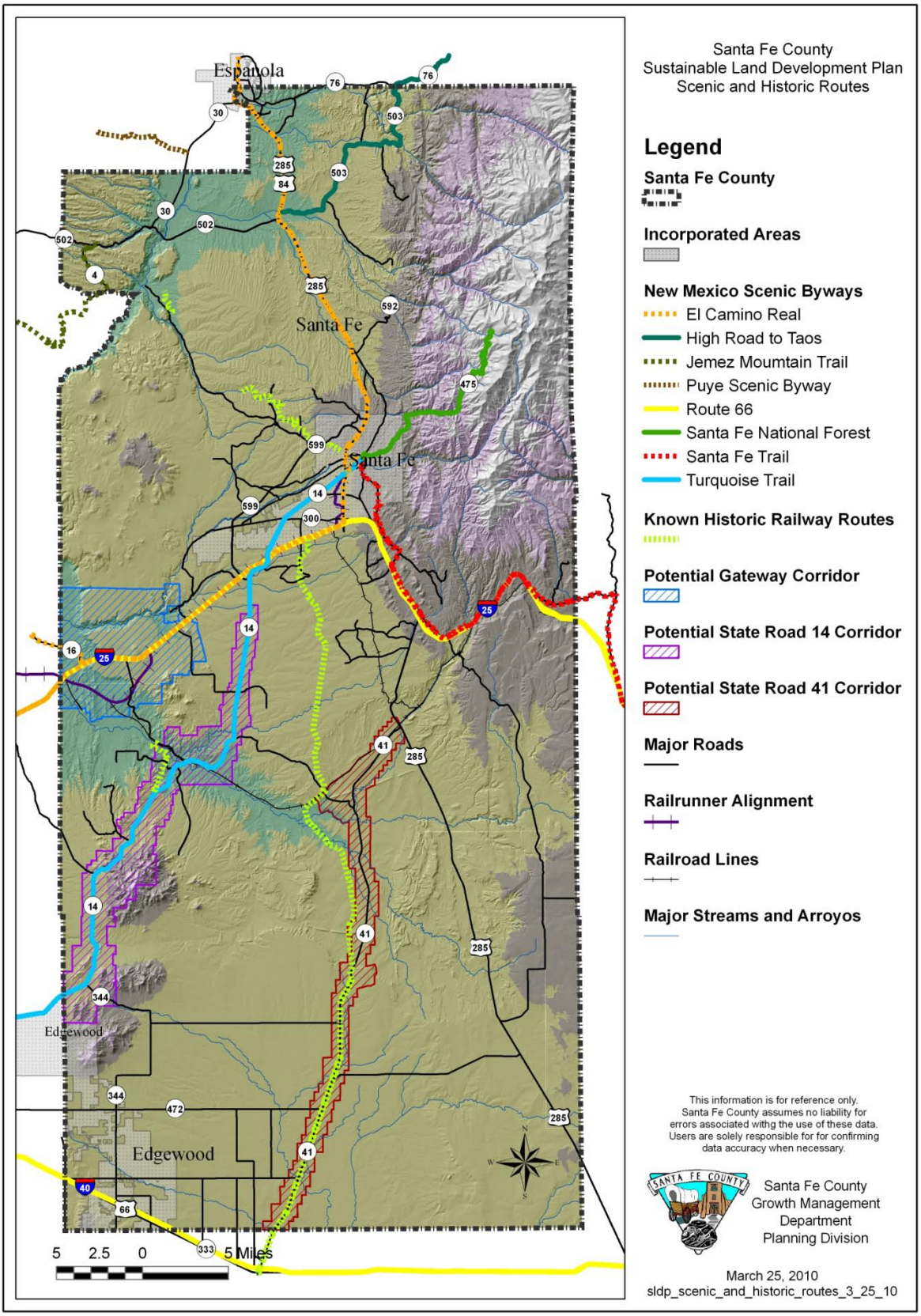
Ever the innovator, the Santa Fe Railway was one of the pioneers in intermodal freight service, an enterprise that, at one time or another, included a tugboat fleet and an airline, the short-lived Santa Fe Skyway. A bus line allowed the company to extend passenger transportation service to areas not accessible by rail, as well as ferry boats on the San Francisco Bay which allowed travelers to complete their westward journeys all the way to the Pacific Ocean. The Atchison, Topeka and Santa Fe Railway officially ceased operations on December 31, 1996 when it merged with the Burlington Northern Railroad to form the Burlington Northern and Santa Fe Railway.

The Santa Fe Central Railway (SCR) started as the Santa Fe Albuquerque & Pacific Railroad with grand plans to reach the west coast. The name was changed to SCR once the plans became more realistic (connecting the El Paso & Rock Island from Torrance to the capital city). The SCR pulled into Santa Fe for the 1st time in 1903. The SCR

fundamentally follows Highway 41 (the roadbed is visible on the west side) until the highway breaks to the east, were the SCR continues N-NW to Santa Fe crossing the AT&SF west of Kennedy.

In 1908 a branch was started from Moriarty to reach the mines in Hagan valley through Frost, the money ran out just north of the Bernalillo County line after crossing the future Highway 14. In 1926 the AT&SF railroad purchased the SCR and by then the name had been changed to the New Mexico Central. The Santa Fe started abandonment in 1928 and by 1943 ceased operation.

Map 5: Scenic and Historic Routes



5.4 ENVIRONMENTALLY SENSITIVE LANDS AND NATURAL RESOURCES

Protection of environmentally sensitive areas and maintenance of the rural character and scenic beauty of the County through regulations, education, and code enforcement is key to the implementation of the SLDP. Since 1980, the County has had policy and plans that recognize that certain lands in the County are fragile, sensitive, or of such high value to the community that they need extra consideration and protection from all kinds of development. The SLDP supports the proactive identification and protection of sensitive lands, prior to the development application or review process to ensure the highest and most comprehensive level of environmental protection.

5.4.1.1 ECOREGIONS

An ecoregion is a recurring pattern of ecosystems associated combinations of soil and landform that characterize that region. Within an ecoregion there are areas where there is spatial coincidence in geographical characteristics associated with differences in the quality, health, and integrity of ecosystems. Geographical characteristics include geology, physiography, vegetation, climate, hydrology, terrestrial and aquatic fauna, and soils, and the impacts of human activity (e.g. land use patterns, vegetation changes). Interlinked ecosystems combine to form a whole that is "greater than the sum of its parts". Looking at ecosystems in an integrated way will help Santa Fe County achieve "multi-functional" landscapes.

- The northern area includes Rio Grande flood Plain, north-central New Mexico valleys and mesas with sedimentary mid-elevation forests, crystalline subalpine and mid-elevation forests, and foothills shrublands.
- The central area of the County consists of north-central New Mexico valleys and mesas with sedimentary mid-elevation forests, crystalline subalpine and mid-elevation forests and foothills shrublands.
- The Galisteo area is diverse, with the majority of the western and middle portions consisting of north-central New Mexico valleys and mesas. In the east, most of the landscape is pinyon-juniper woodlands and savannas. Near Glorieta there is a band of foothill shrublands. The southwestern corner of the basin includes Rocky Mountain forests, conifer woodlands and savannas and a small portion of Albuquerque Basin.
- In the Estancia area, the majority of the landscape in the eastern section is central New Mexico plains. In the west, there are small patches of conifer woodlands and savannas and Rocky Mountain conifer forests.

5.4.1.2 GEOLOGY AND LAND FORMS

Superficial Geology: The contemporary geomorphologic contours of Santa Fe County originated in the Upper Cretaceous (more than 65 million years ago) and were subsequently altered by erosion, uplifts, mountain forming, volcanic activity, and peri-glaciation effects, such as sedimentation from mountain streams and wind erosion and deposits.

The land forms for Santa Fe County range from the upper highlands of the rugged Sangre de Cristo Mountains to the banks of the Rio Grande in the northern areas. Midway, the landscape transitions from the plains at Cochiti pueblo, to La Bajada Mesa, traversing along the Santa Fe River valley towards the foothills at the east. Further south, in the Galisteo Basin, the Cerrillos Hills, and Ortiz Mountains are prominent landforms adjacent to arroyos and flatlands. The southernmost section of the County is the Estancia Basin area with mostly flat land and a few drainage channels flowing south.

5.4.1.3 FLOOD PLAINS/WETLANDS/RIPARIAN ZONES

The surface water drainage systems also form a regional and local hub of water resources and water-related ecosystems of riparian zones and wetlands in an otherwise arid landscape. The riparian and wetlands system of

the watersheds serve in particular as a small stepping stone (i.e., an "island") for waterfowl and other migratory birds that follow the alternative eastern fly routes parallel to the Rio Grande.

Flood hazard areas have been designated by Federal Emergency Management Agency (FEMA) mapping. Flood hazard areas are subject to periodic inundation that results in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

These flood losses are caused by development in areas prone to inundation that increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to flood loss. Floodplain and stream connectivity are major elements in maintaining healthy riparian habitat and off-channel habitats for the survival of fish species and conveyance of floodwaters. If river, floodplains and other systems are not viewed holistically as biological, geomorphological units, this can lead to serious degradation of habitat and increase flood hazards, which, in turn, can contribute to listing of various fish species as threatened or endangered and result in extraordinary public expenditures for flood protection and recovery. Frequently flooded areas, including the 100-year floodplain and the floodway, are mapped on Flood Insurance Rate Maps, or FIRMs. Many areas of the County are inadequately mapped, and improving mapping data is critical to supporting preservation of important environmental areas and preventing natural hazards.

5.4.1.4 SOILS

As with vegetation, desert soils are very delicate and prone to erosion. Minimizing soil erosion is a primary environmental concern. Significant soil erosion negatively impacts surface water quality due to turbidity and sedimentation. Topographical features can be destroyed and damage to transportation facilities can occur. Erosion causes changes to the paths and locations of arroyos and drainage facilities, threatening property and habitat. Within Santa Fe County, soil erosion results from three primary sources of soil disturbance: development activities (subdivision, building and street improvements); abandoned surface mining; and poor grazing management. Unmitigated erosion will adversely impact cultural, natural and economic resources.

Soils with limitations for agriculture are designated by U.S. Department of Agriculture Land Capability Mapping. Land capability classification is a system of grouping soils primarily on the basis of their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time:

- Class 1 soils have slight limitations that restrict their use.
- Class 2 soils have moderate limitations that reduce the choice of plants or require moderate conservation practices.
- Class 3 and below soils have severe limitations that reduce the choice of plants or require special conservation practices, or both.

A number of strategies to reduce and mitigate erosion are set forth in the Sustainable Land Development Plan and should be incorporated into the Sustainable Land Development Code. Best management practices (BMPs) for development and building operations and maintenance will be employed to control erosion. Buffer zones should be created along riparian corridors and significant topographical and cultural features that are susceptible to the negative impacts of soil erosion. Development sites must include features to limit stormwater run-off during construction and operation, such as vegetative buffers and limited site disturbance. Improvements to all roads should employ strong erosion control measures during construction and use.

5.4.1.5 LAND COVER/VEGETATION

The major vegetative communities in Santa Fe County are the Western Great Plains Shortgrass Prairie, the Inter-Mountain Basins Semi-Desert, Juniper and Pinion Pine Woodlands and Savannas, Ponderosa Pine Woodland, and

Rocky Mountain Montane Conifer Forest. The Western Great Plains Shortgrass Prairie and Inter-Mountain Basins Semi-Desert vegetative communities predominate at elevations lower than 6,500 feet. Between 6,500 and 7,600 feet, Juniper and Pinion Pine Woodlands and Savannas predominate, and between 7,600 and 8,800 feet, Ponderosa Pine Woodland predominates. Above 8,800 feet, Rocky Mountain Montane Conifer Forest predominates, although Aspen Woodlands are commonly found on south- and west-facing slopes.

5.4.1.6 HABITAT AND SPECIES

Santa Fe County lies at the convergence of multiple ecosystems; this unique intersection provides for a high level of biodiversity including larger mammals. Natural features which allow for the presence and migration of wildlife should be protected as ecological and eco tourism assets. Overall habitat richness, based on number of vertebrate species, has been evaluated as a part of the Southwest Regional Gap Analysis Project (SWReGAP) analysis that was done by New Mexico State University and a refined analysis of habitat value that NMSU recently performed for the County. The conceptual locations of corridors that are needed to connect major habitat patches have been identified by the New Mexico Game and Fish Department.

Wildlife. Fish and wildlife habitat conservation areas have been designated by Comprehensive Wildlife Conservation Strategy for New Mexico. Fish and wildlife habitat conservation areas perform many important physical and biological functions that benefit the jurisdiction and its residents, including but not limited to: maintaining species diversity and genetic diversity; providing opportunities for food, cover, nesting, breeding and movement for fish and wildlife; serving as areas for recreation, education and scientific study and aesthetic appreciation; helping to maintain air and water quality; controlling erosion; and providing neighborhood separation and visual diversity within urban areas.

Wetlands and streams are environmentally sensitive and serve numerous natural functions and values. These functions include wildlife and fisheries habitat, water quality protection, flood protection, shoreline stabilization, stream flow, and ground water recharge and discharge.

The Biota Information System of New Mexico database lists 621 species in Santa Fe County. From that list, amphibians, reptiles, birds and mammals (those taxa categories specified in SWReGAP) were selected that met one or more of the following criteria: Federal Endangered or Threatened; NM Endangered or Threatened; NM Species of Greatest Conservation Need; and Pueblo Tribes Cultural Importance. Of the 91 resulting species, 28 species are considered to be Demonstrably Secure, leaving 63 species considered to be endangered, threatened or of greatest conservation need and cultural species in the County.

Plants. Santa Fe County provides habitats for twenty four rare plants, which have been designated by the New Mexico Rare Plant Technical Council. Native plants and existing groundcover provide important natural habitats, prevent erosion and provide natural storm water runoff filtration and management. Additionally, Native American Pueblos in Santa Fe County harvest native plants for ceremonial and practical use. Desert plants are very sensitive, taking years to establish once planted. Disturbance of a site can permanently destroy native vegetation, reducing habitat and biodiversity. Road construction and other development activity threaten native plants. For instance, roads built in previously undeveloped areas can lead to the spread of exotic plants; traffic spreads the seeds of these noxious weeds.

Depletion of water supplies and disruption to wildlife corridors and crucial habitat must be prevented in order to protect native fish and wildlife. Provision of a connected critical mass of habitat must be accomplished to provide a viable ecosystem for wildlife. Preservation of connected open space and riparian corridors is a key element of wildlife protection. Monitoring is essential for assessing the impacts of development, as well as whether current management actions are effective.

5.4.1.7 ENVIRONMENTALLY SENSITIVE AREAS

As a part of the current Growth Management Strategy update, staff has researched and mapped Environmentally Sensitive Areas, a concept recommended in the 1999 Growth Management Plan, in order to identify natural areas where development may endanger the health, safety and welfare of citizens or of County services; and identify areas and lands where actions by land use development may damage the cultural and environmental resources that define Santa Fe County and are the basis of its economy and culture.

Identification of the Environmentally Sensitive Areas will give rise to appropriate land use, zoning, and site development strategies to be considered for these designations.

Environmentally sensitive areas perform key functions that protect and enhance the environment and protect the public from hazards. The beneficial functions and values provided by environmentally sensitive areas include, but are not limited to: Water quality protection and enhancement; Fish and wildlife habitat; Food chain support; Flood storage, conveyance, and attenuation (the slow release) of flood waters; Ground water recharge and discharge; Erosion control and wave attenuation; Protection from natural hazards; Historical, archaeological, and aesthetic value protection, and; Recreation and open space.

Identifying the functions and values of local critical areas is essential in defining the purpose of an environmental resource protection program. Each environmentally sensitive area performs different functions and their protection is essential to protect the public's health and safety, and can be used to comply with state and federal laws. If the functions of environmentally sensitive areas are not protected now, attempting to restore them in the future is likely to be costly, if not impossible.

5.5 GOALS, POLICIES AND STRATEGIES

Goal 12: Protect and preserve the County's archaeological, historic, cultural, community and scenic resources.

Policy 12.1: Promote coordination with local, State and Federal agencies, including the Office of Cultural Affairs, New Mexico Historic Preservation Division, and State Historic Preservation Officer to preserve and manage archaeological, historic and cultural resources.

Strategy 12.1.1: ***Create a cultural and historic resource management program in coordination with State and Federal agencies, including the New Mexico Historic Preservation Division.***

Strategy 12.1.2: ***Support the Galisteo Protection Act through coordination with the Galisteo Basin Archaeological Sites Protection Act (GBASPA) Coordination Committee and participate in the development of a Galisteo Archaeological Site Management Plan.***

Policy 12.2: Coordinate with ranches and state and federal agencies to protect archaeological sites.

Policy 12.3: Support local, state and federal designation of historic districts to protect historic neighborhoods, communities, villages, irrigated acreage and acequias.

Strategy 12.3.1: ***Create rural historic district overlay zones for historic and cultural landscapes***

Policy 12.4: Expand the database of known cultural, historic and archaeological resources by compiling information that becomes available through the development review process on a Countywide basis.

Strategy 12.4.1: ***Establish a data sharing agreement with SHPO to identify tracts of land that have archaeology surveys completed.***

Policy 12.5: Support the ability of Native Americans to use the natural resources of the County for ceremonial, religious, and other cultural uses.

Strategy 12.5.1: ***Establish procedures for Tribal requests to use County open space for ceremonial or other purposes.***

Policy 12.6: Promote preservation of the County's communities, including the unique histories and artifacts associated with the communities.

Policy 12.7: The character of the County's built and natural resources should be protected.

Strategy 12.7.1: ***Create development standards for the siting and installation of renewable energy production facilities.***

Strategy 12.7.2: ***The design of new development should be compatible with the character and intensity of surrounding areas.***

Goal 13: Preserve, support and enhance the character and function of communities, neighborhoods and rural areas.

Policy 13.1: Support connectedness and centeredness in existing and new communities.

Strategy 13.1.1: ***New development must be compatible with the scale of surrounding uses.***

Policy 13.2: The character of rural and scenic highway corridors, historic bridges and historic routes should be preserved through the use of context sensitive solutions, design and improvement standards.

Strategy 13.2.1: ***Support community efforts to pursue designation of historic roads and scenic by-ways***.

Policy 13.3: Require use of native vegetation, southwestern plants and draught tolerant natural landscaping materials in the landscaping of public and private development, including roadway and right-of-way landscaping.

Strategy 13.3.1: ***Create landscaping standards that are appropriate for addressing context sensitive solutions.***

Goal 14: Protect, preserve and conserve the County's vast natural resources.

Policy 14.1: Design standards should be established to require developments to be compatible with surrounding areas including landscaping, signage, parking, and screening.

Strategy 14.1.1: ***Support the use of pervious asphalt, pervious concrete or other pervious material to build new, or resurface existing, access roads or parking lots where appropriate***.

Policy 14.2: Promote outreach and education to support environmental protection and conservation.

Policy 14.3: Coordinate with the Agricultural Extension Office, Natural Resources Conservation Service other entities to develop informational programs and publications focusing on best management conservation practices.

Goal 15: Protect vegetation and wildlife, including rare, native species, threatened and endangered species.

Policy 15.1: The spread of noxious and invasive species should be prevented and native species should be protected and restored.

Policy 15.2: Support and encourage rehabilitation of creeks and waterways with native vegetation, implementing erosion control and eradicating invasive species.

Policy 15.3: Wildlife habitat, migration corridors, riparian areas and surface water resources that support wildlife health should be preserved and protected.

Strategy 15.3.1: ***Coordinate with wildlife conservation organizations and state agencies to create a county- wide natural resource conservation plan.***

Policy 15.4: New development should not cause significant degradation of wildlife or sensitive wildlife habitat, especially to any wildlife listed as threatened or endangered on a state or federal list.

Policy 15.5: Coordinate with environmental NGOs (non-governmental organizations) such as the Galisteo Watershed Planning Partnership to protect and rehabilitate local creeks, wildlife corridors and other environmentally sensitive areas.

Strategy 15.5.1: ***Coordinate with wildlife conservation organizations to identify crucial focal and indicator species and establish wildlife corridors.***

Strategy 15.5.2: ***Develop an inventory of local wildlife and wildlife habitat areas, a wildlife management and protection program and a wildlife corridor study.***

Goal 16: Scenic viewsheds should be preserved and protected as an important resource.

Policy 16.1: Require sensitive siting, design and screening of new development to minimize visual and physical impacts to the land where other more appropriate building sites exist.

Policy 16.2: Prohibit development on steep slopes, visible ridges and peaks.

Policy 16.3: Limit development near prominent natural features such as distinctive rock and land forms, vegetative patterns, river crossings or other landmarks.

Policy 16.4: Preserve distinctive natural features.

Policy 16.5: Protect night sky views through prevention of light pollution.

CHAPTER 6: OPEN SPACE, TRAILS, PARKS AND RECREATION AREAS ELEMENT

The SLDP sets forth policies to support and require the conservation of open spaces, parks, recreation areas, trails, scenic lands and vistas ("Open Space") to meet the needs of County residents, support a healthy natural environment and preserve the rural, agricultural and scenic character of the County. Santa Fe County's assets include abundant natural and cultural resources as well as incredible outdoor recreational opportunities. The open vistas and public lands, parks, trails, and scenic landscapes enhance the quality of life and economic value in the County. Open space, parks, recreation areas, trails, scenic lands and vistas attract businesses and eco-tourism and strengthen the county's communities by providing opportunities for residents to recreate and connect with the landscape and nature. Within this remarkable setting, population growth, continuing urbanization and land consumption threaten these critical open spaces while simultaneously fueling an increase in public demand for additional open space opportunities. Incremental losses of agricultural lands, open space or habitat rarely have measurable or predictable impacts -- it is the cumulative impact of many decisions over time that has profound effects.

6.1.1 KEY ISSUES

1. **Impacts of urbanization on open space.** Population growth and continuing urbanization threaten many of the County's distinctive landscapes while increasing the public's demand for additional recreation opportunities.

2. **Acquisition of open space has been piecemeal and reactive.** County Open Space properties are not necessarily part of a county-wide land conservation strategy because acquisition was initially intended to protect parcels from immediate development pressure. Future acquisitions must be strategic.

3. **Lack of standards for internal open space preservation and trails for new developments.**

4. **Lack of public access to County Open Space.** Lack of management plans and trailheads prevents public access to County Open Space properties.

5. **Funding for maintenance of Open Space Properties and Trails and the Open Space Program is inadequate.**

6. **Public is not informed about the various natural and open space resources and stewardship opportunities available to them.**

7. **Lack of County-owned open space in the southern portion of the County.** Open Space can provide important links between existing and future trails and provide opportunities to access other public lands.

6.1.2 KEYS TO SUSTAINABILITY

1. **Permanently protected open space**. The protection and preservation of open space is essential to addressing the impacts of urbanization.

2. **Preserve open space in all areas of the County** with an emphasis on areas experiencing significant growth pressure including the southern portion of the County. Open Space preservation is an essential means of controlling sprawl at the edges of communities and maintaining natural and cultural resources and agricultural and ranch lands. Policies and strategies should be developed for the preservation of open space throughout the County with particular consideration to areas that have historically been used for agriculture and ranching.

3. **Preserve the edges of traditional and contemporary communities from development.** In order to protect and preserve the edges of communities from losing their unique character, strategies such as open space acquisition at the edges of communities should be explored to establish well-defined gateways into the communities in Santa Fe County.

4. **Open Space management and maintenance.** The County will endeavor to provide greater public access and improvements to public lands.

5. **Create an Interconnected Trails System.** New trails should be connected to other new and existing trails in the County, creating opportunities for pedestrians, cyclists and equestrians to circulate among residential, commercial, and recreational spaces. New trails should be designed and built to comply with national sustainable trail models. The County trail network should be tied to the County transportation network.

6. **Cultivate Funding Options for Open Space Acquisition and Maintenance.**

7. **Development of a community-based stewardship and management program for public lands** to provide maintenance and clean-up; create environmentally and culturally sensitive programs; develop and maintain traditional activities such as common open space areas, equestrian trails, grazing, and community gardens; and other activities to support open space preservation while building community. Stewardship can promote open space acquisition and management, and incentivize donation of conservation easements, and public participation in the program.

8. **Establishment of an Official Map** to identify existing and planned open space and trails can ensure that these areas are planned and acquired pro-actively to achieve landscape wide preservation.

9. **Establish an outreach and education program to encourage people to use the County's open space and trails system**.

6.2 CRITICAL FINDINGS

6.2.1 OPEN SPACE FOCUS AND MISSION

The Santa Fe County Open Land and Trails Program has focused primarily on preserving land in Santa Fe County through acquisition. COLTPAC has implemented this approach since 1998. Along with the land preservation and management work of other public and nongovernmental agencies, this effort has been highly visible, and has brought attention to the unique resources available in the County. Since 1998 the Program has moved within the County organization to the Community Services Department and is now called the Open Space and Trails Program. The focus and the mission of the Open Space Program have evolved and it is currently focused on the following priorities:

- Cultural Heritage Preservation
- Trails for Recreation and Alternative Transportation
- Protecting Views and Open Landscapes
- Protecting and Restoring Natural Areas
- Outdoor Education and Landscape Interpretation
- Community Stewardship and Partnerships

Currently, COLTPAC consists of 11 members and 2 alternates appointed by the County Commissioners. They are selected from geographic regions: 3 from the "North", 3 from the "Central", 3 from the "South", 1 from the City of Santa Fe, and 1 "at large". As the Open Space and Trails program has matured, to presently focus on open space management and strategic acquisition, and in light of the broader sustainability objectives of the SLDP, the structure and mission of COLTPAC should be strengthened. There is a need for a technical advisory committee to inform COLTPAC that is readily accessible. Members with specific technical expertise should be sought, and committee members should have a broader policy, monitoring and technical advisory role on matters of general resource protection and conservation related to land use

planning, development review and economic development. There is a potential role for COLTPAC to serve as a Resource Advisory Committee to support other County sustainability initiatives.

6.2.2 OPEN SPACE PROPERTIES AND TRAILS

The current Open Space and Trails Program relies on partnerships and collaboration with over 75 local, state, and national agencies, associations and non-profits to accomplish its work. It is important to cultivate these relationships and to seek out grants and other creative avenues for funding. The Open Space and Planning Staff has strong collaborative experience with a variety of local experts in resource conservation and protection.

Currently the Open Space program provides conservation services for approximately 5,600 acres in Santa Fe County. The program focuses on educational programs that connect the public with the County's environment, watershed and habitat protection, and trail-based recreation. The Open Space program maintains 16 properties ranging in size from 5 to 1,900 acres and assists in the management of 13 County Parks ranging in size from a fraction of an acre to 50 acres in size. In addition, the County maintains approximately 34 miles of built trails. **Figure 6-1** lists existing open space properties, parks, trails, trailheads and level of service. **Map 6-1** shows the locations of open space and trails.

Figure 6-1: County Open Space, Trails, Parks and Trailheads Inventory and Level of Service

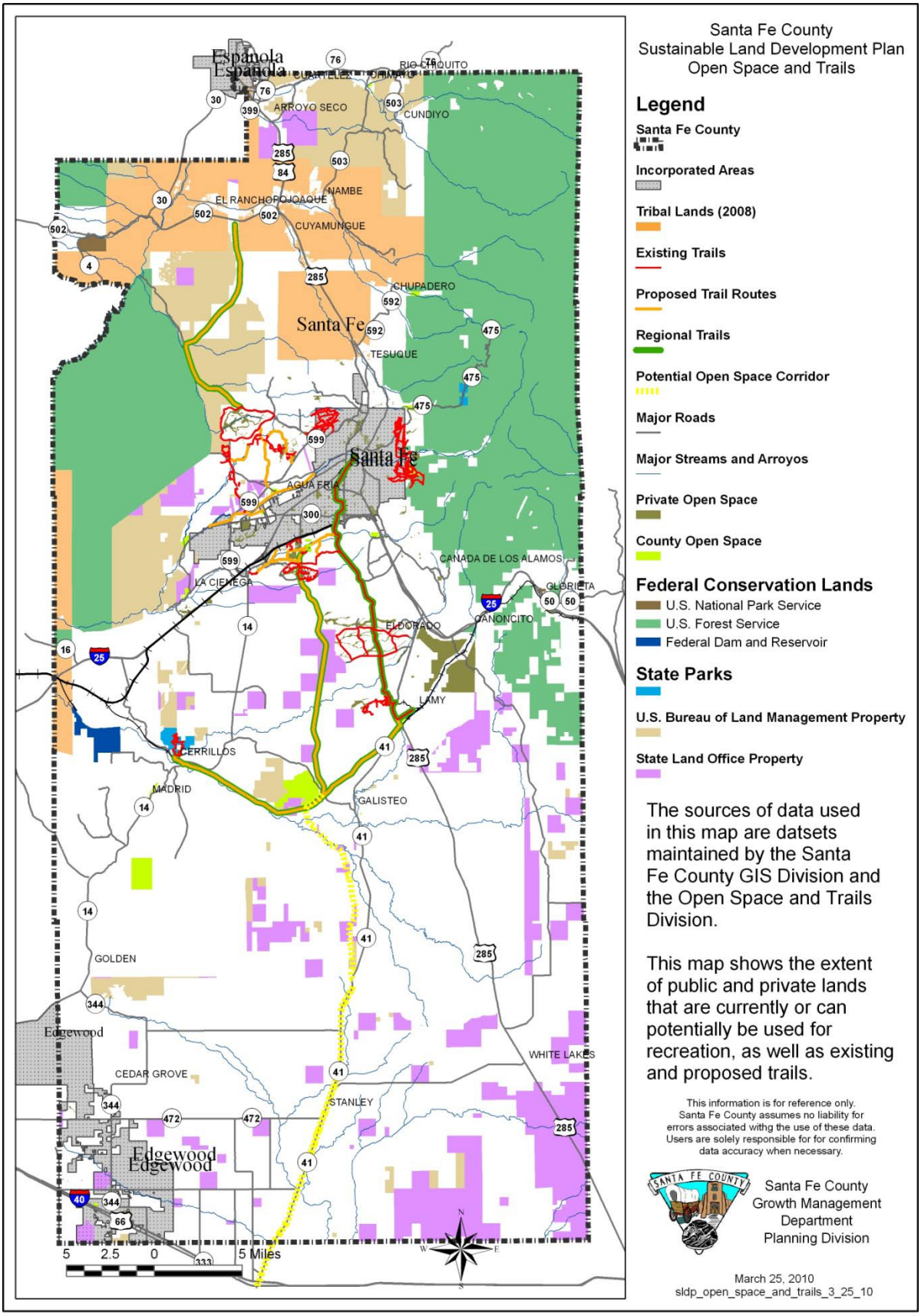
Facility	Amount
Open Space	**Acres**
Arroyo Hondo Open Space	86.842
Cerrillos Hills State Park	1098.243
Edgewood Open Space	29.821
El Penasco Blanco Open Space	93.399
El Rancho Open Space	5.542
Lamy Open Space	91.163
Little Tesuque Creek Open Space	160.971
Los Potreros Open Space	40.0446
Madrid Open Space	57.302
Old Pecos Trail Open Space	4.8
Ortiz Mountain Open Space	1350
Rio en Medio Open Space	121.26
Talaya Hill Open Space	290.54
Thornton Open Space	1904.08
South Meadows Open Space	22.207
Santa Fe River Greenway	242.511
Total Open Space	***5598.726***
Parks	**Acres**
Agua Fria Park	45
Bennie J. Chavez Playground	0.5
Stanley Community Park	0.5
Lamy Park	50
Chimayo Multi-purpose Court	0.25
Pojoaque Tennis Court	0.25
Galisteo Community Park	0.5
Sombrillo Tennis Court	0.25
Burro Lane Park	3.33
Leo Gurule Park	4
La Puebla Park	5.76
El Rancho Playground	0.5
Rio en Medio Playground	0.5
Total Parks	***111.34***

Facility	Amount
Trails	**Miles**
Santa Fe Rail Trail	10.5
Santa Fe River Trail	1
Arroyo Hondo Open Space	1
Cerrillos Hills State Park	6
Little Tesuque Creek Open Space	1
Ortiz Mountains Open Space	6
Rio en Medio Open Space	0.5
Spur Trail	3
Talaya Hill Open Space	5
Total Trails	***34.0***
Trailheads	**Number**
Arroyo Hondo Open Space	1
Cerrillos Hills State Park	1
Ortiz Mountain Open Space	1
Santa Fe Rail Trail	3
Santa Fe River Trail	1
Spur Trail	1
Total Trailheads	***8***

Facility	Level of Service (LOS) per 1,000 Residents*
Open Space (Acres)	87.1
Trails (Mile)	0.5
Parks (Acre)	1.7
Trailheads (Number)	0.1

* The 2010 unincorporated County population of 64,258 was used to calculate the LOS.

Map 6: Open Space and Trails



6.2.3 PRIORITY OPEN SPACE PROJECTS

The SLDP has established as priority projects depicted on the Preliminary Official Map. In particular, the prioritized open space projects for the next two years are outlined below:

6.2.3.1 SANTA FE RIVER GREENWAY

This project includes develop of a public greenway and trail system along the Santa Fe River from Two Mile Reservoir to the Waste Water Treatment Plant in cooperation with the City of Santa Fe. It will include the acquisition of approximately 270 acres of land, implementation of river restoration plans, and construction of trail and park facilities.

The Santa Fe River Greenway has been a vision since at least 1985 and enjoys wide community support. By restoring the Santa Fe River as a focal point of the community, the project enhances the community's identity and sense of place. It will provide a unique recreational area and a safe route for non-motorized transportation. The Greenway will also be an attraction for visitors and enhance the tourist experience. The project demonstrates the County's commitment to the environment and contributes to its image as a "green" location for business and tourism.

6.2.3.2 THORNTON RANCH OPEN SPACE MANAGEMENT AND VISITOR PROGRAMMING

This project involves the completion of a management plan for Thornton Ranch Open Space in coordination with the effort underway by the federal Bureau of Land Management to develop a management plan for Galisteo Basin Archaeological Sites. It will include development of interpretive programming and construction of low impact visitor facilities for managed public access.

The Thornton Ranch Open Space is at the center of the Galisteo Basin which is nationally recognized for its unique cultural landscape. The petroglyphs on the property draw visitors from all over the world. The Thornton Ranch Open Space has the potential to be a major eco- tourist attraction that will generate revenue for the County through entry fees, voluntary donations or gross receipts taxes.

County residents will have access to an important new space for hiking, mountain biking, and horseback riding in a scenic and historic part of the County. The educational component of the docent led tours for the archaeological, cultural and historical resources on the property will add to residents' and visitors' understanding of the prehistory, history, ecology, and geology of the Galisteo Basin. Opening Thornton Ranch will elevate the profile of Santa Fe County for its excellence and progressive approach to managing a resource of national importance within the context of the Galisteo Basin. County residents along CR 42 and CR55A will experience increased traffic impacts.

6.2.3.3 COUNTY TRAIL NETWORK

This project involves the development of a Countywide trail plan. It will include acquisition, design and construction of a major trail network in the central portion of the County incorporating the Arroyo Hondo Trail and the New Mexico Central Trail.

The trails will provide outdoor recreation facilities and safe alternative transportation routes. An expanded and well maintained trail network will attract tourists who are looking for an outdoor recreation experience. Trails also provide a "green" alternative to non-motorized transportation. They are an amenity that improves the quality of life in the community. The trails will enhance the reputation of the County as a quality environment to live and work and will help to attract desirable business to the County.

6.2.3.4 OPEN SPACE, TRAILS AND PARKS FUNDING AND MAINTENANCE

This project involves development and institution of measures to provide dedicated funding for open space, trails and parks capital improvements, operations and maintenance. It includes hiring additional staff to adequately manage and maintain County open space, trails and park properties.

This project will secure the necessary funding to expand the Open Space and trails Program to provide Countywide conservation of significant cultural and natural landscapes and view sheds that are important to the wellbeing and sense of

place of our communities, and regional trail networks that provide meaningful outdoor recreation opportunities for our residents and visitors. The conservation and management of open space and trails plays a critical role in the planning and implementation of the County's SLDP.

The County has recently sought technical advice and assistance from The Trust for Public Land related to ongoing efforts to develop a program to finance land conservation and renew land conservation funding through a potential ballot measure. The scope of work may include feasibility research, evaluation of the feasibility of acquisition, a public opinion survey, recommendations for program design, and assistance with the development of strategies for supporting dedicated, ongoing sources of public funds for conservation. The majority of the services provided by the Trust for Public Land are provided at no cost to the County. These services will augment and assist the County in preparing the Open Space initiatives to be presented to the public for implementing the financing bond and revenue program as outlined in the Binding Principles of this Open Space Element.

6.3 GOALS, POLICIES AND STRATEGIES

Goal 17: Acquire, preserve and maintain a significant amount of land to support a network of public and private open space, parks and trails throughout the County.

Policy 17.1: New open space and park facilities should be established to match demands of population growth and expansion.

Strategy 17.1.1: ***Require open space dedication standards for open space and trails in new development so that these are contiguous and connect with existing open space and trails on adjacent lands including connections/access to regional trails.***

Strategy 17.1.2: ***Require all subdivisions and site plans containing land lying adjacent to any tract or corridor designated on the Official Map to reserve or dedicate such land or a provide a spur connection to such designated lands.***

Policy 17.2: Protect significant lands including: scenic vistas, environmentally sensitive areas (such as flood hazard areas, hillsides above 11% grade, areas accessible or proximate to rivers, streams, creeks and springs, acequias, wildlife habitat or migration corridors, areas of important native vegetation), archaeological, historic, agricultural areas and ranch lands.

Strategy 17.2.1: ***Open Space that is preserved through clustering of development will be preferentially located on the most environmentally sensitive area of the site and should be interconnected with open space on adjacent properties when possible.***

Policy 17.3: Adopt and maintain an Official Map to preserve the potential sites of an open space system of trails, parks, open spaces, scenic vistas, environmentally sensitive areas, scenic vistas, and recreation areas, in addition to other rights of way and sites for existing and future roads, schools, libraries and public facilities.

Strategy 17.3.1: ***Map all existing conservation easements, wildlife corridors, conservation land, irrigated land, and ranchland, and integrate these data into the official map and plans for future infrastructure in order to plan for connectivity among open spaces and conservation lands.***

Policy 17.4: New open space will be acquired and protected. Additional means will be developed to fund acquisition and maintenance of open space, trails, and the programs that support them.

Strategy 17.4.1: ***Research potential to establish a transfer and purchase of development rights program including creation of a County Land Bank.***

Strategy 17.4.2: ***Provide for the use of transfers of development rights of the owner's land to other lands in zoning districts authorized to receive TDRs or to a County Land Bank when clustering is not feasible, but required.***

Strategy 17.4.3: ***Require all subdivisions and site plans containing land lying adjacent to any tract or corridor designated on the Official Open Space and Trails Map to reserve or dedicate such land or to provide a spur connection to such designated lands.***

Policy 17.5: Support partnerships with other governmental agencies, Pueblos, non-profits, non-governmental agencies and private interests to permanently protect open space, parks, trails, recreation areas, environmentally sensitive and natural resource areas.

Policy 17.6: Create new permanently protected private open space in coordination with private landowners, non-profits and relevant agencies through the use of development or conservation easements.

Strategy 17.6.1: ***Coordinate with private land owners, public and private entities and federal land managers in the County to identify and map open space corridors and areas.***

Policy 17.7: An interconnected system of trails and parks should be established, with continuous regional trail and park connections for pedestrians, equestrians, and cyclists.

Strategy 17.7.1: ***Identify and map existing private trails and coordinate with private land owners, Pueblos, the BLM and the state Land Office to develop voluntary use agreements, easements or***

other arrangements for public use of designated trails, parks and recreation areas occurring on these lands.

Strategy 17.7.2: ***Work with community planning groups to expand local trail networks near existing rural communities so that all county residents have access to a trail system within a mile of their residence. Link these local trail networks to regional trails.***

Strategy 17.7.3: ***Continue to develop important regional trail corridors and rails to trails opportunities according to new trail design standards.***

Strategy 17.7.4: ***Identify and pursue rails to trails opportunities.***

Policy 17.8: Develop trail design standards for recreational and commuter trails and implement them in the design of a trails network connecting open spaces, parks, neighborhoods, and commercial centers.

Strategy 17.8.1: ***Include trail design standards in development review standards for both county and developer projects.***

Policy 17.9: Require that the construction, design or location of park and trail corridors does not negatively impact environmental features or waterways.

Policy 17.10: Improve the maintenance of County owned parks, trails and open space through partnerships, grant funding, and other creative techniques.

Policy 17.11: Create and maintain safe access, parking, and trailheads for public lands and other open spaces.

Policy 17.12: Support community-based stewardship of open spaces, trails and public spaces.

Strategy 17.12.1: ***Continue to develop a community-based stewardship and management program for public lands. Such a program should establish: volunteer open space monitors and stewards; periodic open space clean-up days; a method to control unauthorized off-road vehicular use; and citizen volunteers to monitor conditions and provide landscaping and litter/graffiti control.***

CHAPTER 7: RENEWABLE ENERGY AND ENERGY EFFICIENCY ELEMENT

Energy sources which are not renewable, such as fossil fuels, are not only in limited supply but they contribute detrimentally to the environment, and adversely affect the sustainability of the economy. Greenhouse gas (GHG) emissions contribute greatly to climate change and its negative impact. The implementation of renewable energy and energy efficiency initiatives, reduced greenhouse gas emissions and fossil fuel use; and renewable energy production, distribution and use are vital for the development of a sustainable County. The SLDP sets forth policies to establish Santa Fe County as a regional model in the efficient production and use of renewable energy; and energy self-reliance through the development of a local green workforce and renewable energy infrastructure.

7.1.1 KEY ISSUES

1. **Greenhouse Gas Emissions.** Much of the region is still heavily reliant on fossil fuels, with coal being the largest contributor to GHG emission. The County should complete studies to establish base levels of energy consumption and greenhouse gas emissions and set incremental goals to phase out fossil fuel use, reduce emissions and integrate renewable energy.

2. **Over-reliance on fossil fuels.** Fossil fuel has been a relatively low-cost resource for generation of energy until we factor in the related environmental costs associated with this. Increasingly apparent is the volatility of this pricing structure and the region is vulnerable to these changes.

3. **Consumer behavior results in excessive energy consumption.** Much of the energy consumption habits are built upon the conventional model of having access to cheap energy and it will require education, incentives and resources to help integrate and transition energy efficiency and renewable energy measures in order to render impactful environmental, economic and community benefits.

4. **Building Materials Not Local or Sustainable Construction materials are not generated from local renewable resources.** Due to the costs of production and transportation construction materials are laden with high embodied energy. This practice adds to not only the overall costs—economic, environmental and community--of development but also to economic resource leakage from the region.

5. **Increasing Demand for Limited Water Resources Increases Energy Demand.** As the population increases the demand for water increases. Water supply and conveyance can be the most energy intensive phase of water infrastructure. Production and delivery of water require a significant level of energy. Notably, groundwater at depth requires the energy use of pumping and treatment from aquifers. Energy needs will increase as groundwater levels begin to decline. Surface waters typically require more treatment and by default more energy usage. The future faces declining freshwater supplies, aging and less efficient infrastructure, and an increase in more stringent treatment requirements all will require more energy.

6. **Cost of Energy Efficiency improvements**. Agricultural, residential and commercial energy uses and practices affect occupancy and operational costs and can be considerable. Many residents, businesses and local food producers are aware of the need to save energy but the initial capital costs often prevents improvements to take place. Energy efficiency improvements can range from the simplest weatherization to high cost building retrofits. Many of the aged buildings in this region require a significant investment to render energy efficiency effective.

7. **High Costs of Renewable Energy and Infrastructure Requirements.** Many residents, businesses and agricultural producers are unable to utilize renewable energy and energy conservation measures for the reason that the initial capital costs are often a barrier. The costs of renewable energy improvements can be considerable and financing has become challenging due to tightening credit markets and lending practices are increasingly more conservative. Existing energy infrastructure is also a part of the future network and collaborative approach is needed with this aspect to ensure that resources are utilized, leveraged and developed for greater regional benefits.

8. **Regulatory barriers and opportunities.** Existing tax credits and incentives on the state and federal levels provide various forms of assistance for the development of energy efficiency and renewable energy improvements. However, direct assistance from local government is limited due to anti-donation and other regulatory barriers. The Public Regulations Commission plays an important role in shaping rules and practices of utility companies.

7.1.2 KEYS TO SUSTAINABILITY

1. **Need to acquire more data and information regarding greenhouse gas emissions in the County.** In order to guide future development and create more livable communities it is essential to acquire more information and data about Countywide greenhouse gas emissions. Analysis of transportation, industrial, commercial, residential, and agricultural sector emissions and waste production should provide a baseline inventory of greenhouse gas emission quantities by which progress can be measured.

2. **Continue to support policies and actions to enable transition from conventional fossil fuel to renewable energy consumption and generation**. Establish base line for energy consumption and set incremental goals to reduce energy consumption and support renewable energy projects to address climate change and related economic impact.

3. **Santa Fe County will be a leader in renewable energy regulation,** requirements, incentives, production and use. The County will support and develop infrastructure to support the transition from conventional to renewable energy generation and distribution to increase regional energy, environmental, economic benefits and energy independence. Personal and public responsibility to minimize human impact on the environment has fueled support for green building requirements, energy efficiency, alternative transportation modes and renewable energy production and use.

4. **Retrofit existing government operated and owned facilities with energy efficiency, water conservation and renewable energy measures**. Continue to adopt measures to lower energy consumption and costs through capital improvement, resource and staff development. Renewable energy use and reduced greenhouse gas emissions should be encouraged and required for County operated facilities and new development to combat climate change and increase sustainability.

5. **Provide incentives and invest resources and education in local community energy efficiency programs**. Assist the general public with opportunities to incorporate energy efficiencies in daily lives. Programs to assist home energy efficiency improvements, better access and use of public transportation, and changes in energy consumption patterns. It will require education, incentives and resources to transition to energy efficiency and renewable energy.

6. **Invest and leverage local resources for development of local renewable energy generation and distribution.** Enhance and invest resources in the Renewable Energy Financing District to provide low cost financing to support a wide range of energy initiatives and projects, including residential and commercial renewable energy installation, distributed energy generation and green grid development.

7. **Support existing incentives and invest resources to provide incentives for Green Building practices**. The Energy Improvement and Extension Act of 2008 extended the New Energy Efficient Home Credit to the end of 2013. This will help support industry changes to include appropriate energy efficiency, water conservation and renewable energy applications.

8. **Enhance existing energy infrastructure and develop opportunities and strategies for green grid solutions to include a diverse portfolio of energy generation and distribution.** Develop capital improvement resources to support and integrate broadband infrastructure development and the transition from conventional to renewable energy generation and distribution to increase regional energy independence and manage consumption and costs for the long term.

9. **Develop and enhance partnerships with incumbent providers and community based institutions to address future regional energy demands and capacity for viable business models.** Support and develop local policies and programs that will enhance progress with viable and sustainable business models related to energy generation and distribution.

10. **Support key regional partners in energy related assistance and programs to community members.** Enhance partnerships with incumbent providers and community based institutions to address future regional energy demands and capacity with to improve energy efficiency opportunities.

11. **Support technological innovation, development and job opportunities related to energy industries.** Tools and incentives to support clean energy technology innovation, including technology transfers from region's national labs, skill training in energy related disciplines and partnerships with existing workforce development institutions.

7.2 CRITICAL FINDINGS

7.2.1 CONVENTIONAL ENERGY

7.2.1.1 EXISTING ELECTRIC SOURCES

The Public Service Company of New Mexico (PNM), an investor-owned public utility, provides electric service to its service territory in Santa Fe County. PNM responds to growth by adding or expanding the capacity of its electric facilities and plans improvements based on system demands. Electric facilities are an important part of the existing infrastructure system in Santa Fe County and from the existing incumbent models, the preservation of transmission corridors, particularly protection from encroachment, is essential for continued reliable electric service in the County. The Central New Mexico Electric Cooperative, Inc. and the Jemez Mountains Electric Cooperative, Inc. provide distribution customer service in the southern and northern-most portions of the County, respectively. Mora-San Miguel Electric Cooperative, Inc. also serves a portion of eastern Santa Fe County.

As a public utility, the electric utility is regulated at the federal and state levels. Regulation obligates the electric utility to provide adequate, safe, reliable, and economic electric service within the area that it serves. Electric service facilities are allowed in all zones. Delivery of adequate and reliable electric service is deemed as being in the public interest protecting the public health, safety, and public welfare. The PRC regulates the utility's power delivery system (transmission, station and distribution) development standards of system service (capacity and voltage and the cost of service. Local government planning commissions are provided the authority to review proposed electric facilities. PNM reviews all technical needs, requirements and safety clearances for its electric power systems.

7.2.1.2 EXISTING CONDITIONS

Electric power for PNM's service territory in Santa Fe County comes from several generation sources including the Farmington area San Juan Generating Station and the Four Corners Power Plant, both of which are coal-fueled; Palo Verde Nuclear Generating Station in Arizona, the New Mexico Wind Energy Center in eastern New Mexico; and natural gas-fueled generation plants primarily located in Albuquerque. Typically, all power travels over the 345 kV bulk transmission system and arrives at one of the bulk switching stations, either the Bernalillo/Algodones (BA) Station or the Norton Station. The bulk transmission system is designed to carry large quantities of power from generating plants to bulk switching stations, in the same way the interstate highway system carries high volumes of traffic between major destinations.

At the bulk switching stations, lines intersect and power is transformed or "stepped down" to a lower voltage. A transformer, an electrical device for changing the voltage on an electrical system, is located at the switching station. Once transformed at either the BA or Norton Switching Station to 115 kV, the bulk power is then transmitted over 115 kV transmission lines to the Zia Switching Station into the Santa Fe area.

A local transmission system serves the City of Santa Fe and consists of both 115 kV and 46 kV transmission lines and substations. The 115 kV transmission system primarily brings power into Zia Switching Station and serves some outlying 115 kV substations. At local distribution substations, voltage is "stepped down" from 46 kV and 115 kV to 12.47 kV or 46 kV to 4.16 kV, and power is provided over distribution lines called feeders to business and residential customers.

7.2.1.3 INTERCONNECTIONS

Currently, PNM electric customers have the opportunity to become Interconnection Customers by proposing to interconnect their generating facilities, such as rooftop solar panels, with an electric utility's system. In order to become an Interconnection Customer, an application is submitted to the utility along with the associated fees which is placed in a first-

come, first-served order per feeder and per substation and will go through an interconnection review process including screening criteria to evaluate the proposed generating facility's ability to be interconnected consistent with safety, reliability and power quality standards.

A proposed interconnection either passes or fails the review and screening. If it passes, the utility provides the Interconnection Customer with an executable interconnection agreement and can then proceed with operational testing and inspections. If it fails, a full interconnection study may be necessary to determine impacts to the distribution system and modifications to be made for the interconnection to be compatible and the associated costs to be paid for by the Interconnection Customer.

7.2.1.4 NATURAL GAS

Natural Gas service is available from New Mexico Gas Company via pipelines coming from the San Juan wells. Areas outside of the pipeline have to rely on propane gas. Wood for space heating and cooking is also popular in the traditional/historic communities adjacent to the foothills and forested areas.

7.2.2 RENEWABLE ENERGY RESOURCES

Existing Resources. There are already resources, training and examples available in Santa Fe County to support renewable energy. There are a dozen solar energy equipment companies located in Santa Fe offering solar design, solar equipment, system services and repair. Educational institutions are developing training programs in alternative energy and green jobs. Santa Fe Community College is building a Trades and Advanced Technology Center that will be home to the Sustainable Technologies Center, a cutting-edge educational and training facility for alternative energy and green jobs integrating 21st century trades with advanced technologies and green curricula to promote a sustainable economy. There is a Sustainable Degree Program and biomass plant at SFCC, and a SFPS geothermal system for the Amy Biehl Elementary School in Rancho Viejo. These efforts provide a starting point for more intensive investment in green technologies and energy.

7.2.2.1 BIODIESEL AND ETHANOL

Energy security, ever rising oil prices, and the climate crisis are three facets of the same energy challenge. While various alternative energy sources are under development globally, multiple challenges impede the near-term viability of most of those options. Biofuels are a preferred alternative because they rely on the use of a proven technology, with minimal adverse environmental impacts where full consideration is taken with sustainable crop production practices and reuse and recycle of previously used resources and available production and distribution infrastructure that is easily modified. One of the benefits of biofuel is that the distribution infrastructure for petroleum products can be used or is easily modified to support biofuel distribution.

7.2.2.2 SOLAR

New Mexico gets approximately 6 full sun hours per day, on average, almost everywhere in the state. This coupled with gentle sloped terrain of Santa Fe County coupled with the annual mean total sunshine hours of 3,400 creates an ideal setting for solar energy applications. Space heating, water heating, photovoltaic cells, cooking and food production via solar greenhouse are just a few of the possible applications that already exist.

The scale for the integration of solar technology varies from residential to commercial. Many County residents in remote areas are already using solar energy for electricity, space and water heating. The potential for large-scale solar electric generating facilities exists within Santa Fe County. Impacts on the view sheds, historic and archaeological resources and the creation of a grid network to distribute the power would have to be considered in future development proposals in order to preserve the integrity of the landscape.

New Mexico's Solar Rights and Solar Recordation Acts (both contained in NMSA § 47-3) allow property owners to create solar easements for the purpose of protecting and maintaining proper access to sunlight. The Solar Rights Act established the right to use solar energy as a property right and prevents neighboring property owners from constructing new buildings or planting new trees which would block their access to the sun.

In May 2007, SB 1031 strengthened solar access rights in New Mexico by limiting the ability of a county or municipality to

restrict the placement of solar collectors unless the location is within a historic district. SB 1031 also voided all covenants and restrictions (from July 1, 1978 forward) that effectively prohibit the installation of solar collectors. **Map 7-1** shows the alternative energy potential for solar, wind and geothermal power in Santa Fe County.

7.2.2.3 WIND

New Mexico's wind resources are primarily located on the Eastern Plains of the State. The wind resources for Santa Fe County are poor to fair due to the low annual average wind speeds. Estimates of the wind resource are expressed in wind power classes ranging from Class 1 to Class 7, with each class representing a range of mean wind power density or equivalent mean wind speed at specified heights above ground level. The map identifies the wind power classes in terms of mean wind power density and mean wind speed at 30 meters (98 ft.) and 50 meters (164 ft.) above ground level. Areas designated as Class 4 or higher are generally considered to be suitable for most wind turbine applications. Class 3 areas may be suitable for wind energy development using tall (e.g., 70-80 meters hub height) towers.

7.2.2.4 BIOMASS

Biomass is biological material such as wood, plant matter, waste, and alcohol fuels used to generate electricity or produce heat. Forest residues (such as dead trees, branches and tree stumps), yard clippings and wood chips may be used as fuel. biomass. Biomass also includes biodegradable wastes that can be burned as fuel. There are several sources for biomass in Santa Fe County: residues from forest thinning projects, municipal green-waste from landfills and commercial green-waste from wood processing operations. Biomass should be sustainable and use waste materials such as residues from forest thinning projects, municipal green-waste from landfills and commercial green-waste from wood processing operations.

Biomass can be converted to other usable forms of energy such as methane gas, ethanol and biodiesel. Crops such as corn and sugar cane can be fermented to produce ethanol for use as transportation fuel. Biodiesel can be produced from food refuse, including vegetable oils and animal fats. Practical applications include residential and commercial electrical generation, heating and vehicle power.

Biomass systems for Santa Fe County are technically feasible and economically beneficial. Facilities suitable for biomass systems include schools, colleges, universities, hospitals, public buildings, hotels and motels, commercial buildings, greenhouses, large-scale agricultural operations, manufacturing plants, power plants, and community district energy systems (the latter being the use of a central heating plant to provide heat to multiple buildings).

7.2.2.5 GEOTHERMAL

According to the US Department of Energy, New Mexico possesses abundant geothermal resources that range in temperature from low to high and are utilized in a variety of ways. In the north-central region of the state, volcanic activity of the Valles Caldera in the Jemez Mountain Range west of Los Alamos has led to the occurrence of New Mexico's only known high-temperature geothermal system, a hydrothermal reservoir with a base temperature exceeding 260°C. Although low- and moderate-temperature geothermal resources are located throughout the state, resources suitable for development are concentrated in the west. Geothermal energy has been used in New Mexico for small-scale electricity generation and in direct-use applications that supply thermal energy for various agribusiness operations and one district-space heating system. New Mexico also has many hot springs that are enjoyed in their natural state in both wilderness and resort settings. There is potential for direct geothermal energy resources of greater than 50°C within Santa Fe County but further analysis and assessment is needed to determine viability.

Direct use of geothermal energy in homes and commercial operations is much less expensive than using traditional fuels. Savings can be as much as 80% over fossil fuels. Direct use is also very clean, producing only a small percentage (and in many cases none) of the air pollutants emitted by burning fossil fuels. Direct use applications includes district heating, greenhouse and aquaculture facilities, food dehydration, laundries, milk pasteurizing, lumber drying, spas, and others.

7.2.2.6 RENEWABLE ENERGY INFRASTRUCTURE

7.2.2.6.1 LOCAL LEVEL

At the consumer and local level, several important incentive programs exist to stimulate the development of distributed renewable energy. Currently, PNM customers may qualify for a program where PNM purchases Renewable Energy Credits (RECs) based on the renewable energy produced and this may also positively impact energy costs savings. PNM has over 150 customers currently enrolled in this program in the County.

The County recently created a Renewable Energy Financing District for the purpose of providing viable financing options to address the barrier of high upfront costs of renewable energy improvement. The district aims to develop an alternative that will offer relatively long term and low cost financing with repayment accomplished by a special assessment on property tax bills. Residential and commercial property owners will in turn be able to leverage this program to make renewable energy improvements in an accessible and affordable manner. Property owners opt into the district and therefore participation is on a voluntary basis. Qualified photovoltaic, solar thermal, wind and geothermal systems may be eligible. Guidelines are being developed and based on existing state, local or national standards to ensure quality control is addressed.

There are several components of community benefits potentially supported by this program that include long term and ongoing financial, environmental and local economic impact. On the financial level, property owners may yield energy costs savings and in situations where federal and state tax incentives are applied, affordability of the improvement will likely be enhanced as well. In general, the intent of the district to offer long term low cost financing, along with energy savings, reducing the overall costs of renewable energy improvement and making it affordable for the average community member. Equally important, Santa Fe County residents will contribute significantly to climate change by reducing the carbon footprint and greenhouse gas emissions for the region.

Environmental impact reflects partly on how much fossil fuel can be avoided in generation of energy needed for local consumption in the region and the related efforts to reduce greenhouse gas emissions and address climate change. For example, a typical 3.4kW system provides about 50% of a home's energy use (habits and other factors will determine energy consumption and this is, therefore, variable) and assuming that the average kilowatt hour from PNM's grid is produced in a way that releases approximately 1.504 pounds of CO^2 into the atmosphere. As this system produces 5,624 kilowatt hours of electricity per year, the system would save 8,458 tons of carbon from going into the atmosphere. One kilowatt hour is equivalent to saving 3.412 kBTUs. This system's production is therefore equivalent to 19,194 kBTUs.

Local economic effects may be observed by activities stimulated from renewable energy systems being installed and skilled workers being employed and trained in green jobs. This, in turn, is a vital part of the region's transition into a green sustainable economy and in times where unemployment rate continues to rise and greater economic conditions remain challenging, local policy and program may offer a form of community based economic stimulus working collaboratively with the natural environment, local resources and talents.

7.2.2.6.2 UTILITY SCALE

Initial criteria to consider the siting of industrial and energy-related uses include associated access and infrastructure, return on investment, minimization of conflicts with surrounding land uses; and environmental impacts. Opportunities for infill development/redevelopment in lieu of greenfield development should also be considered as appropriate.

While construction related green jobs are required for the development of renewable energy infrastructure, jobs for utility scale projects (>300 kW) usually move with the construction work and are not a primary benefit of large installations. A local construction workforce may be significant where numerous small installations occur over time. Solar photovoltaic installations, even those at utility scale require little additional infrastructure or maintenance once construction is complete. Utility scale wind generation is similar, and only a few roaming wind-smiths are typically required with the exception of the facility dispatchers, who are frequently now stationed at remote locations connected by telecommunications to the facility. Other renewable energy sources such as biomass and solar thermal generating station are staffed on-site, similar to traditional energy sources. Additional maintenance personnel may be posted to a facility during periods of major maintenance.

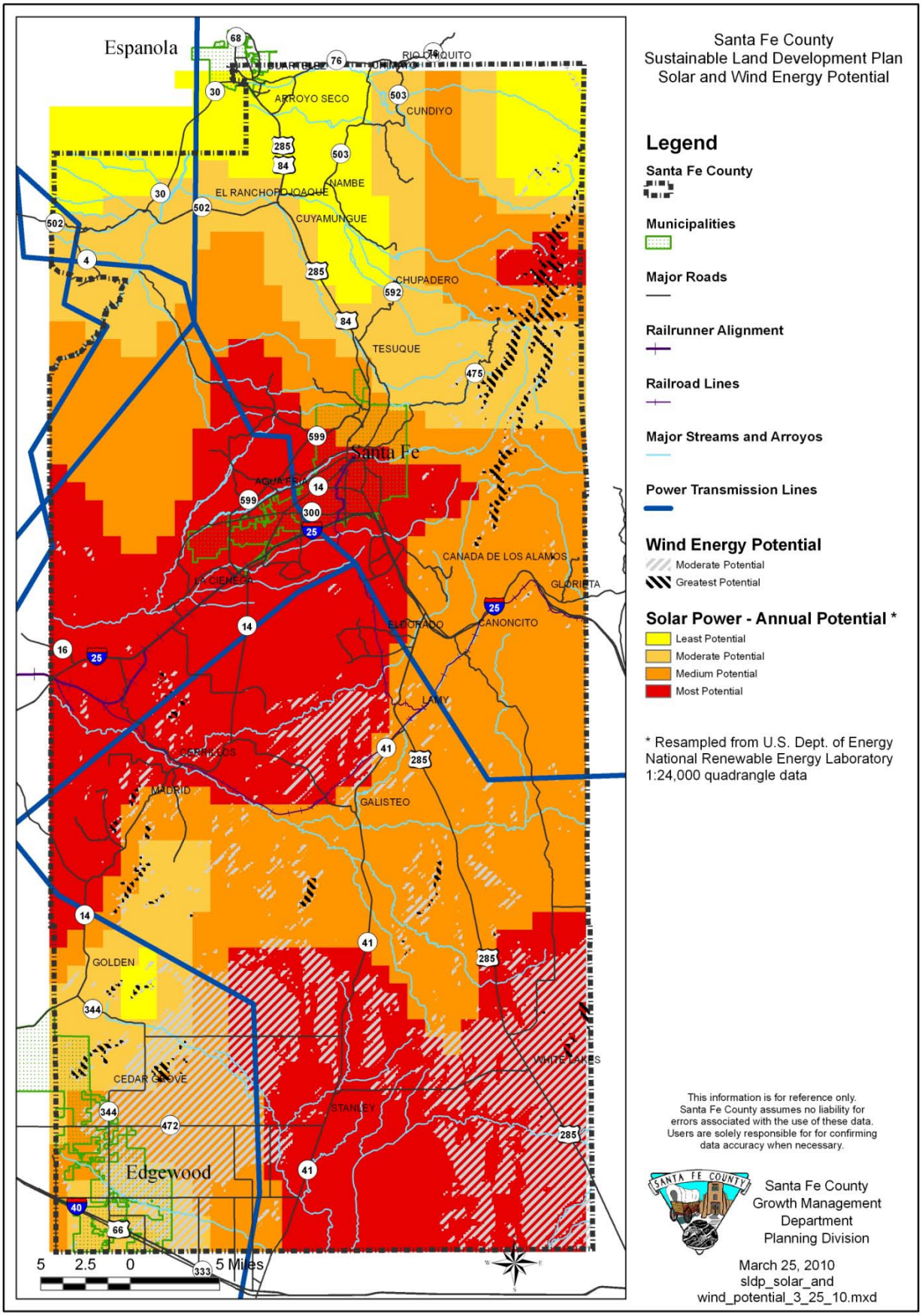
Renewable utility-scale facilities are a significant addition to the property tax base, however. In addition, some facilities require little in the way of traditional infrastructure support. Most solar PV and wind generation facilities for example do not require a permanent source of potable water.

To serve the needs of the County, incumbent energy providers may inject renewable energy to their systems at the distribution voltage level (12.5kV or less); this is especially effective for solar PV as it geographically distributes a sometimes rapidly intermittent supply.

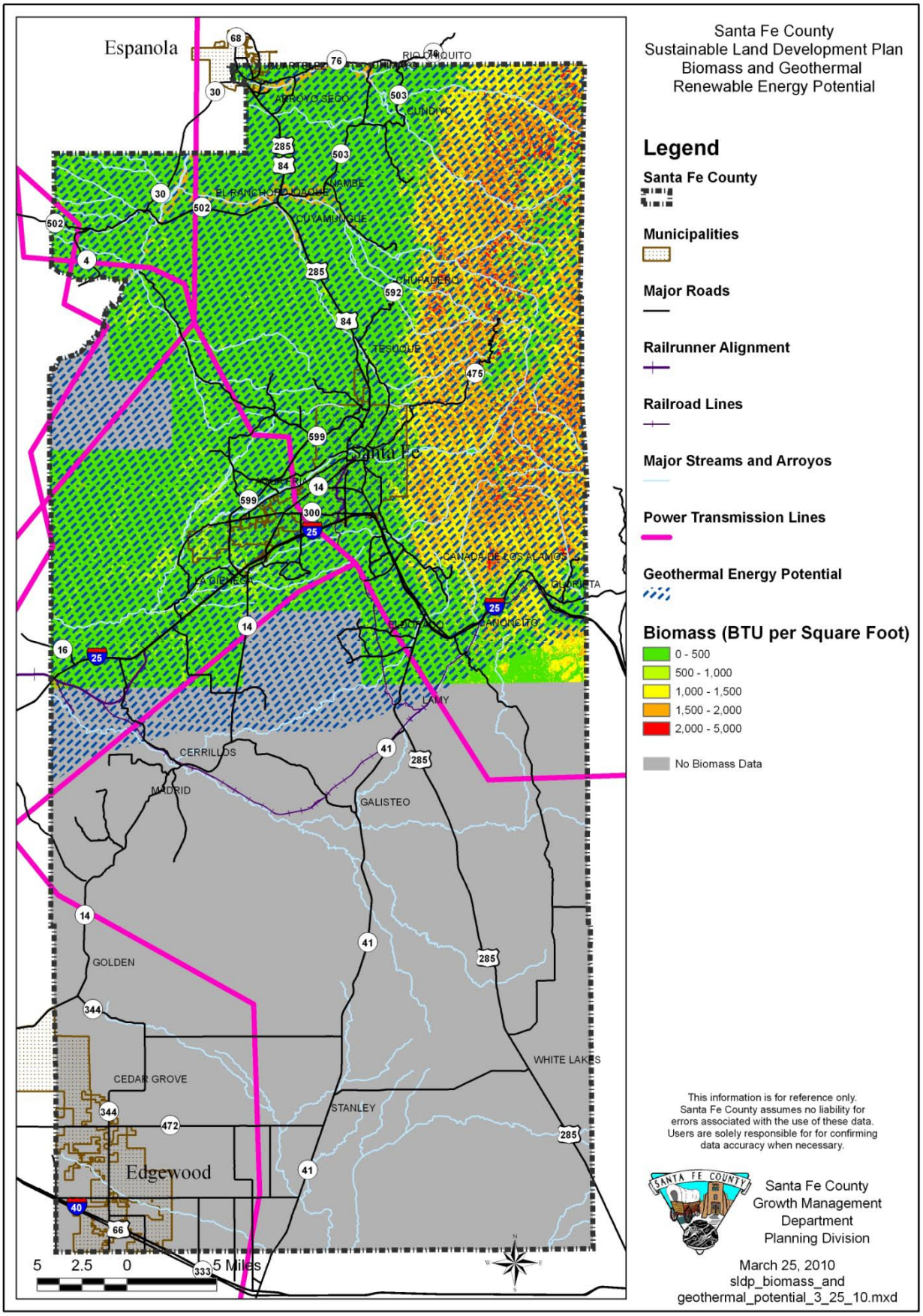
It has been recently estimated that in order to meet the 20% NM renewable portfolio standard, 1200MW of renewable energy generation would be needed by 2030 to serve the northern half of the State. The American Wind Energy Association reports that at the end of 2009, 597MW of wind generating turbines were on-line in New Mexico.

To deliver large-scale solar and wind power resources available in the County, high voltage electric power transmission lines are necessary. Designated and independent transmission service providers and renewable energy developers are investigating how best to serve these demands and are in addition evaluating New Mexico's potential to serve renewable energy to distant western markets. Additional transmission voltage capacity in the southern portion of the County would align well with the already identified renewable energy potential in that part of the County.

Map 7-7A: Renewable Energy Potential-Solar and Wind



Map 7-1B : Renewable Energy Potential-Biomass and Geothermal



7.3 GOALS, POLICIES AND STRATEGIES

Goal 18: Reduce greenhouse gas emissions and dependence on non-renewable energy use.

Energy Efficiency:

Policy 18.1: Reduce energy use and greenhouse gas production through use of renewable energy systems, reduced vehicle miles traveled, alternative transportation modes, and environmentally responsible building and design.

Strategy 18.1.1: ***Pursue regional renewable energy, energy efficiency and sustainable design projects with private and public partners.***

Strategy 18.1.2: ***Implement the conversion of County transit and fleet vehicles to be powered by renewable fuel and improve vehicle-mile- travel (VMT) efficiency.***

Policy 18.2: Require energy-efficient building and site development.

Strategy 18.2.1: ***Assess practicality to develop County Green Building Code and applicable incentives to ensure energy efficiency, water conservation and renewable energy improvements in development projects.***

Strategy 18.2.2: ***Develop program and incentives for energy efficiency, water conservation, renewable energy use and storm water capture in new development.***

Policy 18.3: Reduce greenhouse gas emissions from new development by discouraging auto-dependent sprawl and dependence on the private automobile.

Policy 18.4: Require site and building design that maximizes potential for use of solar and wind design and orientation, energy efficiency and conservation, water conservation and stormwater capture.

Policy 18.5: Require and incent energy efficiency, water conservation, renewable energy use and stormwater capture in new development.

Renewable Energy:

Policy 18.6: Support generation of renewable energy from solar, wind, biomass, and geothermal sources.

Strategy 18.6.1: ***Create a County Sustainable Energy Plan to include, but not limited to, baseline assessment of energy distribution, generation and consumption, actions towards reduction of Greenhouse Gas Emission, development of Renewable Energy Financing District applications and energy efficiency programs and capital and resources requirements.***

Strategy 18.6.2: ***Assess the potential to create a local power utility.***

Policy 18.7: Establish wind and solar energy regulations to encourage renewable energy production compatible with greater ecological and environmental issues such as prevention of nuisances from noise and vibration, hazards to air navigation, birds and other wildlife, degradation to scenic viewsheds and other potential nuisances and hazards.

Goal 19: Promote and encourage the development and use of sustainable, renewable energy production and distribution infrastructure and reduce dependence on non-renewable energy use.

Policy 19.1: Solar and wind turbine facilities will be encouraged and should be incentivized on new and existing buildings and structures throughout the County.

Policy 19.2: Allow solar or wind installation and rainwater collection or other sustainable green technologies in existing and proposed developments throughout the County.

Policy 19.3: Encourage small-scale renewable energy generation systems (on-site wind/solar generation).

Policy 19.4: Research potential to create solar and wind electrical transmission grid and related renewable energy infrastructure.

Strategy 19.4.1: ***Identify a mechanism for solar and wind farm electrical transmission line connection to the existing grid system.***

Policy 19.5: Support establishment of smart and green grid systems to reduce energy usage.

Strategy 19.5.1: Support adequate telecommunications broadband infrastructure for implementation of smart and green grid systems.

Policy 19.6: Pursue regional renewable energy, energy efficiency and sustainable design projects with private and public partners.

Goal 20: Create a Viable Green Energy Economy and Community

Policy 20.1: Recruit and incentivize renewable energy-related businesses.

Strategy 20.1.1: ***Establish a County loan fund to facilitate initial investments in sustainable power generation.***

Policy 20.2: Develop incentives for the use of agriculture and ranch lands for solar, geo-thermal, bio-fuel and wind farm operations.

Policy 20.3: Encourage property owners to achieve sustainability objectives, including use of renewable energy, land preservation and increased energy efficiency, through use of federal, state and County tax credits, tax deductions, loan and grant incentives, monetization of renewable solar and wind systems and other techniques.

CHAPTER 8: SUSTAINABLE GREEN DESIGN AND DEVELOPMENT ELEMENT

The County recognizes that the design and construction of buildings can have adverse impacts and effects on the local environment, public works infrastructure, citizen health and productivity. In order to protect the public health, safety and welfare, the County will regulate the design and construction of buildings with the intent to conserve energy, water and other natural resources, preserve the health of our environment through requirements related to design, construction, operations, recycling, and deconstruction; while providing flexibility to permit the use of innovative approaches and techniques to achieve the effective use of energy and to reduce greenhouse gas emissions in Santa Fe County.

8.1.1 KEY ISSUES

1. **On-going and excessive solid waste production and underutilization** of collection and processing facilities for recycling materials.

2. **Increasing greenhouse gas emissions are contributing to global warming.**

3. **Need to address methane gas production from landfills** will require efforts to recover or otherwise handle methane gas generation.

4. **Lack of integration of the built environment, the site and natural environment.**

5. **Construction materials are imported from outside of the county** and rely on industrial production methods thus increasing the embodied energy.

6. **Need for environmentally responsible sustainable green building development and design standards.**

7. **Conservation efforts of energy and water have been minimal and inconsistent** with land use planning and development**.**

8. **Lack of incentives for conservation/adaptive reuse of buildings, land and water.**

8.1.2 KEYS TO SUSTAINABILITY

1. **Enhance Recycling and maximize solid waste reduction.** Individuals have the greatest power to create a more sustainable County through conservation, recycling, composting and other sustainability measures.

2. **Require green development; conservation of energy and production of renewable energy**; reduction of greenhouse gas emissions and air pollution; protecting water quality and quantity and capturing rainwater and graywater for treatment and use.

3. **Utilize the landfill and other solid waste resources** for methane production, distribution and utilization within Santa Fe County

4. **Integrate site planning, communities and building design into a cohesive ecological design** that incorporates integration of artificial-systems-to-natural-systems.

5. **Enhance the cost effective production of high quality compost and establish markets.** Compost has benefits to the environment and economy for replenishment of soils, minimization of erosion, development of high-nutrient foods, and reduction of water irrigation needs .

6. **Provide designated areas to use recycled materials and transform them into new materials.** The Sustainable Development Testing Site Act allows individuals to experiment and build structures with alternative building materials. Longevity Issues and Regulatory issues should be addressed.

7. **Utilize local resources for building materials and establish a catalog of available recycled materials.** Adobe, stone, pumice, wood are all available in Santa Fe County. There are also a variety of recycled materials such as glass, plastic, metals and paper available from transfer stations and the landfill.

8. **Promote Durability and longevity in the design and construction of residential and commercial structures.** Building materials should be chosen and evaluated for low embodied energy, low impact on the environment and ability to last for generations similar to many historic structures.

9. **Establish "traditional markets",** creating options to have building materials brought in for sale or other initiatives.

10. **Create incentives for green design, resource conservation, reuse and retrofitting buildings** with energy efficient features and building materials.

8.2 CRITICAL FINDINGS

8.2.1 SUSTAINABLE DESIGN

The built environment encompasses everything from individual buildings to communities to infrastructure currently in place. Sustainability in the built environment means efficiency and using materials which promote conservation of the natural environment. From individually energy efficient buildings made from local materials, to communities designed to be "walkable", to infrastructure systems which promote public transit and responsible handling of waste, sustainability in the built environment can make a big difference in the places we create and occupy.

Santa Fe County has long served as an intersection of human cultures and populations. Before European contact the Galisteo Basin supported the highest density human settlement in northern New Mexico. The site planning and design of the pueblos exemplifies energy efficient design. The orientation, compact form, and use of locally based building materials created communities that were sustainable prior to drought conditions that forced abandonment of many of the pueblos. Evidence of these rich cultures is still found throughout the landscape. There are lessons to be learned from studying and analyzing the site environs, architectural form and configuration of localized building materials.

Materials. The selection and raw material processing of building materials is a large contributor to the consumption and destruction of natural resources and emission of carbon dioxide. Looking at historical precedents and learning from ancient and traditional building methods, modern builders can help alleviate the pressure on the environment by selecting materials that are less energy intensive in harvesting and processing. Using environmentally sensitive materials and designing structures that use natural conditioning methods or bioclimatic designs that tap into solar, wind, and other renewable energy systems will partially address the problem of global warming. Low embodied energy materials are easier to process, emit less carbon dioxide and can be atheistically pleasing, building code compliant and sustainable.

Early settlement building materials in Santa Fe County were sedimentary and igneous stone masonry, puddle earth, adobe and wood. The architectural form was pueblo style, featuring masonry walls, earth floors, and flat or low slope earthen roofs. As in the past, this style is still appropriate in arid climates and rural sites. The profile of low slope-earthen roof dwellings, coupled with the aesthetics of masonry type construction results in a built form that integrates harmoniously

with the site while deriving passive solar energy for heating and wind currents for cooling. The design of Communities includes a pattern of diverse and mixed community land uses. Water courses emerging from the Sangre de Cristo Mountains and the Rio Grande provided water for agriculture. The surrounding landscape included agricultural lands coupled with a local subsistence economy structured on barter with surrounding villages from the region.

In the northern part of the County, Spanish colonialists settled small villages, grazed livestock, farmed, and harvested timber. The settlement patterns aligned themselves with the Spanish Laws of the Indies resulting in long lots platted perpendicular to water courses emerging from the watersheds of the Sangre de Cristo Mountains. *Acequias* serve as the irrigation systems for the agricultural fields. Community or common lands were appropriated for grazing, wood gathering and timbering. The buildings were constructed of adobe, wood and stone in small modules that later evolved into "L and U" –shapes forming compounds or *plazuelas* as the family grew in size. Many communities were linear settlements configured along roadways. Larger more centralized communities often had a central space or plaza. All communities, regardless of the scale and configuration, are connected to roads that are part of a greater network linked to other regional transportation systems. Other infrastructure essential for communities include water supply, wastewater disposal, utilities such as natural gas/propane, electricity and communications.

Renewable Energy Use. Renewable energy was employed in the early settlements and continues to the present. Before the advent of imported fuels such as oil, electricity, or propane, wood was used exclusively for space heating and cooking. In the 1880s Santa Fe received its first electricity from a small hydroelectric plant located in the upper Santa Fe River. Shortly thereafter local utility companies were formed to bring electric, gas and water service to the communities. In 1926, FL&T Company established a coal fired generating plant and distribution system. In the early 1970s during the energy embargo, solar and wind energy were introduced into northern New Mexico. Thousands of passive solar homes were built as well as solar water heaters, sunspaces and Trombe Walls (a thick masonry wall that absorbs heat during the day and radiates it during the night). Solar and wind energy technologies continue to be implemented in residential and commercial applications.

Character. A key to sustainability is that buildings are of high quality and timeless design so that they encourage maintenance and reinvestment to remain in service for many years, with adaptive re-use in mind for future uses. The County should encourage new major development to develop and use regional pattern books to guide development styles.

8.2.1.1 ALTERNATIVE MATERIALS AND METHODS OF CONSTRUCTION

There is an increasing demand on natural resources for construction materials for commercial, industrial, institutional and residential building demands. Mass industrialization and high embodied energy requirements of contemporary building materials is taking a toll on the climate, increasing global warming and pollution of the air and terrestrial environments. It is estimated that within the United States approximately 48 % of all the energy consumed is attributed to the architecture we configure and build (Mazria).

The selection and raw material processing of building materials is a large contributor to the consumption and destruction of natural resources and emission of carbon dioxide. Looking at the our historical precedents and learning from ancient and traditional building methods modern builders can help alleviate the pressure on the environment by selecting materials that are less energy intensive in harvesting and processing. Using environmentally sensitive materials and configuring them into structures that utilize natural conditioning methods or bioclimatic designs that tap into solar, wind, and other renewable energy systems will partially address the problem of global warming. Low embodied energy materials are easier to process and can be atheistically pleasing, building code compliant and sustainable.

Looking at the past offers clues and visible proof that natural or non-industrialized building materials can be enduring contributions to the built environment. The most basic building materials such as stone, earth and wood are the principle components of the oldest cultural landscapes throughout the world. Not only do these basic materials offer low-cost solutions to construction of dwellings, sacred structures and public buildings they also create the regional identity and sense of place that make the world as diverse and rich as the people who inhabit the planet as a whole.

Earth construction is one example of a natural building material can be configured into a variety of construction systems such as rammed earth, bricks, cob and pise. Earth construction can minimize and eliminate the use of wood construction when configured into dome and vaults such as the Middle Eastern architecture. There are numerous and timeless examples of vernacular architecture that exemplify the beauty and low environmental impact of traditions that continue to endure today in the form of contemporary architecture revivals such as those of the southwest.

Other materials requiring minimal energy processing are stone, straw, and volcanic based derivatives such as pumice. These materials are still in use and are now beginning to be viewed as viable construction systems by building code jurisdictions. The recycling of materials such as tires, aluminum and steel cans is equally as important and may even be more cost effective since they are all ready in existence and merely require adaptive reuse. New Mexico State Legislature enacted the "Sustainable Development Testing Site Act" in 2007. This Act provides for the of areas to be used for nonindustrial research and testing designed to reduce the consumption of and dependence on natural resources by residential development; providing that specified County codes, ordinances, rules and permits are not applicable to certain activities within an approved area.

Given that natural building materials have been in existence since the beginning of civilization, there is adequate proof of their durability by their enduring qualities and structural integrity exhibited by such fine examples such as the Native American Pueblos and early Hispanic settlements. With the increasing awareness of environmental concerns and issues there is now an emerging movement in the utilization of alternative materials and methods of construction. In order for modern society to accommodate these so called "new adaptations of the old traditions" there must be a level of standards from which to assess the integrity and qualities of the building materials, which the County should assess as it adopts updated and revised building codes and land development standards. New Mexico Construction Industries Division has already developed standards for adobe and straw bale construction, with standards in process for pumice.

8.2.1.2 BUILDING TYPES AND REGIONAL MATERIALS

In new and infill development, building architecture and materials should reflect the character of surrounding development. The Plan recommends that development reflect regional and historic building styles. While the following examples are certainly not the only types of recommended architecture, it is key that new development is designed with architecture and quality, climate-appropriate materials in mind. A key to sustainability is that buildings are of high quality and timeless design so that they encourage maintenance and reinvestment to remain in service for many years, with adaptive re-use in mind for future uses. The County should encourage new major development to develop and use regional pattern books to guide development styles, such as in the Oshara Village development. Examples of appropriate residential styles, as featured in the Oshara Pattern Book, are as follows. For the following styles, building materials include adobe, cast pumice, straw bale, rammed earth, Rastra, brick (on Santa Fe Craftsman style only), concrete masonry, and wood or steel frames.

Santa Fe Craftsman. Best illustrated by homes in the South Capital Historic District in the City of Santa Fe on Don Gaspar Ave., the Santa Fe Craftsman is a regionally-unique version of the early 1900's staple. The Craftsman style, expressing values such as simplicity, durability, harmony with nature and livability, dominated housing styles in the United States from 1905 to the mid-1920s. Craftsman homes are generally a single story or 1 ½ stories with a low-sloped pitched roof. Frequently including decorative glass windows and a large front porch facing the street, these homes are often identified most easily by their expressive roofs, typically featuring a gabled or hipped shape with exposed wood brackets and painted wood trim. Details are essential to a Santa Fe Craftsman style home, including window and door trim, porch columns and beams, and exposed rafters.

Territorial. Unique to the region, the Territorial style incorporates a low-level design which matches and blends with the local landscape, taking design cues from nature. Roofs are flat with brick-capped parapets similar to a classical dentil, windows are vertically proportioned with distinctive painted wood trim and exterior walls exclusively use stucco as a finish material. Except for trim around doors and windows, Territorial style buildings are minimally detailed with a symmetrical composition, broad front massing, flat roofs and minimal parapet stepping.

Pueblo Revival. Pueblo Revival style homes are a modernization of the traditional Pueblo style adobe home, and are finished with stucco on the exterior. Windows are vertically proportioned and recessed with bull-nosed stucco returns, roofs are flat with rolled stucco parapets, often including irregularly stepped parapets. The overall composition of the home is typically asymmetrical and the trim details seen in Territorial and Craftsman styles are not present, as the doors and windows are always recessed back from the face of the stucco. Details in the style instead typically include posts, beams and rafters of un-milled wood exposed from the stucco exterior.

8.2.1.3 MINIMUM STANDARDS - BUILD GREEN NEW MEXICO, ANSI/ASHRAE/IESNA AND LEED

Require environmentally responsible building, site and community design, improvement and development standards and ensure that all new development is sustainable by requiring "green" building and development techniques. Utilization of green construction and neighborhood development materials and techniques for residential and non-residential development will assist in achieving sustainability, utilize renewable energy, and ultimately reduce greenhouse gases. The environment will benefit with the consumer experiencing lower utility costs, while using federal, state and county tax credits, tax deductions, loan and grant incentives.

8.2.1.4 MINIMUM ENERGY EFFICIENCY REQUIREMENTS

Energy Efficiency. The County may require compliance with energy efficiency standards in all (1) new buildings, systems and equipment; (2) additions, extensions or increases in the floor area or height of a building outside of the existing building envelope (3) alterations to all or portions of buildings and their systems, where the work area exceeds fifty (50) percent of the aggregate area of the building; or (4) buildings or spaces undergoing a change of occupancy that would result in an increased demand for either fossil fuel or electrical energy; but not in buildings (i) that do not use fossil fuels or electricity produced by fossil fuels; (ii) that meet the minimum certification requirements of LEED Silver; (iii) that qualify as historic buildings.

Climate. The County finds that Santa Fe County has 6,073 annual heating degree-days, 414 cooling degree-days, and is in climate zone 5B, as set forth in ANSI/ASHRAE/IESNA Standard 90.1-2007.

Heating, Ventilation and Air Conditioning. An application for site plan approval may include a checklist verifying that each of the relevant standards identified by the County has been incorporated into the design of the building and where a reference to each of the items can be found in the construction drawings.

Power Distribution Systems. An application for site plan approval may include a checklist verifying that each of the relevant standards identified by the County has been incorporated into the design of the building and where a reference to each of the items can be found in the construction drawings.

Lighting. An application for site plan approval may include a checklist verifying that each of the relevant standards identified by the County has been incorporated into the design of the building and where a reference to each of the items can be found in the construction drawings.

Roofing. Roof coverings that meet one of the following standards may be required to be installed on new roofs and on existing roofs that are being re-roofed: (1) reflective non-glare roof coverings that are Energy Star qualified; (2) low slope (2 inches in 12 or less) roof coverings that have an initial solar reflectance of 0.65 or greater as determined by the Cool Roof Rating Council; or (3) steep slope (greater than 2 inches in 12) roof coverings that have an initial solar reflectance of 0.25 or greater as determined by the Cool Roof Rating Council.

Rainwater Harvesting. All new development will include a rainwater harvesting system to capture all drainage from the roofed area for use as landscape irrigation. All new development of 2,500 sq. ft. of heated area or greater will include a cistern that is buried, partially buried or within an insulated structure and is connected to a pump and a drip irrigation system to serve all landscaped areas. Cisterns should be sized to hold 1.15 gallons per square foot of heated area but this figure may be adjusted based on proposed landscaping. All new development

of up to 2,500 sq. ft. of heated area will install rain barrels, cisterns or other water catchment basins to capture drainage. Any covenant, restriction or condition contained in any deed, contract, security agreement or other instrument affecting the transfer or sale of, or any interest in, real property which effectively prohibits the installation or use of a rainwater harvesting system is void and unenforceable.

Commercial/Industrial and Site Plans. All commercial/industrial development and site plans will include a rainwater harvesting plan. The rainwater harvesting plan will include a landscape water budget and an implementation plan. The landscape water budget will calculate the estimated volume of water required yearly for all site landscaping detailed in the site plan. The implementation plan will also provide for water metering of all on-site landscape water through either: (1) a separate water meter connected to the main water supply or, (2) an irrigation sub-meter. The County may authorize alternative compliance with development standards when conditions of topography, site soils or ratio of landscape area to total site area would make strict adherence to standard provisions unreasonable and the alternative compliance advances the spirit of this section.

EnergyStar Appliances. When EnergyStar labeled appliances are available, when installed by the builder, appliances should be EnergyStar labeled. At least 70% of all interior lighting should be EnergyStar labeled fixtures or Energy Star labeled luminaires installed in conventional fixtures.

8.2.1.5 SUSTAINABLE LANDSCAPING

Sustainable landscaping is a landscaping approach that seeks to minimize inflow to and outflows from a landscape. Design is an intensive part of the process and must be tailored to suit each geographic location. Care is taken in choosing vegetation types and an overall design that best reflect the natural conditions of the area. The environmental and economical benefits of sustainable landscaping are numerous. Sustainable landscapes can save in reduced labor, water, and fertilizer costs. These benefits are accrued by using native vegetation suited to the local environment that required less intensive maintenance and irrigation. Landscape irrigation consumes more water in urban areas than any other use (one third of all water consumed is typically for landscape irrigation). Santa Fe County is already at the forefront of requiring sustainable landscaping and xeriscaping, limiting water use for landscaping and requiring rainwater catchment.

Methods associated with sustainable landscaping include grass-cycling, composting, and mulching, which return valuable organic material to the soil, in turn increasing the water-holding capacity of soil, reducing erosion and conserving water. Proper watering, fertilizing, and pruning along with Integrated Pest Management can encourage healthier, disease-resistant plants and can reduce the amount of pesticides, fertilizers, and other toxic runoff entering storm drains and polluting creeks, lakes, and rivers.

8.2.2 INCENTIVES

The SLDC may establish Density Incentive Regulations (DIR) to preserve the health, safety and welfare through: (1) assisting local businesses to lower financial and regulatory risks and improve their economic, community, and environmental sustainability; (2) working with the private sector to meet the County's greenhouse gas emission reduction goals; (3) encouraging the use of local renewable energy resources, including appropriate applications for wind and solar energy; and (4) promoting LEED Gold or greater sustainable building design and management standards in residential, commercial, and industrial buildings, as well as meeting the following goals:

Energy Efficiency. Encourage the use of energy efficient technologies and design in new and remodeled buildings in the County.

Environmental Stewardship. Encourage environmental stewardship through reduction in nonrenewable fuel uses.

Economic Development. Encourage local investment in building efficiency as a substitute for out-of-state resources.

Local Investment as Substitute for Out-of-State Resource Use. Encourage local investment in efficiency as a substitute for out-of-state resources.

State and Federal Incentives. Encourage the use of New Mexico's Clean Energy Incentives, pursuant to NMSA 7-2A-19 through 25, including but not limited to: Solar Market Development Tax Credit; Sustainable Building Tax Credit; Geothermal Ground-Coupled Heat Pump Tax Credit; Biodiesel Facilities and Blended Biodiesel Fuel Tax Credit; Solar Gross Receipts Tax Exemption; Renewable Energy Production Tax Credit; Agricultural Water Conservation Expenses Tax Credit; Advanced Energy Corporate Income Tax Credit Energy Innovation Fund Grants; Clean Energy Project Energy Grants; ECMD and the American Recovery and Reinvestment Act (Federal Stimulus Act) Grants; and Federal Tax Credits for Energy Efficiency, as well as the proposed Tres Amigas SuperStation.

8.2.2.1 FLOOR AREA RATIO OR DENSITY INCENTIVES.

The County encourages all new building construction and major renovations to meet the Energy Efficiency Performance Standards. The DIR concept is to establish a voluntary program to evaluate special exception site plan requests for bonus density consistent with the SLDC. The bonus incentive may apply to all subdivision and site plan project applications that include specific green building components that meet U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED™) Gold or higher certification (or equivalent ANSI or Green NM certification standards). Floor Area Ratio (FAR) may be used to guide intensity for all commercial, industrial, institutional or office developments. FAR bonuses may be available as follows, subject to all other requirements being met: (1) for construction complying with LEED Gold or equivalent, a maximum FAR of 0.35; and (2) for construction complying with LEED Platinum or equivalent, a maximum FAR of 0.45. Density bonuses will be used to encourage clustering and retention of open space.

8.3 GOALS, POLICIES AND STRATEGIES

Goal 21: Development should comply with the principles of sustainability and conservation established in this Plan.

Policy 21.1: Encourage new public and private development to attain Leadership in Energy and Environmental Design (LEED) standards.

Policy 21.2: Assess the County's ability to establish building permits and green building codes into the SLDC.

Strategy 21.2.1: ***Assess feasibility and prepare analysis of requirements to establish a building permit program.***

Strategy 21.2.2: ***Analyze City of Santa Fe and State Green Building Codes for applicability in the County. Ensure standards proposed reflect green building techniques that are compatible with the New Mexico arid environment and take into account County weather and rainfall conditions.***

Policy 21.3: Promote the use of traditional, regional and innovative design solutions to minimize impacts of development and achieve sustainability, such as revival of sustainable historical/traditional settlement precedents and other compact, mixed-use development types that promote walkability, transit use and minimize impacts to air and water quality.

Strategy 21.3.1: ***Develop a pattern book to promote sustainable site design, building patterns, compact mixed uses, transit oriented design, green building and development techniques.***

Policy 21.4: Adopt green development and sustainability design and infrastructure standards for new residential and non-residential development in the SLDC.

Policy 21.5: Promote the use of high quality, sustainable site design and layout, architectural design and building materials.

Policy 21.6: Encourage the use of traditional New Mexico architecture, regional design, building types and native building materials, including natural and locally available building materials with low-embodied energy, such as adobe, earth, pumice, block, stone and wood and locally recycled materials.

Strategy 21.6.1: Where appropriate utilize locally recycled materials in road and trail building and maintenance.

Goal 22: Promote sustainable develoment through "green" building and development techniques.

Policy 22.1: Promote environmentally responsible sustainable green building, site and community design, improvement and development standards.

Strategy 22.1.1: ***Adopt a Climate Action Plan that prepares for climate change effects in the County, including increased heat, drought and public health impacts.***

Policy 22.2: Encourage green construction and neighborhood development materials and techniques for residential and non-residential development.

Strategy 22.2.1: ***Establish comprehensive sustainable design and improvement standards for green development and renewable energy systems.***

Policy 22.3: Encourage sustainable use and conservation of buildings, land and water.

Policy 22.4: Encourage xeriscaping and natural vegetation shading for buildings and hardscape surfaces.

Policy 22.5: Encourage the use of New Mexico's Clean Energy Incentives.

Goal 23: Limit solid waste production and support recycling to limit landfill use.

Policy 23.1: Residential, commercial and construction/demolition debris recycling should be required to divert materials from the landfill.

Strategy 23.1.1: ***Develop a Countywide waste reduction and recycling plan that identifies requirements and incentives for recycling and composting, and the sustainable regulation of landfills, and junkyard.***

Strategy 23.1.2: ***New development should submit waste reduction and recycling plan.***

Strategy 23.1.3: ***Educate the public about the need for and the "how to" of residential and construction/debris recycling through educational and informational materials.***

Strategy 23.1.4: ***Promote waste minimization and the segregation of recyclable materials at transfer stations.***

Policy 23.2: Require proper disposal of hazardous wastes, including household hazardous waste and commercial and industrial wastes.

Policy 23.3: Prohibit illegal dumping and clean-up and restore illegal dumping sites.

Strategy 23.3.1: ***Develop new signage to prevent illegal dumping.***

Strategy 23.3.2: ***Conduct Countywide sweeps to discourage illegal dumping.***

Strategy 23.3.3: ***Develop a community program for periodic trash pick-up days for large items and waste not accepted at transfer stations.***

CHAPTER 9: PUBLIC SAFETY ELEMENT

This chapter addresses law enforcement, fire and emergency medical services, the Santa Fe Regional Emergency Communications Center, and presents goals, policies and strategies for addressing public safety issues.

9.1.1 KEY ISSUES

1. **Several residential areas in the County have insufficient water to provide adequate fire flows**. Deficiencies should be corrected where feasible and the County should require adequate fire flows and water infrastructure to improve Fire Department service delivery and Fire District ISO ratings.

2. **Coordinated input from Law Enforcement and the Fire Department** staff in the development review process will enhance emergency response, and will help prevent threats to life and property. This coordination may be facilitated through the Technical Advisory Committee.

3. **Some rural residential development cannot adequately be served by County** emergency services due to several factors including; inadequate telecommunications capacity, distance from service points, inad**eq**uate emergency access, lack of fire protection water, and failure of property to meet life safety codes.

4. T**he current emergency response system is not sufficient to service our population today.** In the case of a large scale emergency, where large numbers of County residents would have to be evacuated or hospitalized, the County and provider infrastructure and resources would be insufficient.

5. **The impact of large scale developments on County emergency services** should be addressed to ensure that adequate financial resources are provided to meet an expected level of service.

9.1.2 KEYS TO SUSTAINABILITY

1. **A well trained and adequately staffed and equipped Fire Department** greatly contribute to the County's public health, safety and welfare. The County should continue to support the development of a professional Fire Department that combines the dedicated service of volunteers and career staff.

2. **Volunteer recruitment and retention** are critical to the continuing success of the Fire Department. Sufficient attention and resources as well as cultivating community cooperation and goodwill are essential to this end.

3. **Public interaction with law enforcement services** in a large, mostly rural County is generally limited to emergency situations and specific calls for service.

4. **The County should explore opportunities to support proactive law enforcement presence** in communities across the County.

5. **The County should mitigate emergency access and safety hazards** through the proper enforcement of Fire Code requirements and appropriate educational initiatives for property owners.

6. **There is a need to develop community warning systems** to initiate and facilitate mass evacuation, sheltering, and care in the event of a large emergency incident such as a wildland fire or other event. Some areas of the County lack the transportation infrastructure and other resources required to mass evacuate.

7. **Involve community in public safety planning.**

9.2 CRITICAL FINDINGS

Developing effective programs for ensuring safety for the public in Santa Fe County requires the coordination of several County Departments including the County Sherriff's Department, County Fire and other local and tribal government entities. Emergency service provision requires access to both urbanizing as well as rural areas throughout the County as well as well trained staff and emergency equipment. As some rural areas in the County cannot be adequately served by fire, emergency services or law enforcement, various programs, enforcement of Code requirements and educational outreach should be initiated.

9.3 LAW ENFORCEMENT

The Santa Fe County Sheriff's Department provides crime prevention, response, investigation and prosecution services in Santa Fe County. The Department provides Community Support Services and Court Services which includes security for both District Court and Magistrate Court, screening and transportation services The Department also provides animal control services.

9.3.1 CALLS FOR SERVICE & RESPONSE

As is shown in **Figure 9-1,** the Sheriff's Department responded to a total of 40,103 calls in 2007, with 17,885 calls initiated by Officers in the field and 22,218 calls for service by the community. With 78 officers and animal control personnel, exclusive of administrative staff **(Figure 9-2),** this equates to approximately 514 calls for service per officer or animal control personnel**. Figure 9-3** illustrates the average response time per call, based on the call priority.

Figure 9-1: Sheriff's Department Calls for Service

Total Offenses and Calls for Service	Number
Total Offenses (Aug 1, 2007 - July 31, 2008)	9,717
Number of Calls Dispatched (2007, not officer initiated)	22,218
Number of Calls Dispatched (2007, officer initiated)	17,885
Total Calls Dispatched (2007)	40,103

9.3.1.1 LEVELS OF SERVICE

The Sheriff's Department operates out of the Santa Fe County Public Safety Building at 35 Camino Justicia in Santa Fe, NM. **Figure 9-2** shows the Sheriff's Department personnel, vehicles and building space. **Figure 9-3** shows the level of service per thousand population, based on the estimated unincorporated population in the County in 2010 of 64,258.

Figure 9-2: Sheriff's Department Personnel, Vehicles and Building Space

Personnel	Number
Commissioned Officers	72
Non-Commissioned Officers	1
Administrative	17
Animal Control	5
Total Personnel	**95**
Vehicles	**Number**
Patrol Vehicles	95
Administrative Vehicles	7
Investigative Vehicles	20
Special Ops/Misc	13
Total Vehicles	**140**
Building Space	**GSF**
Main Station	6000 sq. ft.

Figure 9-3: Sheriff's Department Level of Service

Facilities & Services	Level of Service (LOS) per 1,000 Residents*
Vehicles (Number)	1.87
Building (GSF)	93.4
Personnel (Number, Career)	1.48
Average Response Time (2007; approx):	
Priority 1	26 mins
Priority 2	24 mins
Priority 3	41 mins
Priority 4	27 mins
Priority 5	21 mins
Priority 7	36 mins

* The 2010 unincorporated County population of 64,258 was used to calculate the LOS.

9.4 FIRE PROTECTION & EMERGENCY MEDICAL SERVICES (EMS)

Fire protection, suppression and emergency response services are integral public safety services provided to Santa Fe County residents. In 1997, the Santa Fe County Fire Department was created by the Santa Fe County Commission by S.F.C. Ordinance 1997-11, effectively consolidating the existing fifteen County volunteer fire districts and the County Fire Marshal's office into the new County Fire Department. The Fire Department's Five Year Plan (2010-2014) and updated 2008 Capital Improvement Plan (together, "Fire CIP") as well as discussions with the Fire Department informed this report.

The Fire Department works proactively to adopt mutual aid agreements and joint powers agreements with other governmental agencies to improve the availability of emergency services to Santa Fe County citizens. Mutual Aid Agreements have been adopted between San Miguel County, Rio Arriba County, Torrance County, Bernalillo County, City of Moriarty, and Sandoval County. Joint Powers Agreements have been approved between the County and the City of Santa Fe and the Town of Edgewood for Fire, Rescue, and EMS services as well as for Regional Emergency Communication Services.

Santa Fe County has received two national awards for its efforts in the last decade. First, the County was recognized by the National Association of Counties for its Regionalization of Emergency Services project in 2000. This program integrated full-time, paid paramedic firefighters into four County fire stations in the four geographic regions of the County to augment the basic level emergency medical services then provided by a depleted volunteer force. Next, the County was recognized for its efforts through the FireWise Communities USA program. Through this program, the Fire Department developed a wildland-urban interface hazard assessment model that has also garnered national recognition for its effectiveness and innovation. The development and implementation of the first Wildland-Urban Interface Code in New Mexico has improved the County's prevention and response to wildland fires.

One of the on-going challenges for the Santa Fe County Fire Department is the provision of training opportunities for professionals and volunteers. The lack of efficient, effective, and readily available training venues for emergency services personnel has been, and continues to be, problematic for the department's firefighters.

Emergency Medical Service. Emergency Medical Services (EMS) comprise a majority of the Fire Department call volume Countywide. Regional paramedic ambulances offer 24-hour Advanced Life Support (ALS) coverage throughout the County. The regional ALS teams consist of a professional Paramedic Firefighter and a professional EMT-Intermediate Firefighter. The five ALS regional medic units exist to augment and support the services of the volunteer fire districts. The fire districts of Edgewood, Turquoise Trail, El Dorado, Hondo and Pojoaque also offer ambulance transport services. The Fire Department also works cooperatively with Espanola Hospital Ambulance Service to ensure that the closest ambulance service is dispatched to emergencies in the Pojoaque area.

9.4.1.1 FUNDING

In 1997, Santa Fe County Fire Department implemented its first five-year plan utilizing several revenue sources to not only fund the operational needs of the department but also to fund its capital improvement plan. Funding mechanisms of the Santa Fe County Fire Department are described as follows:

The **State Fire Protection Fund** is administered by the State Fire Marshal's Office and funding is provided to the County for specific operational use by a specific County Fire District. These funds are restricted funds, meaning they can only be used for the operational and capital needs for the fire district; they cannot be used for payment of salaries or personnel benefits.

The **State EMS Fund** is administered through the State EMS & Primary Care Bureau of the Department of Health. These funds can only be used to purchase emergency medical services equipment and supplies and cannot be used for personnel salaries or benefits.

The **County Fire Protection Excise Tax**, more commonly referred to as the one-quarter percent fire tax, is a gross receipts tax that had been approved by the County Commission and by the County voters via a County referendum. Approval to collect this tax expired at the end of 2008. Efforts to renew the excise tax in November 2009 were thwarted during a special election held specific to this issue. Low voter turnout, the timing of the election, and the national and local status of the economy were blamed, in part, for its defeat. The revenue generated by this tax had been an essential means to fund the Department's Capital Improvement Plan.**Santa Fe County Fire & Rescue Impact Fees** were imposed in 1995 by the County Commission on all new development in Santa Fe County. These impact fees, imposed under the authority of the State Development Fee Act, are collected and spent in each fire district where the development occurs. These fees are for capital infrastructure expenses secondary to the growth and development within a specific fire district. The fees can only be utilized for capital infrastructure expense

such as building fire stations or buying fire apparatus or equipment with a life expectancy of ten years or more. The fees cannot be utilized for personnel salaries or benefits. Additionally these fees can only be spent in conjunction with a capital improvement plan for the department.

In 1998, a **Revenue Bond** was approved by the County Commission, raising $2.2 million dollars to significantly improve the capital infrastructure of the County fire districts and the department based on the five-year plan. This Bond has been retired.

General Obligation Bond monies, derived from the approval of the voters for specific purchases or expenditures, have been utilized to help support the capital improvement plan of the department. These monies are spent for the purchase of capital infrastructure items, buildings and apparatus. A General Obligation Public Safety Bond in the amount of $4.5 million approved by voters in November 2000 provided a Public Safety Building and Regional Emergency Communications Center (RECC) communications equipment.

In 2006, voters Countywide approved the **Emergency Communications and EMS Tax**, a one-quarter percent gross receipts tax, to provide revenue to hire and train 48 additional career firefighters in an effort to improve the delivery of services. The Department collects approximately $7.8 Million annually from this tax primarily to fund salaries and benefits.

Existing County general funds for personnel are considered insufficient to meet the growing demand of services expected from the Fire Department by the public. Growth in the County will increase capital needs over the next six years as well as the need for staffing, which has not kept up with labor needs. Significant growth in the Fire Department is needed to meet level of service expectations. Volunteers are in short supply and responses to calls are very often provided by the station that is capable of sending staff. The Fire Department is in the process of training and hiring additional career firefighters and EMTs on an annual basis to increase the County's level of service and shorten response times.

Impact fees collected by individual fire districts have been spent more rapidly in some districts than in others. Some smaller and less active districts have surplus funds that could be, at least in part, utilized by districts with greater needs. However, current law mandates that fees collected must remain and be spent in the individual district in which they are collected. Districts that collect lower levels of impact fee funding often find it necessary to reserve the funds from year to year until enough funding is available to purchase a large piece of equipment. The use of development agreement funding for staff and personnel needs generated by oil and gas projects should be utilized.

9.4.1.2 CALLS FOR SERVICE & RESPONSE

Figure 9-4 shows the Fire Department's calls for service for 2006, 2007 and 2008. Sixty-three to sixty-six percent of the Department's emergency calls are for emergency medical service. The annual increase in calls from 2006 to 2007 was 8.6 percent. This is overshadowed by a significant 17.8% increase in 2008. The average response time, based on 2006 data, is ten minutes and forty-six seconds. While the Department considers the average response time to be marginally adequate, especially considering the geographical extent of the County area served, it strives to constantly improve response and has taken steps to do so. In order to improve response time, the Department is in the process of adding career staff. Increasing the number of stations and equipment can also improve response time.

Figure 9-4: Fire Department Calls for Service

Year	Fire (Number)	Fire (Percent)	EMS (Number)	EMS (Percent)	Total	Annual Increase
2006	1,469	34%	2,819	66%	4,288	
2007	1,723	37%	2,934	63%	4,657	8.6%
2008	1,903	35%	3,583	65%	5,486	17.8%

9.4.1.3 ISO RATING & LEVELS OF SERVICE

As per the Fire CIP, fire districts are rated by the Insurance Services Office (ISO) for insurance purposes on a scale of 1 to 10 with 1 being the highest grade and 10 grade the lowest. A district rating of 1 indicates an urban area with a sound municipal water system and ample vehicles and stations to accommodate the district population; a rating of 10 indicates a rural area with no community water system, inadequate equipment, and no stations. The Fire Department CIP established a minimum service level in order to determine the vehicle and station improvements that are attributable to growth versus existing inadequacies.

The Santa Fe County Fire Administration has determined that a reasonable minimum level of service (MLOS) is the equipment and station equivalent of an ISO rating of 7/9. This indicates a rating of 7 in the more densely developed portions of rural areas and a rating of 9 in the less densely developed portions of rural areas. This rating is the minimum required LOS; a district may have a better ISO rating. The ISO rating of 7/9 is not dependent on a community water system.

While the determination of ISO ratings is partially subjective and dependent largely on the unique circumstances of each district, an ISO rating of 7/9 generally requires that, in addition to a fire station, the district be in possession of an engine, a tanker with tanker-shuttle capabilities, and a rescue vehicle.

9.4.1.4 LEVELS OF SERIVICE

Personnel. Since 1998 the Santa Fe County Fire Department has used paid professional staff to support local volunteer personnel to ensure that the mission of the Department is successful. The paid staff augments those services provided by the volunteers of each fire district and additionally provides a higher level of emergency medical service (Advance Life Support or Paramedic level) than can be typically provided by a County-wide volunteer-based service.

The volunteer personnel of the fifteen fire districts of Santa Fe County Fire Department are responsible for responding to fire, rescue and EMS emergencies twenty-four hours a day, three hundred and sixty-five days per year. These personnel must undergo many of the same training, licensure and certification requirements of career (paid) personnel.

The Department has been working to increase the number of career staff to overcome the difficulties of recruiting and retaining volunteers, as well as to increase the level of service and improve response times. Given the geographic extent of the County, it is unrealistic to transition to an entirely career professional staff in the foreseeable future, and emergencies and fires at oil and gas projects sites and other large scale developments in the County are too complex to be handled by volunteers alone. **Figure 9-5** enumerates the career professional and volunteer staff of the Fire Department. The number of volunteers reflects those who are trained as firefighters. Not all volunteers are trained for interior structural firefighting activities.

As part of the Fire CIP, an inventory of fire apparatus and fire stations for each County fire district was conducted, including both existing apparatus and stations and those needed to meet MLOS. **Figure 9-5** documents the Department's existing, deficient (not in the current inventory) and replacement apparatus – engines, tankers,

brush trucks, ambulances, rescues and aerial trucks; and square footage of existing and needed stations. **Map 9-1** shows the locations of existing stations and wildfire hazards. **Figure 9-6** shows the Levels of Service per thousand unincorporated County residents (including Edgewood) for Fire and EMS personnel, vehicles, and building space.

Figure 9-5: Fire Department Personnel, Vehicles and Building Space

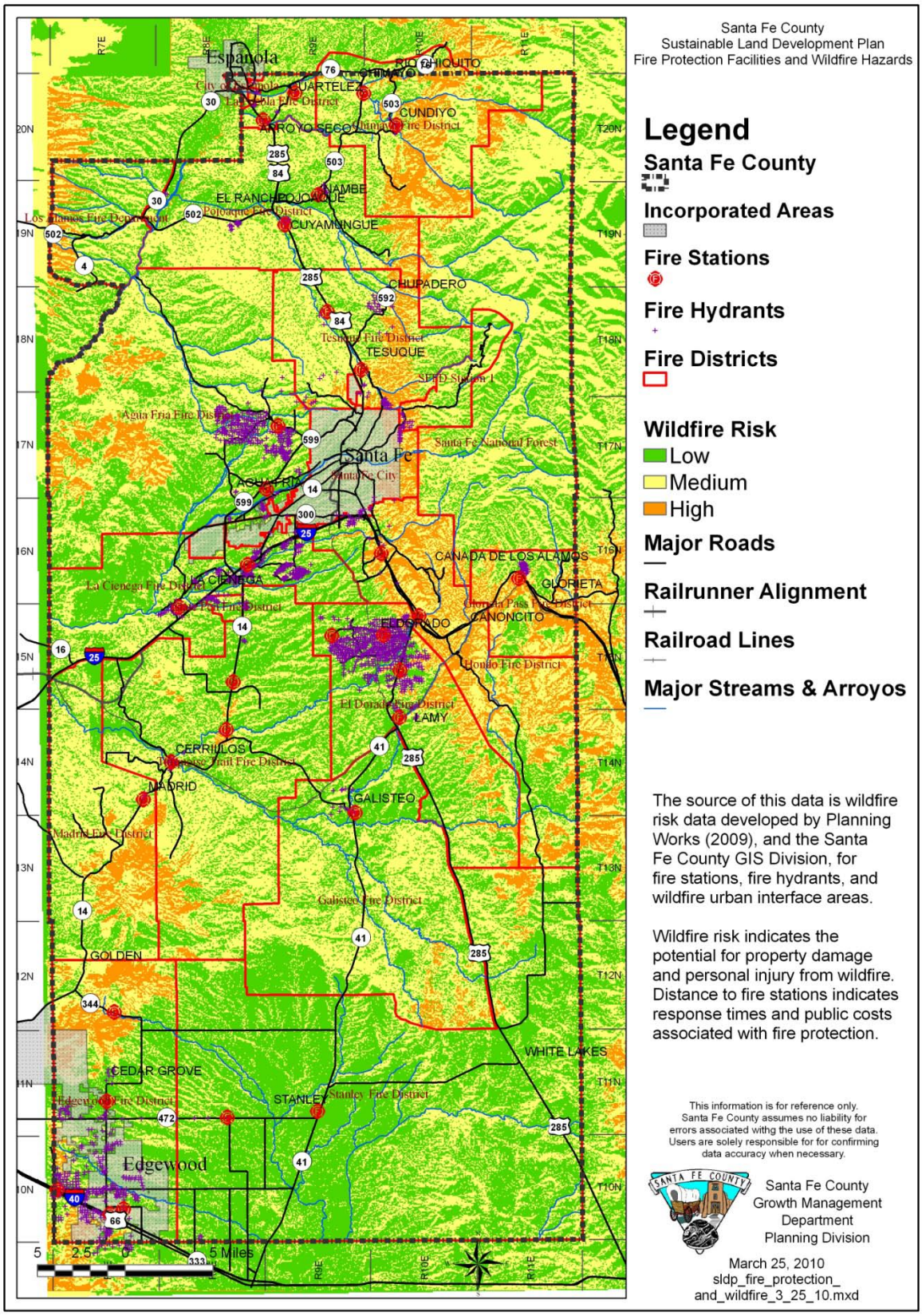
Personnel (2008)		Number	
Full Time Uniformed Career Positions (Cross Trained Firefighter/EMT or Paramedic)		73	
Volunteers		204	
Administrative (Civilian) Staff		12	
Total		289	
Vehicles (2007-2012 CIP)	**Existing**	**Deficiencies**	**Replacements**
Engines	33	3	11
Tankers	29	2	8
Brush Trucks	21	3	2
Aerial/Quint	1	2	0
Ambulances	8	0	4
Rescues	14	0	4
Total	106	10	29
Fire Department Stations (2007-2012)	**Existing**	**Deficiencies**	
Number of Stations	32	6	N/A
Gross Square Footage (GSF)	133,650	21,672	N/A

Figure 9-6: Fire Department Level of Service

Facilities & Services	Level of Service (LOS) per 1,000 Residents*
Vehicles (Number)	1.5
Building (GSF)	1,938.5
Personnel (Number, Career & Volunteer)	4.2
Average Response Time (2006; approx)	10 mins
Fire Station Service Area (est)	4 miles
ISO Rating	7/9

*The 2010 County population of 64,258 plus the 2008 Edgewood population of 4,687 were used to calculate the LOS since the Santa Fe Fire Department provides first-response service to these areas. The 2008 population for Edgewood is the latest estimate available.

Map 8: Fire Facilities and Wildfire Hazards



9.5 SANTA FE REGIONAL EMERGENCY COMMUNICATIONS CENTER (RECC)

9.5.1 RECC HISTORY

In 2002, in an effort to establish and provide a centralized enhanced 911 communications system that would improve public emergency medical, fire, rescue, and law enforcement services to their citizens, the City of Santa Fe and Santa Fe County entered into a Joint Powers Agreement to create the Santa Fe Regional Emergency Communications Center (RECC). In doing so, the separate City and County EMS, Fire and Law Enforcement dispatch centers were consolidated to become the single point of emergency communications contact for the entire County of Santa Fe.

In 2007, the JPA was amended to include the Town of Edgewood and its newly formed Police Department and Animal Control. With this amendment, the Chief of the Edgewood Police Department gained a seat on the RECC Board of Directors, and operationally another piece of the Countywide communications puzzle was put into place, allowing further regionalization of emergency response services within Santa Fe County, further improving central communications for our client agencies, and improving overall service response for the public.

9.5.2 E911 CALL RECEPTION AND SERVICE RESPONSE

Santa Fe RECC provides 24/7/365 Dispatch and Communications services for all Law Enforcement, Fire, EMS and Animal Control agencies within the City and County of Santa Fe. With a complete staff of 49 individuals, the RECC is recognized as a consolidated public safety answering point for all emergency calls originating in Santa Fe County. Through joint administrative oversight and financial participation of all agencies services provided via the RECC maximize the efficiency of emergency medical, fire and law enforcement dispatch duties countywide. Utilizing the latest communications technology available, including a Computer Aided Dispatch system, GPS and cell tower assisted mapping and reverse 911 notification systems, the RECC fields over 300,000 calls for service from the public and dispatches over 185,000 calls to client agencies each year. As a critical part of the Public Safety Community, the Santa Fe Regional Emergency Communications Center is committed to providing prompt, accurate, coordinated and reliable E9-1-1 and emergency dispatch services for all the residents and visitors of the City of Santa Fe and Santa Fe County in a courteous, responsive, and professional manner.

9.5.3 RECC FUNDING

The RECC is operated as a separate legal entity utilizing Santa Fe County employees. Daily operation of the center is supported financially by the County of Santa Fe through countywide gross receipts taxes while capital funding is split based upon an agreed percentage basis between participating entities. Other funding sources include fees paid by the town of Edgewood, the village of Pecos and San Miguel County for provision of communications services by the RECC.

Possible future funding sources such as General Obligation bonds also merit consideration as the demand for emergency response services increases as the City and County continue to grow. Significant challenges are presented by ever-increasing operational costs to run the RECC. Originally the RECC was funded jointly by the City of Santa Fe and Santa Fe County based on the number of calls received for dispatch services. At that time approximately 70% of the calls were dispatched to City fire and police agencies and thus 70% of the funding was provided by the City and the remaining 30% was funded by the County for its fire and sheriff calls. In 2006 with the adoption of a new countywide gross receipts tax the County through an agreement with the City agreed to assume the then $2.5 million dollar City share of RECC expense. Since that time the RECC budget has grown significantly and correspondingly the County's contribution on behalf of the City has grown much higher than the original $2.5 million. Discussions with the City have not yet begun regarding this increased funding by the County but will need to in the near future.

9.5.4 RECC STAFFING

The RECC employs a total of 49 full time positions; 9 administrative positions including management, data entry, training, quality assurance and information technology, and 40 Emergency Communications Specialist positions ranging from trainees to team leaders (supervisors).

ECS positions work alternating 36 and 48 hours work weeks consisting of 12 hour shifts. All ECS staff members are cross-trained to answer both 911 and administrative telephone lines as well as to operate the two-way radios and all peripheral radio console equipment for every RECC client agency.

9.5.5 RECC DEVELOPMENT OUTLOOK

As the City of Santa Fe, the Town of Edgewood, and Santa Fe County as a whole continue to grow, the response agencies for these areas must also expand to serve the needs of the public. As the central and primary point of contact and communication for these agencies, the RECC must continue to advance not only in its training and staffing, but also in its equipment, facilities and technology as well. With constant improvements being made in the way communications are relayed, from text and video messaging to mobile data terminals in the field units, it is crucial that the 911/dispatch center stay on the leading edge of technology as we move into this newest era of dispatch communications known as “Next Generation 911”. Expansion to match new growth will ensure not only that adequate and efficient services are provided for quick and accurate response to service calls by the public, but also will ensure the safety and well-being of the Fire, EMS and Law Enforcement personnel responding to those calls.

9.6 GOALS, POLICIES AND STRATEGIES

Goal 24: Preserve and protect public health, safety, welfare and property through adequate provision of law enforcement, fire and emergency response, and emergency communication services.

Policy 24.1: Ensure sufficient infrastructure exists, including organizational, administrative, and operational structures, personnel, facilities, apparatus and equipment, and training to support emergency service delivery throughout the County.

Strategy 24.1.1: ***Identify and support additional funding sources for public safety agencies in order to meet or exceed desired levels of service and local, state, and federal requirements.***

Policy 24.2: Adopt and support expanded public safety standards related to fire protection, such as: adopt the International Fire Code; require fire sprinklers and on-site water storage in rural areas without water access; require new development to have appropriate fire flows and hydrants; prohibit the stockpiling of flammable materials in a dangerous manner; prohibit combustible designs and materials such as untreated wood siding, wood shake roofs, and wooden enclosed decks in wildland areas; and encourage the use of non-combustible building materials such as stucco, gypsum, masonry, adobe, concrete siding, and fire resistant roofing material.

Strategy 24.2.1: ***Mitigate fire flow deficiencies in existing development and meet nationally recognized standards in new development.***

Strategy 24.2.2: ***Improve compliance with the Life Safety Code (NFPA-101), the Wildland Code, and enforcement efforts***

Policy 24.3: Support training for volunteer firefighters in an effort to enhance recruitment and retention efforts for volunteers.

Strategy 24.3.1: ***Identify funding and resources to provide training opportunities for career and volunteer personnel to meet or exceed local, state, and federal requirements.***

Policy 24.4: Evaluate and prioritize options to mitigate inadequate emergency access and safety hazards to emergency response equipment or personnel.

Strategy 24.4.1: ***Develop and enforce design standards to require that new developments eliminate emergency access barriers such as unconnected roadways, long driveways, one-way in and out subdivisions, roadways at excessive grades, and roadway encroachment.***

Strategy 24.4.2: ***Require an access management plan for all new roadways.***

Policy 24.5: Coordinate with the Fire Department, Public Works and the School District to maintain adequate right-of-way for emergency response vehicles and school bus service.

Strategy 24.5.1: ***Develop a safety zone on 599 N of I-25 to Caja del Rio to protect at-risk populations from exposure to risks due to the natural gas line.***

Policy 24.6: Support proactive law enforcement presence in communities across the County.

Strategy 24.6.1: ***Identify areas with speeding problems and develop a periodic monitoring schedule with the Sheriff's Department to enforce speed limits.***

Policy 24.7: Encourage and support coordination and cooperation among service providers, County departments, tribal governments, other entities and the public to enhance service levels and ensure code compliance.

Strategy 24.7.1: ***Establish multi-agency public health and safety reviews of all special events.***

Strategy 24.7.2: ***Coordinate with the Fire Department and Acequia Associations to allow coordinated permitting and burning of agricultural fields.***

Strategy 24.7.3: ***Coordinate with Tribal Governments to expand the role of the Fire Department in development review on Pueblo land to ensure adequate provision of fire prevention, protection and emergency medical response services.***

Policy 24.8: Coordinate with governmental agencies and other organizations to address vandalism, graffiti, trash dumping, drug/alcohol abuse, suicide prevention, teen pregnancy, animal control and speeding.

Strategy 24.8.1: **Utilize the existing graffiti program coordinator to work with community organizations to remove and prevent graffiti.**

Policy 24.9: Limit threats from manmade hazards and ensure efficient and effective emergency response through training, preparation and planning.

Strategy 24.9.1: ***Develop community warning systems and other means to initiate and facilitate mass evacuation, sheltering, and care in the event of a large emergency incident such as a wildland fire or other event.***

Policy 24.10: Limit threats from wildfires and other natural disasters.

Strategy 24.10.1: ***Coordinate with private property owners in the wildland-urban interface to develop and maintain additional defensive space to reduce risk of loss from wildfire.***

Strategy 24.10.2: ***Reconcile SLDC requirements with fire protection standards such as the Wildland-Urban Interface Code.***

Policy 24.11: *Thin trees and vegetation in forests and neighborhoods and mitigate invasive species that cause brush* build-up.

Strategy 24.11.1: ***Coordinate with public land managers to implement forest thinning on public lands to reduce competition for water and sunlight, reduce the incidence of insect and disease spread, and leave remaining trees healthier and less likely to support extreme fire behavior.***

Strategy 24.11.2: ***Coordinate outreach and education programs to improve fire safety in the County***.

Goal 25: Operational and Capital Growth

Policy 25.1: Determine permanent long term funding sources for operation and capital growth.

Goal 26: Establish and maintain an 911 public education/community outreach program

Policy 26.1: Provide public education regarding the overall Law Enforcement, Fire and EMS response process, to include the role of the RECC in order to become more visible to the public and to raise the awareness of the citizens of Santa Fe County with regard to the 911 center and its function.

Policy 26.2: Improve methods and processes by which information can be disseminated by dispatch to client agencies and the public through electronic mass notification systems for use in the development and implementation of Emergency plans or during emergency situations.

Strategy 26.2.1: ***Assist client agencies and the public by providing information to citizens regarding emergency services available to them, along with prioritization methods and expected response times for those services.***

Strategy 26.2.2: ***Develop or improve current processes for maintaining and updating gated residence access codes and special premise information to ease access and expedite response, lowering response times.***

Policy 26.3: Establish and maintain cooperative working relationships with surrounding area communications centers.

Strategy 26.3.1: ***Reach agreements with surrounding counties to effectively route calls for service to the appropriate destination center to allow for the quickest and most effective response.***

Strategy 26.3.2: ***Work cohesively with surrounding centers to familiarize each other with jurisdictional boundaries and response units available in order to better coordinate mutual aid response, lowering response times and ensuring field unit and citizen safety.***

Strategy 26.3.3: ***Establish back-up and contingency plans with surrounding centers to ensure continuity of service and more effective regional communications and response.***

Goal 27: Obtain and utilize the latest in emergency communications equipment and technology

Policy 27.1: Provide faster and more accurate information to field units and to the public.

Policy 27.2: Incorporate the use of Fire and Police ProQA, in addition to the current EMS ProQA for more accurate and effective assessment of calls and dispatch of field units.

Strategy 27.2.1: ***Use Automatic Vehicle Location systems to more effectively track and assist responders in the field, improving response times and ensuring officer and field unit safety.***

Strategy 27.2.2: ***Research funding options to upgrade to newer and more capable mobile communications vehicle for use in special events, center evacuation, or other emergency situations.***

CHAPTER 10: TRANSPORTATION ELEMENT

The transportation element of this plan aims to create the road map for providing safe access and mobility to a full range of services including employment, educational opportunities and goods and services throughout the County as well as to other service areas outside of Santa Fe County. This chapter will outline the central points of Transportation Planning in Santa Fe County by addressing the Binding Principles and Critical Findings to the County's transportation system, the keys to Transportation Sustainability, Roadway Plans and Programming including considerations for the County Future Road Network Map, Transit and Transit Oriented Development, and a context sensitive approach to road design including bicycle and pedestrian design features and the proposed future bikeways map for the County. Goals, Policies and Strategies are also presented as the approach to providing a safe and effective transportation system in the County.

10.1.1 KEY ISSUES

1. **Right-of-way issues.** A number of right-of-way problems plague the County, including inadequate documentation of legal easements, confusion of jurisdiction regarding many roadways, and inadequate right-of-way ownership by the County to implement bike and pedestrian access on many roadways.

2. **Road deficiencies and emergency response issues**. Various deficiencies in roadway design have been identified which directly affect emergency response including substandard grades, widths and turnarounds hampering emergency access; roads which are inaccessible in bad weather, poorly constructed or maintained roads; and outdated road and address information for emergency responders.

3. **Operation and maintenance issues**. Although a number of roadways exist, connecting much of the County in an efficient manner, there are issues related to the operation and maintenance of existing roadways. From inadequate funding of road maintenance in general to public demand for the County to take on the responsibilities of maintaining privately constructed roadways to a lack of future funding for new road construction when maintaining already built roads. There has been a lack of coordination for road maintenance services with other jurisdictions and a lack of coordination to maintain and improve roads in areas that are in the process of urbanization.

4. **Impediments to transit provision**. The future of transit in the County must overcome significant constraints such as a dispersed population with spread out destinations, a lack of planning for future transit hubs and inconsistent funding for service provision.

5. **Need for consistent roads standards for rural and urbanizing areas**. Existing County roadway standards constrain the development of a better transportation system as there is currently a lack of consistent road guidelines for development throughout the County.

6. **Environmental and scenic impacts along roadways.** New roads can pose a significant risk to wildlife, habitats and other sensitive lands. Insufficient protection of the County's scenic byways from both road improvement projects as well as continued development adjacent to these scenic byways.

7. **Lack of context sensitive approach and public input process in road design.** Residents have expressed the need for having a clear process to provide input on new road projects and improvements to existing County roads as well as on-going maintenance and operations of these roads.

8. **Inadequate funding for road improvements and construction of new roads.** As the population in the County continues to grow, the funding of County roads continues to be issue. Historically many County roads have not been improved to accommodate the increased development which is accessed along these roads. There is a need for programming County resources to provide adequate road infrastructure within the County's growth areas as well as policies whereby future development will bear the cost of developing a well-functioning road network.

9. **Lack of transportation facilities for non-motorists.** There is a need to improve multi-modal transportation options including more bikeways, pedestrian paths and equestrian easements.

10.1.2 KEYS TO SUSTAINABILITY

1. **Address right-of-way issues and ensure adequate right-of-way for existing and future road needs**. The SLDP, the Official Map and the SLDC should ensure that the site plan and discretionary development review processes address the need for dedication and reservation of adequate existing and future right-of-way.

2. **Mitigate emergency access issues.** Improve roads to meet County standards to ensure emergency access.

3. **Identify adequate funding options for operations and maintenance of existing roads.**

4. **Develop funding mechanisms including the Capital Improvements Program and impact fees** for future transportation needs generated by new development.

5. **Coordinate road operations and maintenance.** Coordinate with municipalities and other jurisdictions for road maintenance services in cross-jurisdictional areas.

6. **Plan and coordinate safe, convenient and efficient transit services.** In order to develop an efficient and well-utilized transit system, transit hubs and service provision should be coordinated with other local and regional transit service providers and government entities. Higher density traditional neighborhood, transit oriented and mixed-use developments designated by the County Code will foster a development pattern which allows for a more efficient transit system with links to regional commercial centers and economic opportunity centers and provides both the revenue and passengers. Such a system will encourage reduction in automobile trips and provide mobility for all people, including underserved populations residing in rural areas of the County.

7. **Develop policies which lay the foundation for a safe and efficient multi-modal transportation network.** The multi-modal transportation system will accommodate the full range of transportation users including pedestrians, bicyclists and equestrians. The existing transportation system is shown in Map 10-1

8. **Develop consistent road standards for rural and urbanizing areas.** The County's Sustainable Land Development Plan lays out the foundation for higher density development within the primary growth areas.

9. **Evaluate and design transportation projects so they are appropriate to the local context**. In order to provide for a safe and efficient transportation system that serves the needs of all users, roadways should be designed according to the specific context with careful consideration to the concerns of local residents as well as the impact on the local environment.

10. **Multi-modal transportation is important for long-term sustainability**. The County has coordinated with a number of other entities on transportation issues including the MPO, the Regional Planning Authority, the North Central Regional Transit District, the Town of Edgewood and the State of New Mexico, and Santa Fe Southern Railroad and can build on these relationships in the future.

11. **Carefully analyze and address environmental issues prior to implementation of transportation projects.** Santa Fe County is home to a great wealth of natural resources including wildlife and wildlife habitat.

10.2 CRITICAL FINDINGS

10.2.1 TRANSPORTATION PLANNING ORGANIZATIONS

Coord**ination of planning for Santa Fe County falls within the jurisdictions of** the following Transportation Planning Organizations and Agencies:

The Santa Fe Metropolitan Planning Organization (MPO). The MPO also sets priorities for funding of new or improved roads and transit using State and Federal funds within the Metropolitan area. The Transportation Policy Board comprised of City Councilors and County Commissioners is the governing body of the Santa Fe MPO. Identify TCC as recommending body to MPO. The Technical Coordinating Committee (TCC) of the MPO serves as a recommending body to MPO Transportation Policy Board (TPB). Map 14 shows the current MPO and RPA boundaries.

The Northern Pueblos Rural Planning Organization (NPRPO). The NPRPO sets priorities for funding of new or improved roads and transit using State and Federal funds outside of the MPO boundary.

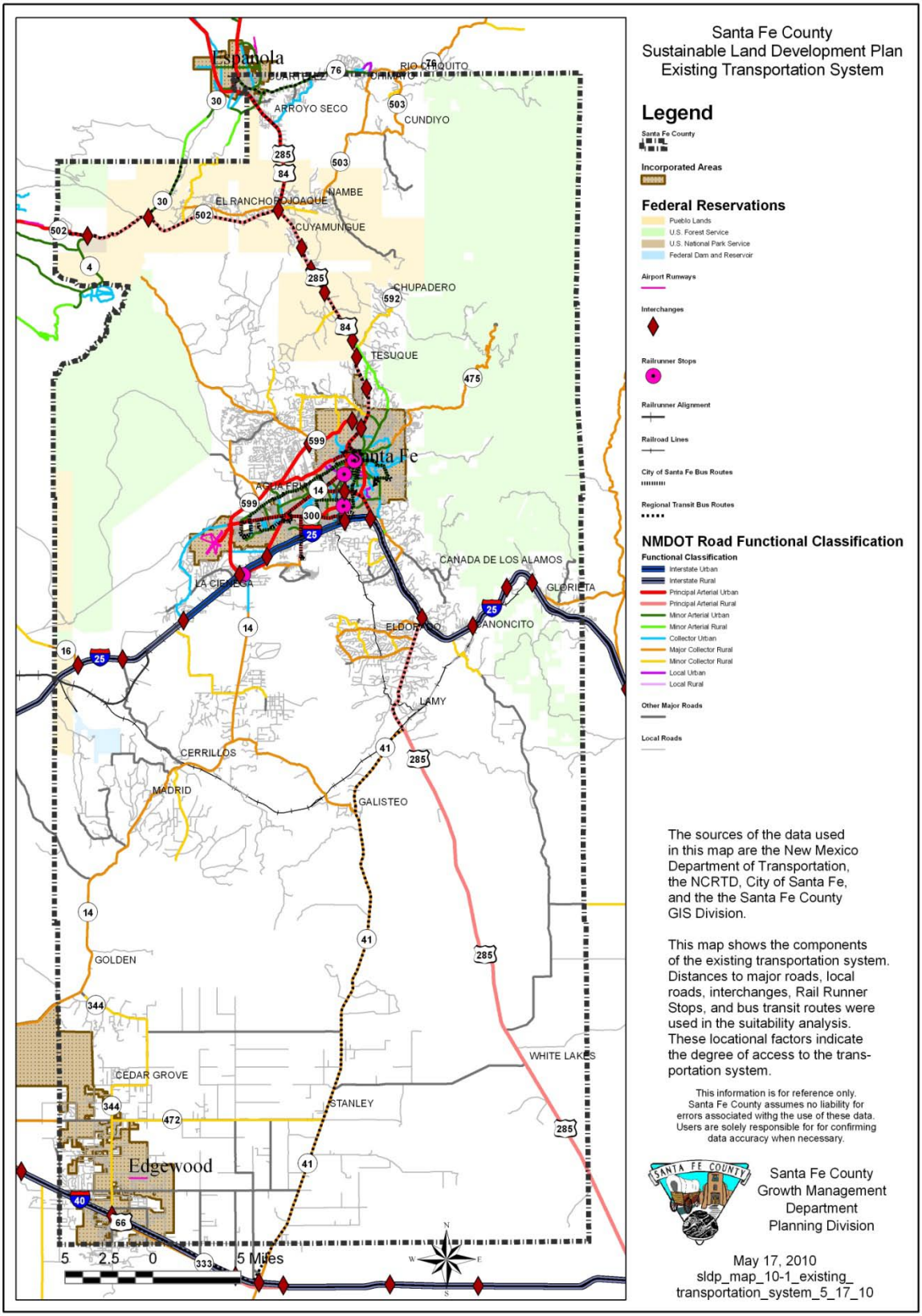
Boundaries of the NPRPO

The Regional Planning Authority (RPA). The RPA is the fiscal agent through which 1/16 cent GRT will be allocated for transit operations throughout Santa Fe County as well as the City of Santa Fe. It is anticipated that the GRT will generate approximately $4.5 million in revenues with fifty percent ($2.5 million) going to the Rail Runner service, $1.9 million to the City of Santa Fe and Santa Fe County, and $300,000 to the NCRTD for Rail Runner Express The RPA, in collaboration with Santa Fe County and the City of Santa Fe, has approved a transit plan to serve City Orand County ridership needs with emphasis on connection to the Rail Runner commuter rail service. The RPA also allocates funding for roads through the County Capital Outlay Gross receipts tax.

The North Central Regional Transit District (NCRTD). The NCRTD transit operations serve the four north central counties of Los Alamos, Taos, Rio Arriba and Santa Fe Counties as well as Santa Clara Tesuque and Ohkay Owingeh pueblos. The NCRTD operates several transit routes or programs in Santa Fe County including the Greater Eldorado Express (GEE-Line) which began in October of 2007 with service to Eldorado. Service was expanded in January of 2008 serving riders in Edgewood, Moriarity, Stanley, Galisteo and Eldorado to destinations in the City of Santa Fe. These services are currently contracted through All Aboard America and run from 6:00 am to 7:04 pm. There has been steady interest among residents in the southern portion of the County to increase these transit services. The Transit Advisory Board for Santa Fe Trails, the City of Santa Fe bus system, has stated that services to Eldorado and the Community College District will be priority areas to be served by Santa Fe Trails in 2009. Ridership studies and route and mode analysis are needed to determine potential ridership.

The Middle Rio Grande Council of Government (MRCOG) functions as the RPO and provides transportation planning support to the outlying areas covering the entire Edgewood area and approximately the southern 1/5th of the County. The majority of data collection and analysis within the MR COG region considers region-wide functionality and connectivity to the New Mexico Rail Runner.

Map 9: Existing Transportation System



10.2.2 ROADWAY PLANS AND PROGRAMMING

10.2.2.1 ROAD IMPROVEMENT PLAN

In 2005, the County Public Works Department and the Road Advisory Committee developed the 5 Year Road Improvement Plan that was adopted by the Board of County Commissioners in the same year. The plan was primarily for paving improvements, but also included some drainage structures. The plan was comprised of approximately 98 road projects totaling 148 miles. Due to increased construction costs, only about half of the projects have been completed or have existing funding and are waiting to be constructed. The plan was to be funded primarily by the general obligation bond approved by the voters in November of 2004. These projects are also funded through GRIP 2 funding which is being utilized to construct existing projects from the plan.

10.2.2.2 LONG RANGE TRANSPORTATION PLANS

Several plans for future arterial and primary roads and transit have been completed and adopted for the area of the County in close proximity to the City of Santa Fe, where most new growth has occurred in the last 40 years. In 1992 the Extra Territorial Zoning Authority (EZA) adopted an Arterial Roads Plan for the 5 mile Extraterritorial Area around Santa Fe. This Plan has been replaced since by two efforts: the Santa Fe Urban and Extraterritorial Future Roads Plan (ARTF) adopted in 1999 by the County, the City, the EZA and the MPO and the Community College District (CCD) Plan adopted by the County and the EZA in 2000. The CCD Circulation Plan also includes a plan for trails and transit routes.

Several planned arterials and primary roads indentified in these plans link or cross through multiple developments or ownership, and Right-of-Way would have to be purchased to develop these County roads. To date, roads throughout the County are built as development is proposed and approved. There has been no plan for phasing or financing of roads or portions of roads needed to complete the network to County standards in the absence of pending development. It is also not clear where the responsibility lies for implementing the construction of new roads that cannot be attributed to a specific development. The County Code ties off-site road requirements to the scale of each development as it comes in for approval. This leaves some roads under built and does not adequately address the need for road improvements resulting from the cumulative impacts of many small lot splits through various means such as family transfers.

The Metropolitan Transportation Plan approved by the MPO builds on the transportation networks of the County and the City to identify construction and improvements needed in a specific time frame. The Regional Planning Authority (RPA) is also concerned with the completion of planned road networks and how that interacts with the growth areas in that plan.

10.2.2.3 COUNTY FUTURE ROAD SYSTEM CONSIDERATIONS

Recommendations for future roads as presented in this section are based on a detailed needs analysis based on future traffic volumes and key connections which will distribute traffic more effectively, thereby reducing traffic congestion and improving efficiency and safety. These projects are intended to satisfy unmet travel demand and improve the performance of the region-wide road network. They accomplish these efficiency goals by substantially increasing the carrying capacity of the road network by dispersing and thinning out traffic across the network's roadways, and by reducing the travel times. Recommendations include the sequencing of projects which will ensure that the existing system continues to function in an efficient manner and to minimize potential disruptions of the region's existing road network and adjacent communities. In developing a process to evaluate road improvement projects and new road projects in the Santa Fe County the following should be considered:

- Priority roads projects including improvements to existing roads and construction of new roads should connect to designated community service areas and proposed growth areas.
- Road improvement projects and new road construction projects should address improved connectivity and access to other areas that provide a range of community services.
- Road improvement projects and new road construction projects should be evaluated and prioritized based on the need for a higher level of service, the character of the road (i.e. rural or sub-urban), the environmental suitability of the road project, and whether the proposed project would provide improved connectivity to services.
- A process should be developed that evaluates the traffic demands of the full spectrum of roadway users including local and commuter traffic, emergency services, commercial users, and multi-modal users including pedestrians, cyclists and equestrians for all proposed road improvements and new road construction projects.
- A clear public input and evaluation process shall be developed and followed to consider the specific conditions of the project and the full spectrum of user demands.
- The County should prioritize specific roads for planned improvements through the CIP.
- Avoid concentrating traffic on a small number of large arterials. Instead, the network should de designed to fulfill the principles of several small roads where traffic can be more evenly distributed, neighborhood-friendly roads, and pedestrian oriented roads.
- Roads should be designed as two-lane roads, with third lanes added only as necessary to provide turning lanes at congested intersections. A two-lane arterial road network will be less disruptive to existing communities and make pedestrian and cyclist travel safer and more practical.
- Traffic calming measures and the construction of additional small roads should be implemented before road-widening.
- Recognition and preservation of historic trails and roadways.
- A two-lane arterial road network is both desirable and feasible. Such a network will be less disruptive of existing communities and less destructive of Santa Fe's character. This type of road network will also make pedestrian and cyclist travel more possible.

10.2.2.4 COUNTY FUTURE ROAD NETWORK

Santa Fe County, in collaboration with the Santa Fe Metropolitan Planning Organization (MPO), has developed a draft map of the County's future road network **(See Map 10-2).** The County's future roadway recommendations are based on previous road plans, studies and recommendations including the Arterial Roads Taskforce, a study for the Community College District, and recommendations from Santa Fe County Staff, consultants and the Santa Fe MPO. All roadways indicated on the Future Roadways map were evaluated as described above. Future road improvements can be found in **Map 10-3**. **Map 10-4** shows road surface and maintenance projects. Objectives of the Future road plan include:

- Provide road connections that link residents to their principal destinations;
- Remedy poor driving conditions and congestion on roads that receive considerable traffic;
- Provide convenient and redundant public safety service access to area communities;
- Minimize disruption of existing communities and the region's existing road network;
- Inform citizens of planned road projects that could affect them; and
- Effectively coordinate road planning and implementation of road plans across jurisdictional boundaries within Santa Fe County.

10.2.2.5 FUTURE ROADWAY RECOMMENDATIONS

A detailed study conducted by the County examined the County's existing road network capacity and projected future growth within the Community College District (CCD) and projected traffic conditions in the County's urbanizing area. The CCD is the existing primary growth area in the County and is within the SDA 1 area identified as a primary growth area in this plan. The study concluded that over the next ten years there will be a need to remediate congestion on NM 14 and Richards Avenue, provide improved public safety access to Eldorado and the Community College District, and reduce the heavy dependence on Richards Avenue and I-25 by providing multiple, alternative, and more direct links between City and Community College District destinations.

Future roadway recommendations should be incorporated into the County's Capital Improvements Plan to coordinate and prioritize road projects. Potential future road projects identified in the study include the following:

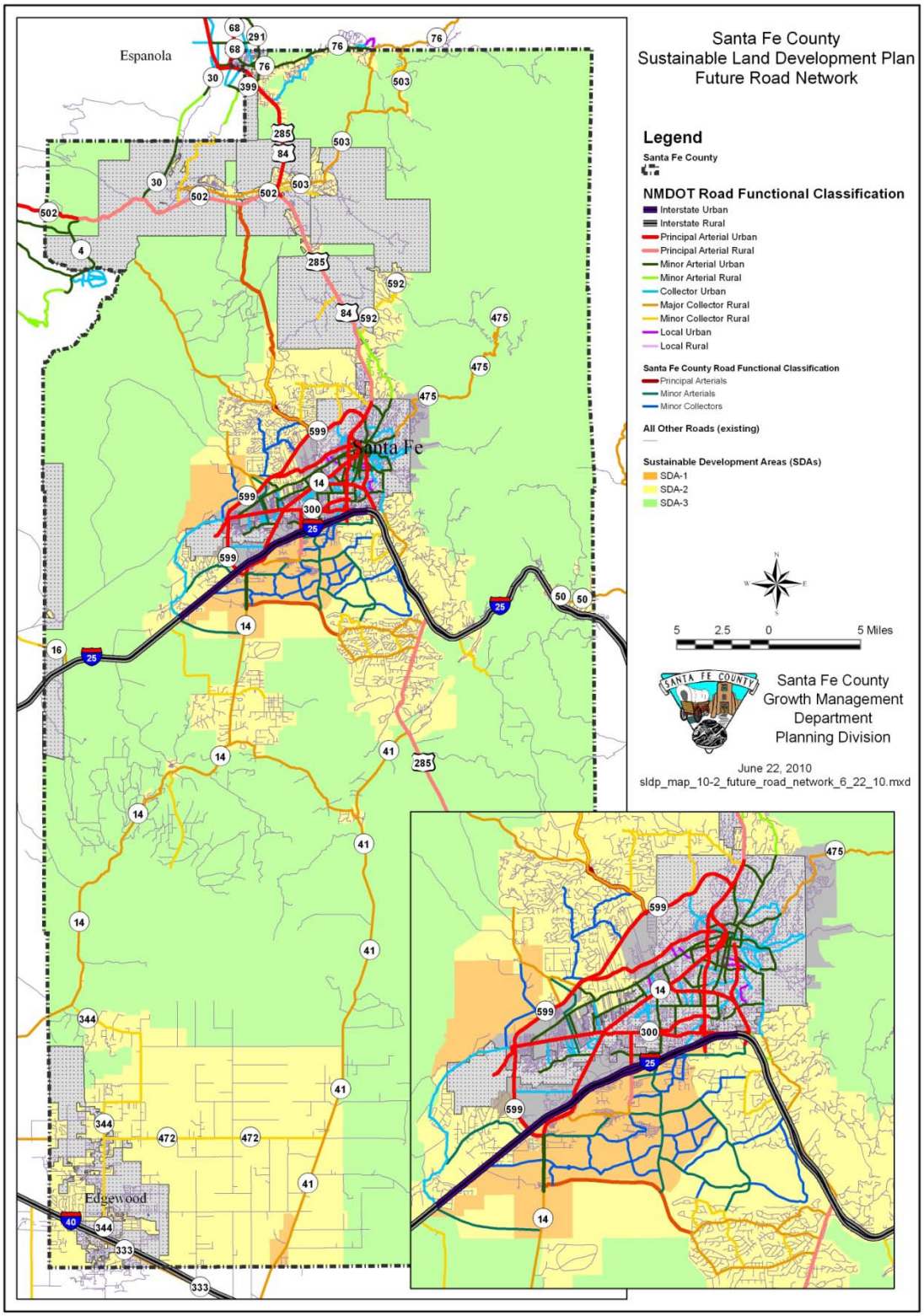
- Four-lane widening of NM14 approximately 1.5 miles, from Camino Vista Grande to Camino Justicia
- Construction of a proposed southeast connector road between Rabbit Road and Windmill Ridge in Rancho Viejo
- Construction of an east access road to the Santa Fe Community College from the proposed southeast connector
- West extension of Avenida del Sur from A Van Nu Po Road to NM14
- Construction of an Eldorado North Connection to the Southeast Connector

These projects would satisfy unmet travel demand and improve the performance of the region-wide road network. These projects would substantially increasing the carrying capacity for the priority growth areas within the Community College District road network by dispersing and thinning out traffic across the network's roadways, and by reducing the travel times to and from the District. The study also recommended further study of the following potential road connections and improvements:

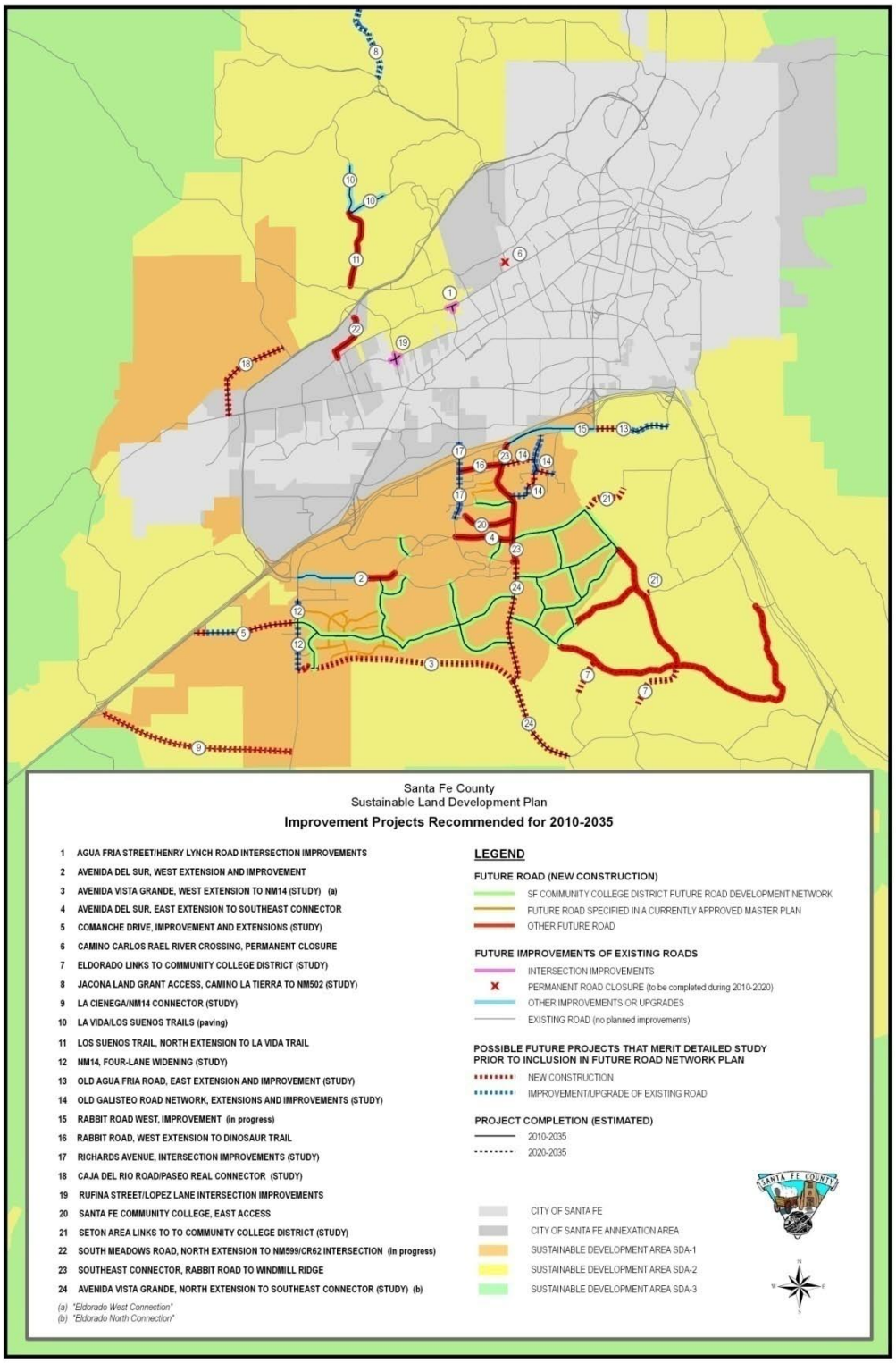
- A connection from Eldorado West to NM14
- Connections between the proposed southeast connector and lower Old Galisteo Way and Old Galisteo Road in the Arroyo Hondo/Old Galisteo Road area, and
- Richards Avenue intersection improvements

Future roads projects including improvements to existing roads and construction of new roads should address improved connectivity and provide connectivity to designated community service areas and proposed growth areas.

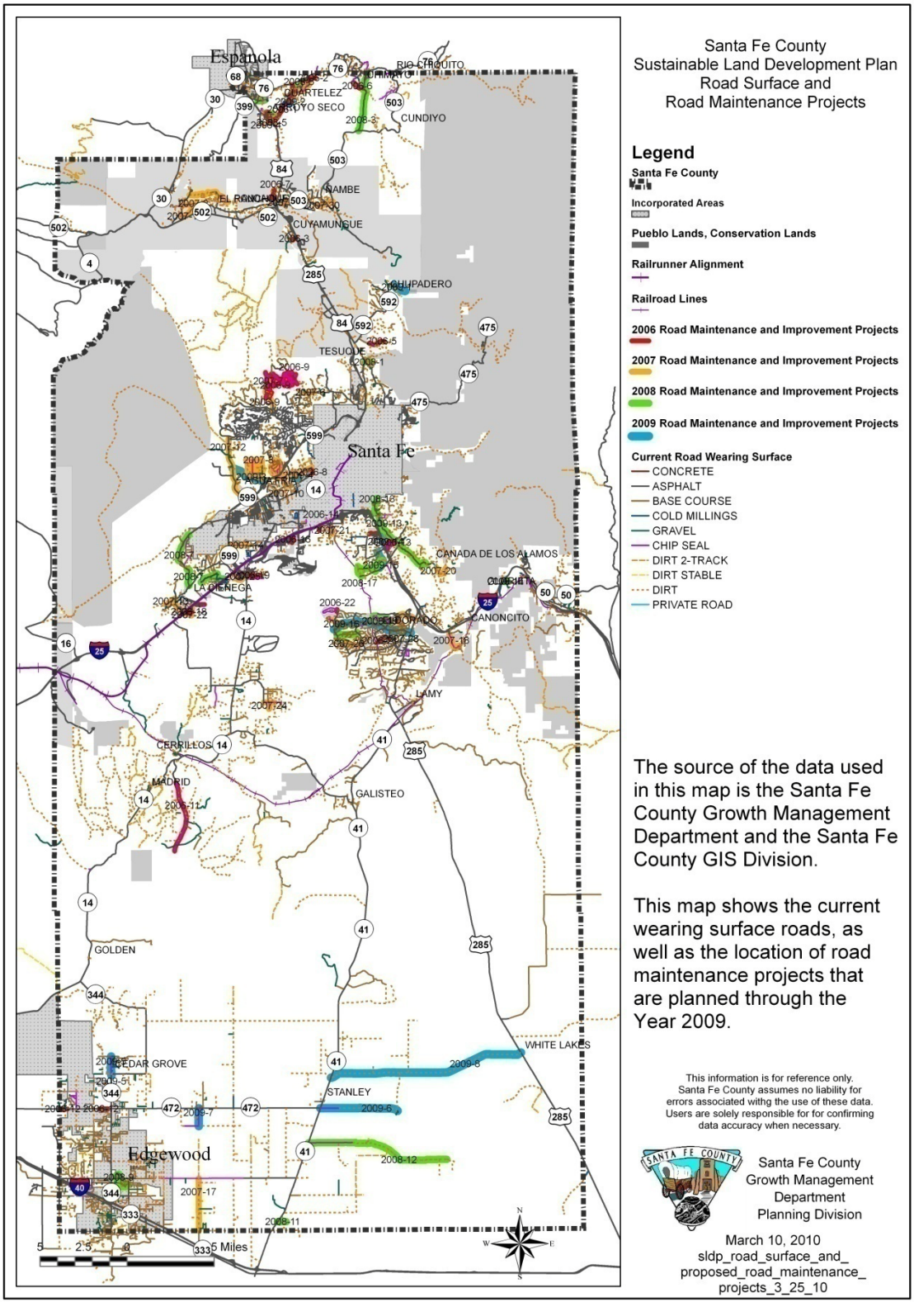
Map 10-2: Future Road Network



Map 10-3: Future Road Improvements



Map 10-4: Road Surface and Proposed Road Maintenance Projects



10.2.2.1 FUNCTIONAL CLASSIFICATION OF EXISTING AND FUTURE ROADWAYS

Functional classification for roads was established by the Federal Highway Administration and is the process by which streets and highways are grouped into classes or systems according to the character of service they are intended to provide. Most travel along roadways is not served by a single type of roadway, such as by a residential street, but through a network of roads such as local streets, neighborhood collectors and arterial roadways, each with its specific roadway function.

The Functional Classification System is defined by the NMDOT Consolidated Highway Database. Functional Classifications for County roads are specifically defined in the Santa Fe MPO Metropolitan Transportation Plan. The following are the NMDOT Function Classification definitions for roads in Santa Fe County:

- **Principal Rural Arterial:** These facilities are designed to provide minimal interference along relatively long distances and at relatively high speeds thereby allowing for efficient corridor movement. These roads provide access to important traffic generators not served by the interstate system as well as providing access to inter-modal facilities. These roads are key facilities in an integrated network without stub endings except where unusual geographic conditions exist. These facilities accommodate average annual daily traffic (AADT) volumes of 5,000 or more trips.

- **Principal Urban Arterial:** The primary function of these facilities is to provide the greatest mobility for through movements in which direct access to adjacent land is discouraged. This road classification provides access to major traffic generators and to other inter-modal facilities. These facilities are designed to accommodate a high percentage of commercial vehicles and to serve most trips entering and leaving the urban area. These facilities accommodate average annual daily traffic (AADT) volumes of 7,500 or more trips.

- **Minor Rural Arterial:** These facilities provide a high level of mobility with minimized interference to through movements. These roadways provide inter-county access for relatively long distances at relatively high speeds. These roads form an integrated network without stub endings except where unusual geographic conditions exist. These facilities accommodate average annual daily traffic (AADT) volumes of 2,000 or more trips.

- **Minor Urban Arterial:** These facilities interconnect with and augment the urban principal arterial system and provide a lower level of travel mobility and a higher rate of access than the principal arterial system. These facilities are characterized as moderate distance roadways with moderate travel speeds. Spacing of these roadways is approximately one half to two mile intervals depending on the urban density. These facilities accommodate average annual daily traffic (AADT) volumes of 4,000 or more trips.

- **Major Rural Collectors:** These facilities connect urban areas with populations over 5,000 and serve traffic generators typically of intra-county importance such as access for consolidated schools, employment centers. They may also cross county boundaries. These roads tend to collect traffic from local roads to rural minor arterials.

- **Minor Rural Collectors:** These facilities connect population centers from 500 to 5,000 and have lower traffic volumes than major collectors. These roads tend to collect traffic from local roads to rural major collectors and larger.

- **Urban Collectors:** These facilities provide land access and traffic circulation within residential neighborhoods and commercial and industrial areas. This road system serves to distribute trips between the arterial system and the local street network and provide some degree of mobility while also serving abutting properties.

10.2.2.2 LEVEL OF SERVICE (LOS)

The transportation facility level of service standard as established by FHWA apply to all transportation facilities identified in the Santa Fe County road plan, as shown on **Map 10-5**. These include: collector roads, arterial roads, freeways, and expressways that are maintained by Santa Fe County or the State of New Mexico and which include all County collector and arterial roads as well as State highways, U.S. highways, and Interstate highways, within the unincorporated portion of Santa Fe County. Transportation facilities include all road links, intersections, and interchanges for roads that are components of the thoroughfare system.

The following descriptions of Level of Service do not imply that a specific Level of Service category is appropriate for specific land uses, such as a shopping corridor, but rather indicates the degree of traffic congestion as a result of traffic density and traffic delay. A lower Level of Service indicates that the road is designed to handle fewer cars than a road with a higher LOS. The proposed LOS as shown on Map 10-5 corresponds to the road capacity suitable for the proposed density of development and desired traffic speeds. A lower LOS therefore corresponds to areas with higher congestion or traffic delay and lower allowable traffic speeds and higher LOS corresponds to lower congestion or traffic delay and higher allowable traffic speeds."

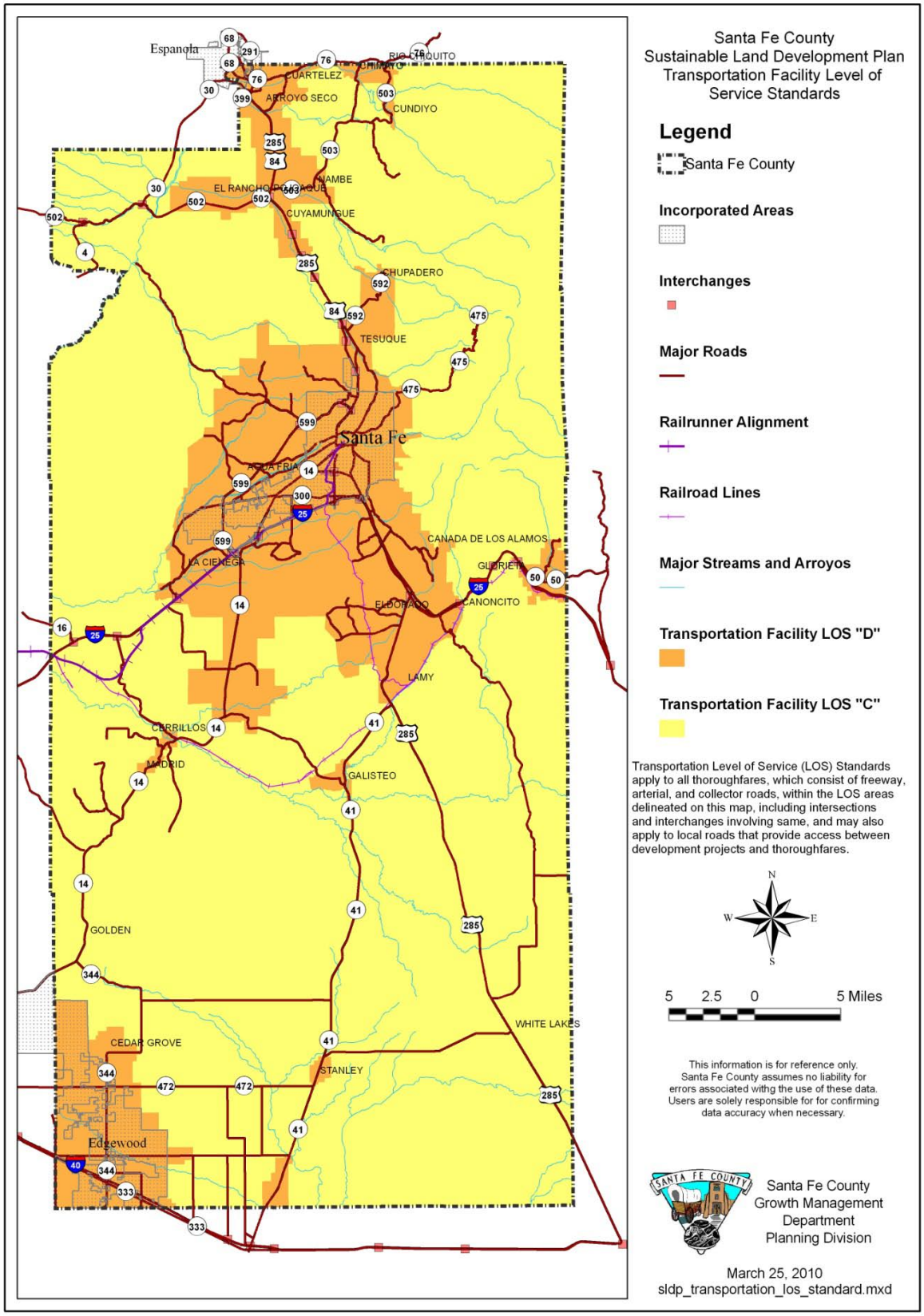
Level of Service. The Highway Capacity Manual and AASHTO Geometric Design of Highways and Streets describe the various Levels of Service (LOS) for roadways ranging from LOS A to LOS F.

- LOS A describes conditions where traffic flows at or above the posted speed limit and all motorists have complete mobility between lanes.
- LOS B is slightly more congested such as where two motorists might be forced to drive side by side, limiting lane changes.
- LOS C has more congestion than A or B where the ability to pass or change lanes is not always assured but where driving speeds are consistent with the posted speed limit and generally very safe. Traffic along these roadways is efficient but traffic volumes are close to the road's carrying capacity.
- LOS D is described as the level of service in which speeds are somewhat reduced and motorists are hemmed in by other vehicles. LOS D is a common goal where providing LOS C would be cost-prohibitive or where there is a need to minimizing negative societal impacts such as locations where there is through-traffic within residential areas.
- LOS E is a marginal service state. Flow becomes irregular and speed varies rapidly, but rarely reaches the posted limit. On highways this is consistent with a road at or approaching its designed capacity. LOS E is generally not desirable to efficiently move traffic.
- LOS F is the lowest measurement of efficiency for a road's performance. Flow is forced with frequent slowing required. This LOS describes a road in which the travel time cannot be predicted and generally have more demand than capacity.

The transportation facility level of service will apply on a peak-season, peak-hour, directional basis, for all impacted road links, intersections, and interchanges, using traffic volumes that are based on the latest edition of the Highway Capacity Manual published by the Transportation Research Board. Generally, LOS for transportation facilities for the County is as follows:

- For facilities generally within SDA-1 and SDA-2, that are identified in the Santa Fe County Sustainable Land Development Plan, as well as within municipalities or the City of Santa Fe Annexation Area a Level of Service "D" is recommended, and;
- For facilities within SDA-3, a Level of Service "C" is recommended.
- Standards will be set forth in the Sustainable Land Development Code requiring traffic impact analysis and mitigation to ensure safe and sustainable transportation management planning.

Map 10-5: Transportation Level of Service Standards



10.2.3 TRANSIT

Improving public transportation services can significantly reduce impacts on the environment including decreasing green house gas omissions as well as decreasing the costs and environmental effects of new road construction and maintenance and overall cost savings for operating and maintaining a personal vehicle. Public transportation will play an increasingly important role over time in meeting the transportation mobility needs of County residents, businesses, employees, and visitors. As Santa Fe County continues to grow, especially in primary growth areas, public transit investments are a significant component to:

- Increase personal and regional mobility
- Promote balance of systems with various and unique within systems
- Improve economic vitality, competitiveness, and job access
- Encourage active living and healthy communities
- Address social equity – providing transit for life-sustaining activities for those with few or no other transportation options

Potential public transit investments may span a range of options tailored to specific needs and circumstances in different areas of the County. These include commuter-oriented connections to Rail Runner, downtown Santa Fe, and major regional destinations through fixed route, commuter express, park-and-ride, or other service delivery options. Transit investments also include demand-response and other tailored services to connect outlying areas to life-sustaining activities.

Santa Fe County does not intend to directly operate transit service in the County. Rather, the County will collaborate with regional transportation stakeholders to ensure effective service provision and coordination of transit services within the County. These stakeholders include the City of Santa Fe, Santa Fe Regional Planning Authority, the North Central Regional Transit District, the Santa Fe MPO, New Mexico DOT, and others. The County will actively participate in regional transit planning, prioritization, and evaluation activities, as well as potentially contribute funding for transit services provided by others that effectively meet the objectives and criteria above.

10.2.3.1 EXISTING TRANSIT SERVICES

Current transit in Santa Fe County is being provided by the NCRTD, of which Santa Fe County is a member, as well as Santa Fe Trails operated by the City of Santa Fe. The Santa Fe Trails component comprises recent and anticipated service investments to improve Rail Runner connections, serve IAIA and the Santa Fe Community College, and provide new service along NM 14. Santa Fe Trails and the City have increased and expanded service to connect to the Rail Runner and to serve new areas within the City and County. These routes and investments are relying on funding through the County's portion of the Transit Gross Receipts Tax. This Transit GRT was passed during the General Election in November of 2008.

Figure 10-1: Existing Transit Services

Operator	Service Component
SF Trails	IAIA/Santa Fe Community College (Current Route 22)
NCRTD	Greater Eldorado Express
NCRTD	Espanola - N/T/P Pueblos - Santa Fe (cost share)
NCRTD	Chimayo Fixed Route
NCRTD	Los Alamos – Pojoaque
NCRTD	Pojoaque School Students
NCRTD	NM 14 (NM 599 RR Station - State Pen. Complex)
SF Trails	Route 22 to Santa Fe Community College District and NM 599 RR Station

Santa Fe Trails provides bus service to the Community College District and the campus of the Institute of American Indian Arts from the City's south side transit center located at the Santa Fe Place mall. Collaborations between the City, County and Regional Planning Authority have resulted in an expansion of this service to create a new route to connect to the Rail Runner Station located at NM 599 and I-25 and continue southward to provide service to the State Penitentiary and the County Adult Detention Facility. There is limited morning and evening service from Edgewood to Santa Fe via Moriarity, Stanley, Galisteo and Eldorado. The transit study conducted by the Regional Planning Authority examined various segments of this route to gauge cost-efficiency, ridership, and mode share between Eldorado and Edgewood. The future extent of this route will likely depend on cost effectiveness and ridership. The County will continue to explore options to provide transit to the southern area of the County.

10.2.3.2 FUTURE TRANSIT ROUTES FOR CONSIDERATION

While at the present time there are insufficient resources to provide transit services to many areas where services have been requested in the County, the following routes have been identified for potential future services.

NM 599 Rail Runner Station connections. When the NM 599 Station opened in August 2009, NMDOT began providing park-and-ride and shuttle service. There is identified need to provide additional connections to the NM 599 Rail Runner Station, and the NM 14 Corridor to include the Village of Cerrillos, and the Town of Madrid.

Pueblo service. Significant coordination has occurred with representatives from Tesuque, Pojoaque, San Ildefonso, Nambe, and Cochiti Pueblos regarding transit service needs and opportunities. Discussions with these pueblo representatives developed the concept of one or more "Pueblo Express" route(s) that would provide commuter/park-and-ride service to each Pueblo with a focus on efficiently connecting the Pueblos to each other and to Espanola and Santa Fe. In this regard, this concept would need to be merged with NCRTD's existing Espanola to Santa Fe service, and possibly the Tesuque Pueblo to Santa Fe service. Such service may not necessarily replace local service within or between Pueblos currently provided by NCRTD.

La Cienega and El Rancho de Las Golondrinas. These areas, southwest of Santa Fe, represent another potential future transit service market.

Ski Santa Fe. Another potential investment identified from the public meetings is service connecting the Santa Fe Depot Rail Runner Station and Ski Santa Fe.

Tesuque Village via Bishops Lodge. The County identified this route as a priority to serve the Village of Tesuque and north Santa Fe.

Future Rail Runner connections. Future Rail Runner stations may be considered in the future including potential service to the Pueblos and the community of Cerrillos along the existing Rail Runner alignment.

10.2.3.3 FINANCIAL CONSTRAINTS TO PROVIDING TRANSIT SERVICES IN RURAL AREAS

There are policy tradeoffs between expanding service in the urbanizing areas of Santa Fe County to most efficiently serve the greatest number of people versus providing much-needed and much higher-cost service in outlying rural areas. Because each potential Transit GRT funding recipient (Santa Fe Trails, NCRTD, Santa Fe County, Pueblos) has different needs, objectives, service/passenger markets, etc., it is that much more difficult to equitably prioritize and allocate the TGRT as a shared, limited regional resource. In evaluating the future expansion of transit services in Santa Fe County, careful consideration will be paid to the needs of commuters and those who rely on transit as primary or only transportation, especially for life-sustaining activities. In certain cases, this policy may weigh issues of social equity over cost efficiency even where there may be indication of low ridership. Common service delivery options include park-and-ride, commuter express, demand response, vanpools employer-based transportation demand management, etc.

10.2.3.4 TRANSIT ORIENTED DEVELOPMENT

As the County develops policies and strategies to guide development into areas that can be served with limited available County resources, some of the County's future growth can be effectively served in Transit Oriented Developments (TODs). With the New Mexico Rail Runner Express service to Santa Fe beginning in 2008, there is an opportunity to orient future growth in and around Santa Fe toward rail as well as bus transit stations. This section of the plan presents a broad range of recommended principles for Transit Oriented Development in Santa Fe County.

There are several primary design considerations that help to foster an efficient and effective Transit Oriented Development. In general, Transit Oriented Development should incorporate more connections with more intersections and more small streets, thereby elevating the importance of the pedestrian rather than the automobile within the built environment. As discussed in more detail in the Sustainability section, features that should be incorporated into a Transit Oriented Development include:

1. An identifiable center and edges that create a "sense of place".
2. A mix of land use and building types.
3. A variety of housing types with affordable housing integrated into the design.
4. A connected and integrated network of walkable streets.
5. Residential areas located within ¼ to ½ mile of transit stops.
6. Bicycle and pedestrian infrastructure that links to transit stations.
7. Emphasis on pedestrian features including prominent entrances, landscaping and sidewalks.
8. Other civic amenities such as parks and open space that are designed into the development.

The County's transportation investments and policies will directly affect mobility, connectivity and access throughout Santa Fe County. Therefore, the type, location and scale of existing land uses have a strong influence on the transportation system.

10.2.4 APPROACH TO ROAD DESIGN

10.2.4.1 WALKABILITY

Sidewalks are desirable to support both mobility and safety and to establish a multi-modal transportation system. According to a 1987 FHWA study, the presence of sidewalks has been shown to reduce the risk of pedestrian crashes in residential areas and that locations with no sidewalks were more than twice as likely to have pedestrian/motor vehicle crashes as sites where sidewalks existed. The study found that the safety benefit was particularly pronounced in residential and mixed residential areas. Approximately 15% of pedestrian accidents in suburban and rural areas occur when a pedestrian is struck while walking along a roadway (ibid.)

The physical condition of streets, sidewalks, utilities, public spaces and other infrastructure often provides visitors with their first impression of a place and sets the tone for the level of maintenance of private property. High quality streetscapes enhance the community identity and encourage pedestrian activity, adding vitality to commercial and residential areas. Pedestrian amenities make walking and biking attractive for recreation and travel. Such amenities include sidewalks and bike lanes; street furniture such as benches, trash receptacles, and bicycle racks; street trees and street lights; other public spaces, such as plazas and squares; dedicated public access easements; and public art.

Obesity and related health problems, such as diabetes and heart disease, are widespread public health issues that dominate media and public health campaigns across the nation. Obesity-related health problems result in increased health care costs and reduced productivity, as well as a possible decline in quality of life. Walking has been touted as one of the easiest, most affordable and accessible strategies for improving public health. Provision of adequate infrastructure and destinations to support walkability is key to achieving public health benefits.

10.2.4.2 COMPLETE STREETS

Complete Streets, context sensitive solutions and green streets are similar concepts that promote a more comprehensive approach to the design and function of roadways. The key premise is that roadways should be designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and bus riders of all ages and abilities. Streets should be engineered to meet the demands placed on the roadway, but should be done so in a way that minimizes negative impacts and recognizes the character and function of the surrounding area. For instance, even though a downtown street may be heavily travelled, it should not be designed to function like a high speed arterial.

A Federal Highways Administration safety review found that streets designed with sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for disabled travelers improve pedestrian safety. Some features, such as medians, improve safety for all users: they enable pedestrians to cross busy roads in two stages, reduce left-turning motorist crashes to zero, and improve bicycle safety.

Due to the 573 miles of roadways in the County Road network, it is not practical or feasible to apply uniform criteria of Complete Streets for all County roads; however, there are priority segments and areas where this approach should be used. All transportation facilities or improvements within a designated growth area should be required to incorporate elements of Complete Streets design.

There are many factors that must be considered in determining the degree to which Complete Streets policies apply to a specific roadway in the County's road network such as the location of the roadway within the County, the adjacent land use, the volume of different users such as cyclists, pedestrians and equestrians, the design speed of the roadway, etc. Therefore, the applicability of the Complete Streets policy should be evaluated on a case by case basis. Consideration should include:

- An evaluation of the needs of all users, including pedestrians, bicyclists, transit vehicles and users, and motorists, of all ages and abilities;
- Element that create a comprehensive, integrated, connected network;
- Recognition of the need for flexibility in design dependent upon the context of the roadway and the character and design of surrounding development;
- Consideration of exceptions to established standards to enhance safety, promote traffic calming and walkability or achieve other objectives;
- Public involvement in the design of roadways early on in the process;
- Application of the latest and best design guidelines; and
- Design that fits in with context of the community.

10.2.4.3 SAFE ROUTES TO SCHOOL

According to the Federal Highway Administration, the number of school children that walk or ride a bike to school has dropped from 50% in 1969 to less than 15% today. This is particularly alarming in consideration of the rising rates of childhood obesity and the associated chronic health disorders, including Type II diabetes and asthma. Aside from the public health concerns of a less physically active school-age population, the number of children who cannot walk to school due to safety concerns is problematic in terms of the increasing costs of fuel for cars and busses.

Parents repeatedly identify safety as the number one reason their children ride in vehicles. Safe Routes to School (SRTC) is a national program that addresses the issues that prevent students and parents from utilizing transportation alternatives. The first Safe Routes to School (SRTC) program in America began in New York City in 1997, and in 2005, Congress dedicated $612 million dollars towards the SRTC Program. Schools provide a unique opportunity to educate students as well as provide school-based walking programs where students can walk safely in supervised groups. The SRTC Program is having success in communities around the nation and is expected to continue to grow.

While children in rural communities are not necessarily within safe walking distance from school, development in planned growth areas and communities should incorporate safe route concepts. To promote safe routes to school and the quality of the overall pedestrian environment, the County should include specific design components for new and existing facilities, parks, schools and other community gathering places, such as pedestrian crosswalks, sidewalks and bike trails, signage, schools near to neighborhoods, traffic calming measures, pedestrian refuges and other techniques, including community education.

10.2.4.4 CONTEXT SENSITIVE SOLUTIONS

Context Sensitive Solutions (CSS) is an approach to transportation decision-making and design that takes into consideration the communities and lands which streets, roads, and highways pass through ("the context"). The term is closely related to but distinguishable from Context Sensitive Design in that it asserts that all decisions in transportation planning, project development, operations and maintenance should be responsive to the context in which these activities occur, not simply the design process. CSS seeks to balance the need to move vehicles efficiently and safely with other desirable outcomes, including historic preservation, environmental sustainability, and the creation of vital public spaces.

All road projects in Santa Fe County should respect the character of the areas where they are proposed and should be designed to reflect the unique local context of each community and its surrounding area. The design of a road should reflect the particular local conditions and change as the road transitions from rural to semi-rural to more urbanized areas. Changes in roadway widths, the presence or absence of parking lanes, and other factors provide clues to motorists on how fast to drive when they pass from one land use type to another. If appropriately designed, vehicular speeds should fit local context.

The needs of pedestrians, bicyclists and transit users must be considered in designing all roadway projects. Sidewalk networks should be well connected with opportunities for regular, safe street crossings. On collector and arterial roadways, bike lanes or wide curb lanes can encourage people to bike rather than drive for short and moderate distance trips. If a roadway is designed to discourage vehicular speeding, it can be comfortably used by pedestrians and bicyclists alike. In an effort to maintain the character of many of the traditional communities throughout Santa Fe County, all road projects within communities should consider the context and characteristics of the community's Main Street including the following characteristics:

- Regular pedestrian activity, sometimes along wider sidewalks;
- Presence of commercial and civic uses;
- Typically higher building density than the surrounding rural areas;
- Buildings oriented to the street, with little or no building setbacks;
- Presence of street furniture, public art, shade trees and landscaping;
- On-street parking;
- Speeds of 30 mph or less;
- Typically no more than two travel lanes

10.2.5 BIKE LANES, TRAILS AND PEDESTRIAN ACCOMMODATIONS

In order to accommodate and encourage a full range of transportation options, bike lanes should also be considered for future roadways as well as for retro-fits to existing roadways in Santa Fe County. By designating a space only for bicyclists, bicycle lanes give bicyclists a measure of comfort that motorists will not move into their path. They serve to advise motorists of the possible presence of bicyclists. The presence of bike lanes encourages bicyclists to separate themselves from parked cars more than they otherwise might, reducing the possibility of collisions with motorists. **Map 10-6** shows on- and off-road bike trails.

10.2.5.1 PAVED SHOULDERS

Paved shoulders or designated bicycle lanes are the two primary means to dedicate road space to bicyclists. For many streets, however, including low-speed local roads, rural routes with minimal motor vehicle traffic, and unpaved roadways, "shared lanes" are a sufficient accommodation for bicyclists. The decision to include paved shoulders, shared lanes, or off-road facilities for non-motorized uses should also reflect consideration of the projected needs of pedestrians, children on bicycles, equestrians, and other local users along a given road segment.

According to AASHTO (1999), "Adding or improving paved shoulders often can be the best way to accommodate bicyclists in rural areas and benefit motor vehicle traffic. Paved shoulders can extend the service life of the road surface since edge deterioration will be significantly reduced. Paved shoulders also provide a break-down area for motor vehicles. Where funding is limited, adding or improving shoulders on uphill sections will give slow-moving bicyclists needed maneuvering space and will decrease conflicts with faster moving motor vehicle traffic.

Consideration of providing a paved shoulder or bicycle lane for use by bicyclists in the design of a new roadway should be based on a variety of factors to indicate that paved shoulders or bicycle lanes should be included:

- Local land use with mixed land use or higher population density;
- Motor vehicle traffic with higher volume and speeds (e.g. >30 mph) of motor vehicle traffic;
- Continuity and connectivity with other bicycle facilities;
- Lack of availability of other facilities (e.g. other roads, multi-use path, or existing side path) to safely and conveniently reach significant destinations;
- Destinations of particular interest to bicycle and pedestrian traffic;
- Local pedestrian demand not addressed by sidewalks or side paths;
- Input from bicyclists; and
- Feasibility of addition of paved shoulder.

All future County roads that are to be classified at the collector or arterial level, or that otherwise meet the criteria expressed above, should be accordingly built with appropriate paved shoulders or bicycle lanes. Several Santa Fe County Roads have already been built with paved shoulders, or designated bicycle lanes, that meet or exceed the AASHTO minimums described above. The County should maintain these paved shoulders as integral parts of the corresponding County Roads. Many existing County roads meet paved shoulder or bike lane standards for either AASHTO desired (5 ft. or wider) or AASHTO minimum specifications (4 ft. or wider).

Some County Roads have shoulders that do not meet AASHTO minimums and many have no paved shoulder at all. In most cases, applying a "retrofit" to such roads means widening the roadway in order to add paved shoulders or bicycle lanes. In limited cases, a retrofit to create sufficient shoulders or bicycle lanes is possible simply through re-striping or repaving the roadway. For example, multi-purpose paved shoulders could be created along a critical part of Tesuque Village Rd. through a "road diet" treatment whereby space dedicated to motor vehicles is reduced (in this case by eliminating a third, "climbing" lane). This kind of re-striping treatment typically takes place in the context of a maintenance overlay. On other highways, the pavement overlay itself may serve to remediate other limitations to bicyclists' use of the shoulder, such as deteriorated shoulder conditions or longitudinal seams left in the shoulder area (as on Ave. Vista Grande).

The County should dedicate resources and seek additional federal and state support to construct or improve paved shoulders on existing roadways classified as arterials or collectors through a prioritized effort following priority levels listed below, which have been determined following the criteria described above. A full list of these road segments with notes on their classification is shown in Figure 10-2.

Map 10-6: Bikeways Network

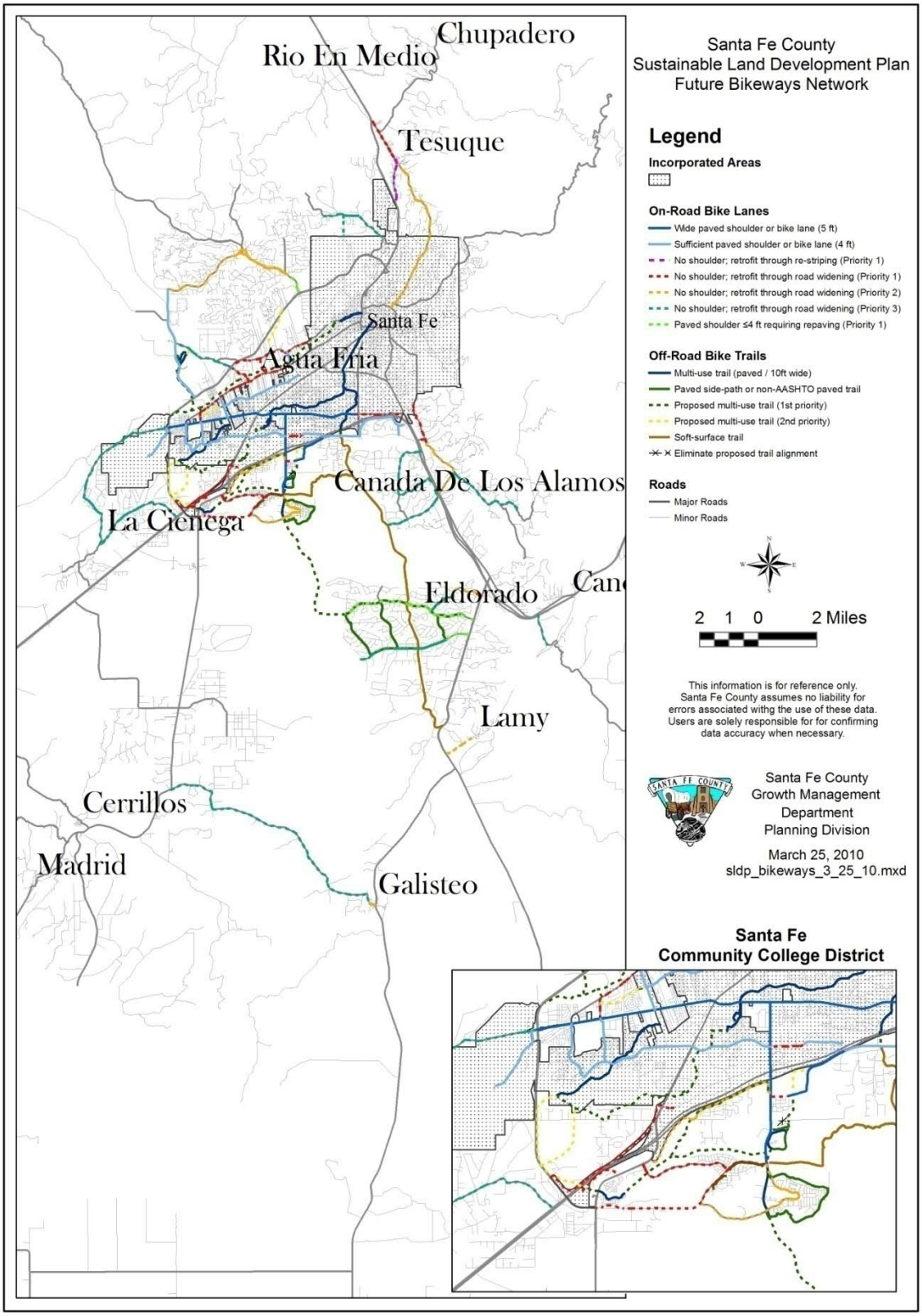


Figure 10-2: Priority Paved Shoulder Improvements

High Priority	Medium Priority
Old Santa Fe Trail, to El Gancho Rd.	Old Lamy Trail
El Gancho Rd., particularly northbound (uphill)	Richards Ave. (at least first 100 yds. south from Ave. del Sur to Trailhead)
Tesuque Village Rd., Tesuque Village south to US84/285 (Retrofit possible through "road diet" / re-striping)	Old Santa Fe Trail (to Two Trails Rd.: both sides; also consider uphill side to Cañada de los Alamos, both sides in Cañada de los Alamos)
Tesuque Village Rd., Tesuque Village north to US84/285	Two Trails Rd.
Avenida del Sur	A Van Nu Po
Rancho Viejo Blvd.	Camino La Tierra (bet Las Campanas and NM599)
Bishop's Lodge Rd. (from Bishop's Lodge south into City) (particularly southbound side on climb)	Las Campanas Dr. (bet. Caja del Rio Rd. and Camino la Tierra)
West Alameda Agua Fria St.	Los Pinos
Caja del Oro Grant Rd.	Dinosaur Trail (esp. where no side path)
San Ysidro Crossing	Paseo Real
	Tano Rd. (paved part: east of Tano West)
	Ave. Vista Grande (re-pave shoulders to eliminate seam)

10.2.5.2 SHARED LANES AND THE USE OF "SHARROWS"

In some cases where cyclists can easily travel at or close to the posted speed limit, and particularly on lower-speed roadways with multiple conflicts (driveways, parked cars, etc.), the "shared-lane arrow" or "sharrow" is an appropriate pavement marking device to indicate appropriate positioning of cyclists to "take the lane," as they are entitled to in order to be more safely positioned in the roadway and to prevent unsafe (and unnecessary) passing attempts by motorists. On higher-speed facilities with shared lanes, where cyclists can be expected to ride as far to the right as "practicable" (per state law), the more customary practice to direct motorists and bicyclists to consider each others' needs is to erect Bicycle Warning signs with "Share the Road" plaques rather than "sharrows."

10.2.5.3 MULTI-USE PATHS

Function of Multi-Use Paths in a Multi-Modal Transportation Network. Shared use paths are facilities on exclusive right-of-way and with minimal cross flow by motor vehicles. Users are non-motorized and may include a variety of users, both for recreation and transportation. Shared use paths are a complementary system of off-road transportation routes for bicyclists and others that serve as a necessary extension to the roadway network. Shared use paths should not be used to preclude on-road bicycle facilities, but rather to supplement a system of on-road bike lanes, wide outside lanes, paved shoulders and bike routes.

Function of Side Paths in a Multi-Modal Transportation Network. Side paths, while they may provide a useful facility for pedestrians and other users, including some recreational bicyclists, are not acceptable as a substitute for on-road facilities as they typically provide a less convenient and less safe alternative for through-cyclists. One of the primary difficulties created by parallel roads and paths is the increased complexity of intersections with driveways and cross-streets, which results in increases in the number and severity of hazards that side paths

present to cyclists of all skill levels. Side paths also typically provide a less convenient route for cyclists, partly due to the design of the path vs. the road but also particularly because cyclists' legal right of way is legally or effectively denied at cross-streets and driveways.

Santa Fe County has generally focused on developing soft-surface trails for recreational purposes while requiring developers to include small trail networks, including narrow paved trails, focusing on internal transportation and recreation. Neither approach has emphasized the development of longer-range transportation corridors for non-motorized traffic, but both approaches have created some favorable conditions to do so.

Trail Corridors. Two trail corridors in particular have considerable potential to address bicycle transportation needs in the County's growth area around the Community College District:

> **Arroyo Hondo Trail and associated trail segments.** Key east-west links between transit, residential areas, Richards Ave., the community college, and a major north-south trail corridor can be made through the western-most segments of the planned Arroyo Hondo Trail (from the NM599 Rail Station to La Pradera (Dinosaur Trail)) and an adjacent trail alignment planned along a tributary arroyo along the north side of Rancho Viejo. A small part of the Arroyo Hondo Trail has already been built as a soft-surface recreational trail east of NM14. Key to the overall alignment would be designing and building trail underpasses of NM14 and possibly the abandoned Interstate on-ramp east of the train station. Use of excess capacity of concrete box culverts to this end holds promise, following the City's example of the recently-built Rodeo Rd. underpass (Arroyo Chamiso Trail).
>
> **Kennedy Line** (abandoned NM Central Railroad bed) from I-25 to Eldorado. This overall trail alignment holds exceptional promise to address north-south transportation needs through the growth area and into the City. Some parts have been built and others have been planned, but it generally has not been conceived as a single trail in the past. A trail from Rabbit Rd. to Rancho Viejo through Oshara Village, over the Arroyo Hondo, and through Santa Fe Community College (via the existing SFCC Loop Trail) would facilitate a major link from the City's Rail Trail to Rancho Viejo's trail system. Rancho Viejo's "District Trail" is one of several parts of this alignment that have already been built. The distance from the end of the "District Trail" to the closest part of Eldorado is just over two miles, but a desirable connection through state land to the end of Ave. Vista Grande in Eldorado would require about an additional half-mile along the rail line. In order to serve as a transportation corridor, the trail would need to maximize use of the originally-engineered grade.

North-South Alternatives. Other alternatives to make the broader transportation connection from Eldorado to the city include the Santa Fe Rail Trail and an on-road route, State Bike Route 9.

- **Santa Fe Rail Trail.** The County's Rail Trail is an excellent, recreational route providing access to the City's paved Rail trail (north of Rabbit Rd.) for off-road cyclists, hikers, and runners. This connection to the City Rail Trail from central Eldorado and to Lamy makes for a favorable and desirable transportation corridor.
- **State Bike Route 9 is** a series of on-road facilities connecting Lamy, Eldorado, Santa Fe and Tesuque Village. The link from Eldorado to Santa Fe follows paved shoulders and bike lanes along US285, NM300 (Old Las Vegas Highway), and Old Pecos Highway (NM466 and City section).

10.2.5.4 CURB EXTENSIONS

Curb extensions (or bulb-outs) which reduce the width of the street to provide safer pedestrian crossings as designated locations are encouraged whenever possible. They are often used in urban core, village/town center and suburban center contexts to improve visibility of and by pedestrians, and also reduce the length of pedestrian crossings. They are installed at both intersections and mid-block locations. A common width is 6 ft., or slightly less than the width of a parallel parking lane. Their use should be restricted to streets with on-street parking. They should not be installed within a striped bike lane. They are favored by emergency service departments in many

municipalities, since their presence prevents vehicles from parking too close to an intersection, or in front of a water hydrant if so positioned.

10.2.5.5 ROUNDABOUTS

Modern roundabouts provide one-way traffic flow around a central island, and should be considered as an alternative to signalized intersections throughout the County. They have become increasingly more accepted in the United States, and have been successfully implemented in other countries for decades. Modern roundabouts help to maintain traffic flow, while improving safety through reducing vehicular speeds and the number of vehicle conflict points (eight versus 32 at traditional 4-way intersections). The County recognizes the need for clear signage as well as a standard roundabout design which will improve both efficiency of traffic flow as well as safety. The following are key considerations to determine whether a roundabout is appropriate for traffic management at an intersection:

1. What are the existing traffic control devices such as signalized intersections in the vicinity of the proposed roundabout location? Roundabouts may not be appropriate in areas where there are already signalized intersections. Combinations of signalized intersections and roundabouts can result in unwanted traffic stacking at the roundabouts.
2. Is the roadway currently being shared by non-motorized users or will there be a likely increase in non-motorized roadway users including bicyclists and pedestrians?
3. What are the roadway needs? Is there a desire for a continuous traffic flow and decreased traffic speeds along the roadway? Does the traffic model or other analysis indicate that a roundabout will allow for continuous traffic flow or provide other benefits such as a desire for decreased traffic speeds along the roadway?
4. Are there sufficient gaps between vehicles merging into the intersection to allow vehicles to efficiently enter the roundabout?
5. Is there sufficient spacing between the proposed roundabout and other existing roundabouts to accommodate road users? Other traffic control measures or limited access may be appropriate where there is inadequate distance to existing roundabouts.
6. Is there sufficient right-of-way at the intersection to accommodate the roundabout and all road users?

10.2.6 AIR QUALITY

The Santa Fe/Espanola area ranks number one as far as the top twenty five cites in America with lowest Year-Round Particle Pollution (Annual $PM_{2.5}$) according to the American Lung Association State of the Air 2004 report. The study included a Grade of A for the County based on a three year average. While the County generally enjoys excellent air quality, air quality is a major environmental health issue, particularly the when weather conditions trap pollutants close to the ground.

Sustainable communities use a combination of techniques to address the relationship between land use and air quality. Compact development and mixed use land use patterns, coupled with mechanisms to set aside open space, can help alleviate air quality problems by reducing vehicle miles traveled (VMT). The County can support achievement of clean air goals by encouraging development in new and infill locations that can be efficiently served by transit, rail, shipping and highway infrastructure, and is near to a variety of commercial, industrial and residential land uses.

10.2.6.1 DUST MITIGATION

Fugitive dust from travel on dirt roads pollutes the air and removes road surface; dust mitigation improves air quality by reducing dust generated by dirt roads. One alternative for reducing entrained dust is paving, but due to the high costs of paving and consideration of induced traffic demand, only those collector roads that are located near populated areas, those that received heavy traffic, and those that create excessive dust should be considered for paving. Environmental costs associated with paving roads include asphalt production, paving, construction, induced traffic, and greater stormwater runoff. For those roads which are not paved, dust management practices are important.

10.3 GOALS, POLICIES AND STRATEGIES

Goal 28: Coordinate with Local, State and Federal governments and transportation organizations to develop a cohesive, safe, and efficient transportation network and transit opportunities to serve County residents, workers, employers and visitors.

Policy 28.1: Coordinate with all local, state and federal organizations and authorities to clarify road maintenance issues, secure funding for transportation and transit projects, coordinate transit service provision and schedules, and support transportation efficiency.

Policy 28.2: Protect and preserve right-of-way for future roadway needs, and include all funding options to pay for future transportation needs generated by new development.

Strategy 28.2.1: ***Coordinate with local representatives, the Road Advisory Task Force, the MPO and NMDOT on the development of prioritized maintenance and improvement plans.***

Strategy 28.2.2: ***Develop a plan for future road access through National Forests in cooperation with the National Forest Service. Coordinate with the Federal Forest Service to build and maintain roads to County standards.***

Policy 28.3: Coordinate with jurisdictions that share the maintenance of a road in order to streamline and improve maintenance.

Policy 28.4: Conduct quarterly meetings with public officials and staff to review road and traffic issues.

Strategy 28.4.1: ***Coordinate with the NM Department of Tourism and local eco-tourism organizations to mitigate negative impacts resulting from increased tourism.***

Strategy 28.4.2: ***Create a transportation working group with members from other transportation entities (NMDOT, Scenic Byways) to coordinate with legislators to improve the cross-jurisdictional road network.***

Strategy 28.4.3: ***Coordinate with the state to support County preferences for development along highways, including signage, trails and vending.***

Policy 28.5: Provide a safe, efficient, interconnected roadway network.

Strategy 28.5.1: ***Develop a clear process to prioritize road improvement projects, evaluate road improvements and determine the location of future roads.***

Strategy 28.5.2: ***Develop and maintain a list of County roads Rights of Ways that includes the functional classification, status and obligations.***

Strategy 28.5.3: ***Develop outreach materials to inform residents of the County's notification procedures for road maintenance needs and requests.***

Strategy 28.5.4: ***Develop outreach materials to inform landowners of the requirements to obtain a development permit for private road construction and the various regulations and policies regarding terrain management. Include information on the importance of terrain management and contour-sensitive road design.***

Policy 28.6: Ensure the equitable funding and adequate provision of transportation facilities and services.

Policy 28.7: Identify and protect or acquire rights-of-way needed for existing and future road construction and expansion through the adoption of an Official Map.

Policy 28.8: Use traffic impact assessments (TIA) to ensure adequate access and capacity.

Strategy 28.8.1: ***Require TIAs to include a description of the isolated and cumulative adverse impacts of the proposed project on the transportation network, including the relation of these impacts to the existing and future capacity of the road system.***

Policy 28.9: Develop roadway standards that address erosion prevention, shoulders, grading and sidewalks limiting cul-de-sacs and other disconnected roadway types and requiring safe pedestrian crossing and access points.

Strategy 28.9.1: ***Require interconections between adjacent development sites.***

Policy 28.10: Amend the County's road acceptance policy to include emergency access criteria, timing of construction and funding.

Policy 28.11: Identify options available to bring private roads that do not meet County emergency access design standards into compliance.

Goal 29: Expand safe, convenient and efficient public transportation services to encourage reduction in automobile trips and provide mobility for all people, including underserved populations.

Policy 29.1: Support an efficient and cost-effective multi-modal transportation system that includes public transit, use of alternative fuels for automobiles and transit vehicles, and supports increased transit-ridership.

Policy 29.2: Provide public transit services and incorporate transit stops into all new development within Sustainable Development Areas 1 and 2 to connect with the existing transit network.

Policy 29.3: Coordinate with RTD and other entities to evaluate public transit routes and enhance existing transit services (both to existing areas and to areas of new development) to match population demands and future growth to provide an efficient alternative to personal vehicle use.

Strategy 29.3.1: ***Evaluate transit service options along the Santa Fe Southern Rail line.***

Strategy 29.3.2: ***Translate transit information into multiple languages and improve its availability.***

Strategy 29.3.3: ***Expand public bus service from communities to the City of Santa Fe and from communities to Rail Runner stations. Coordinate with the RPA to prioritize revisions and expansions.***

Policy 29.4: Encourage reduction in number of automobile trips and per capita vehicle miles travelled to reduce energy demand, greenhouse gas emissions, and other negative impacts to the environment.

Strategy 29.4.1: ***Identify the feasibility to establish a County and private industry employee rideshare program.***

Goal 30: Ensure safe, context-sensitive design standards for transportation improvements that reflect local preferences and the needs of all types of transportation users.

Policy 30.1: Develop an efficient multi-modal transportation network in Santa Fe County such that the access, mobility, and safety needs of motorists, transit users, bicyclists, and pedestrians of all ages and abilities are safely accommodated.

Strategy 30.1.1: ***Establish requirements for on-street bike lanes and off-road bike paths in areas identified for improvements.***

Strategy 30.1.2: ***Require development plans to show clear, convenient and safe pedestrian connections between commercial developments and surrounding neighborhoods and provide safe bicycle, pedestrian infrastructure and equine access where practical.***

Strategy 30.1.3: ***Develop parking standards which offer a reduction in the number of required parking spaces for traffic projected to arrive at a development site by modes other than automobile.***

Policy 30.2: Ensure roadway improvements are designed to accommodate all users and include appropriate design features such as those considered for context sensitive solutions, complete streets, safe rotes to school and similar programs.

Strategy 30.2.1: ***Incorporate Complete Street design in road projects in Sustainable Development Area 1 to establish a safe and effective pedestrian and cyclist network within the County's future growth areas.***

Policy 30.3: Ensure that roadways are improved and maintained to standards that allow road users to interact safely and allow adequate emergency response.

Strategy 30.3.1: ***Map areas that are difficult to access or are inaccessible by emergency vehicles.***

Strategy 30.3.2: ***Develop frontage road infrastructure on highways, especially on Rail Runner routes.***

Policy 30.4: Evaluate and develop standards for the frequency and spacing of curb cuts to minimize the potential of pedestrian and vehicular conflicts.

Policy 30.5: Limit dangerous interactions among roadway users and protect roadway users from inappropriate or dangerous truck traffic. Support the use of traffic calming techniques, weight restrictions, establishment of truck routes and other strategies for the elimination of through heavy truck traffic through traditional villages, communities, neighborhoods, and other inappropriate areas.

Strategy 30.5.1: ***Coordinate with the NMDOT to determine what types of traffic calming best management practices can be implemented along state highways which pass through communities in Santa Fe County.***

Policy 30.6: Implement traffic calming techniques, weight restrictions and other strategies to mitigate traffic impacts in communities.

Strategy 30.6.1: ***Coordinate with the NMDOT to explore the possibility of decreasing the level of service along some state routes and/or changing the functional classification of the state routes as they pass through communities.***

Goal 31: Limit air, noise and water pollution due to transportation.

Policy 31.1: Minimize noise, light, dust, stormwater drainage, visual and other impacts of roadways and traffic.

Strategy 31.1.1: ***Explore dust remediation efforts for gravel and dirt roads to reduce particulate matter in the air.***

Policy 31.2: Balance the need to pave roads to protect and improve air quality with other environmental impacts, such as increased stormwater run-off or induced traffic demand.

Policy 31.3: Require all roads, including private roads, to be designed, contoured and maintained to prevent erosion.

Policy 31.4: Support acquisition of drainage easements from neighboring land owners where necessary for efficient road drainage.

Strategy 31.4.1: ***Establish a process for evaluating low-water crossings based on traffic volume, road type, runoff volumes, and conjunctive use of the drainage by wildlife and other traffic safety considerations.***

Goal 32: Transportation networks and connections will promote compact development patterns and reduce sprawl.

Policy 32.1: Require efficient street networks and a range of uses which integrate jobs, housing, shopping and community services into adjacent development. The County will also develop regulations which accommodate the full range of transportation users, including pedestrians, bicyclists and equestrians.

Strategy 32.1.1: ***Provide accessible transit stops within Sustainable Development Areas 1 and 2 where transit is available.***

Policy 32.2: Establish and Prioritize County Transportation Projects in the Capital Improvements Plan (CIP) and ICIP.

Policy 32.3: Explore all possible funding strategies for transportation and transit improvements.

Policy 32.4: The County should adopt a hierarchy of roads to prioritize specific roads for planned improvements.

Goal 33: Require consistent and efficient road standards.

Policy 33.1: Priority roads projects including improvements to existing roads and construction of new roads should connect to designated community service areas and proposed growth areas.

Policy 33.2: Road improvement projects and new road construction projects should address improved connectivity and access to other areas that provide a range of community services.

Policy 33.3: The road network should improve access to areas both within Santa Fe County and outside service areas including Albuquerque, Espanola, Edgewood and Los Alamos which provide many key services such as employment and medical services to residents in Santa Fe County.

Policy 33.4: Road improvement projects and new road construction projects will be evaluated and prioritized based on the need for a higher level of service, the character of the road (i.e. rural or sub-urban), the environmental suitability of the road project, and whether the proposed project would provide improved connectivity to services.

Strategy 33.4.1: ***The traffic demands of the full spectrum of roadway users, including local and commuter traffic, emergency services, commercial users, and multi-modal users including pedestrians, cyclists and equestrians, should be considered for all proposed road improvements and new road construction projects.***

CHAPTER 11: WATER, WASTEWATER AND STORMWATER MANAGEMENT ELEMENT

There is a need to balance the demand created by residential, commercial and institutional building activity while ensuring a sustainable supply of water for the community. Santa Fe County's current reliance on ground water as a primary water source is unsustainable. Ground water is being used by public water systems and individual wells faster than it is recharged. If current practices are permitted to continue, serious problems are likely. To meet the goals of the SLDP, our thinking about water must change, and sustainable practices must be developed.

11.1.1 KEY ISSUES

1. **Ensure a sustainable water supply.** A sustainable long term water supply capable of meeting the County's present and future needs is critical. A sustainable supply can be provided from surface water of the Rio Grande and its tributaries, groundwater, reclaimed water from conservation or waste treatment, imported water, or from other sources. All sources ultimately used to supply water to the County should be, collectively or individually, sustainable.

2. **The current reliance on groundwater as a primary water source is unsustainable.** The current reliance on ground water as a primary water source is unsustainable. The County, through the Buckman Direct Diversion Project, has embraced the challenge of providing a safe, long-term surface water supply. Now the challenge will be to provide those surface water supplies widely and supplant the current reliance on domestic wells and groundwater.

3. **Conserve water. Santa Fe County already has in place many progressive programs whose goal is wat**er conservation. Reducing per capita demand further will help prevent unnecessary use of surface and groundwater resources. One way to accomplish further water conservation is to require new development to provide the latest water conservation technology and to retro-fit existing development as feasible. Some techniques that can be applied include increased water recycling through gray water and rain catchment systems.

4. **Plan for droughts and emergencies. It is critical to plan for drought and the uncertain impacts** of climate change. The climatic record in New Mexico is replete with serious, lengthy droughts that have a capacity of seriously disrupting life. Even without the uncertainty of climate change, New Mexico's climate has had periods when life as we know is not sustainable. We need to plan, as well as possible, for these events, knowing that climate change may exacerbate what has happened before. A back-up ground water supply needs to be implemented as proposed in the County's Conjunctive Mananagement Plan. Other sources of backup water supply need to be seriously entertained. Serious planning efforts need to be given towards providing further back up supplies to address serious droughts that have been seen before.

5. **Expand centralized water and wastewater to serve primary growth areas.** Centralized water and sewer service apply the economies of scale to reduce the unit cost of those services. The more customers that can be provided centralized services, the less these services cost each individual. Centralized service provides control over consumption to ensure that per capita use is reasonable. And centralized service provides access to funding that individual service does not. Accordingly, the SLDC could encourage use of centralized services and discourage individual services; certainly centralized service should be required in growth areas. Increased density should only be possible where centralized water and sewer are provided and the best conservation and reuse technology is used.

6. **Improve the efficiency of water and sewer services.** Related to the previous point, water and sewer services need to be as efficient as they can be if persons are going to be required to hook up. Water and sewer infrastructure are currently limited to very discrete areas within the County. The basic water and sewer infrastructure needs to be significantly expended within the designated growth areas. Storage is a critical need, both to provide pressure and provide an adequate supply for emergencies. These existing infrastructure should be expanded to new development,

to existing development (as feasible), and to areas served only by domestic wells. Expansion of the systems should be well planned to take advantage of economies of scale.

7. **Equitably finance water, wastewater and stormwater improvements.** Currently, water and sewer infrastructure are paid for by taxpayers and ratepayers. The users of the facilities and developers do not share in the often huge expenses associated with the capital infrastructure. Accordingly, methods should be considered that apportion the costs to all parties. Therefore, the SLDC should provide for water and sewer impact fees to fairly apportion the costs the need for which is generated by the development, on the proponents of developments and the end users. In addition, administrative fees and application fees should apportion the costs of processing and applying capital improvements.

8. **Minimize erosion and water pollution.** Stormwater management and erosion control is an on-going concern due to the fragility of desert soils and the impacts to downstream residents due to upstream activities. The development review process does not adequately consider the projects from a watershed-wide perspective. Watershed boundaries do not align with political boundaries, creating the need for intergovernmental cooperation. In addition to sedimentation and turbidity, changes in drainage patterns and arroyos can cause flash flooding and threaten life and property. Best management practices shall be employed to limit impacts during land clearance, construction and operation of roadways, and other public and private development and facilities.

9. **Provide backup for small systems.** Small systems throughout the County need reliable water service with back-up supplies. Some small systems also experience water quality issues including the presence of a variety of contaminants including uranium, arsenic, and nitrates. The County shall continue to expand water quality testing and provide assistance to these small systems, including on-going work with Canyoncito, Chimayo, Eldorado, Edgewood, Glorieta and La Cienega MDWA.

11.1.2 KEYS TO SUSTAINABILITY

1. **Numerous techniques can be applied to ensure a sustainable water supply** including surface water, water reuse and water conservation.

2. **Discontinue reliance on groundwater as a primary water source where surface water is available**. Ground water will provide the chief means of back up to surface water supplies for the foreseeable future. Accordingly, ground water supplies are precious and use of ground water for primary supply should be curtailed, if not eliminated. This is possible only by providing basic infrastructure to carry surface water supplies to areas now served by groundwater, and by insisting that new development not rely on groundwater, but hook up to surface water supplies.

3. **Conservation is a key to a sustainable water supply.** The County's current efforts in this regard should be ramped up; the SLDC should require aggresive conservation and re-use, and should require the latest technology be used to assure the most efficient use of the precious resource. In addition, limits on water use should be expanded and given increased teeth, and should be strictly enforced. The County's steeply inclining rate structure can assist in this effort. A comprehensive approach to water conservation includes education, outreach, incentives and rebates.

4. **Prepare for droughts and climate change.** As climates change the way we respond to these issues must change also. The conjunctive management plan and other planning efforts need to address drought preparedness.

5. **Continue to monitor water quality.** There are water quality issues throughout the county. The county can continue to provide outreach by hosting water quality fairs to determine the location and methods to improve water quality.

11.2 CRITICAL FINDINGS

The County recognizes that the design and construction of buildings can have adverse impacts and effects on the local environment, public works infrastructure, citizen health and productivity. It is the County's obligation to protect the public health, safety and welfare by regulating the design and construction of buildings with the intent to conserve energy, water and other natural resources, preserve the health of our environment through optional and mandatory requirements related to design, construction, operations, recycling, and deconstruction. Implementation of the goals will only occur via consideration and compliance by the public and private sectors with sustainability, conservation of energy and green development policies at all levels of decision-making to ensure that the County's resources are available to sustain future generations through the following Goals, Policies and Strategies.

11.3 WATER

11.3.1 WATER OVERVIEW

Growth in the unincorporated County within the Santa Fe Basin can be managed. But even slow manageable growth will result in a steady increase in the demand for water. At the present time, residents not served by the County water utility are reliant almost exclusively on domestic wells. The County has developed major policy statements that require use of surface water preferentially to groundwater in the Conjunctive Management Plan (CMP), the 40 Year Water Plan, and the almost-completed amendment to the 40 Year Water Plan and the Santa Fe County water conservation plan. These, together with new methods of financing water supply systems, will help establish surface water as the primary source of water to most users in the unincorporated areas, with groundwater serving as a backup in the event of drought or an emergency. Additional water resources within the County have been identified and are delineated through studies and reports. Numerous water systems located throughout the County provide their own water rights and water service, ranging from small mobile home park systems to mutual domestic water consumer associations (MDWCAs) to the water systems operated by the Cities of Española and Santa Fe. Many residents within the County have self-supplied domestic wells as their sole water supply.

11.3.1.1 ADDITIONAL COUNTY WATER RESOURCE STUDIES WITHIN SANTA FE COUNTY:

Water resources within Santa Fe County have been studied and reported by numerous agencies including the following:

- Regional Planning Groups such as the Jemez y Sangre Regional planning group (JyS) created the Regional Water plan for their region in 2003 and performed an update in 2009 and the Estancia Basin Water Planning Group (EBWPG) recently finalized the Estancia Basin Regional Water Plan Year 2010 update.
- State agencies such as the New Mexico Environment Department (NMED), the New Mexico Office of the State Engineer (OSE),
- University of New Mexico Water Resources Program and Planning and Engineering Schools, the Espanola Basin Technical Advisory Group (EBTAG), the New Mexico Bureau of Geology and Mineral Resources Aquifer Mapping Program, and New Mexico State University
- Federal agencies such as the U.S. Bureau of Reclamation, the U.S Forest Service, the Bureau of Land Management and the Environmental Protection Agency
- Various non-profit organizations throughout the county have also contributed to studying the water resources within Santa Fe County

These studies include information on the water quality, water quantity, water conservation, water rights, aquifer recharge, riparian habitat, watershed restoration and endangered species.become available.

11.3.2 THE COUNTY WATER UTILITY

The Santa Fe County Water Utility delivers water to approximately 1,700 accounts and is anticipating expansion to serve additional customers in the County surrounding the City of Santa Fe.

The County recognizes three demand categories: (1) Residential: Includes single and multi family housing and apartments and bulk water sales (i.e., water sold to customers who haul it for domestic use, which represents about 1 percent of residential use); (2) Commercial: Includes local businesses such as gas stations and business parks, as well as bulk water services ; (3) Institutional: Includes the County Detention Facility and public safety building, the National Guard, and the department of military affairs; the Institute of American Indian Arts (IAIA).

The County has recently entered into a Bulk Water Service Agreement to serve the approximately 350 customers in the Las Campanas development. The County entered into an agreement with the City of Santa Fe to define their respective service areas. The County anticipates providing water rights and operating a separate water system in the Pojoaque Valley as part of the proposed Aamodt water rights settlement. Numerous water systems located throughout the County provide their own water rights and water service, ranging from small mobile home park systems to mutual domestic water consumer associations (MDWCAs) to the water systems operated by the Cities of Española and Santa Fe. Many residents within the County have self-supplied domestic wells as their sole water supply.

The County water system is divided into sectors. The South County Area has the majority of the present demand, about 90 percent, and has about 1,700 customers. The South County Area will continue to be the major area of highest demand for the foreseeable future. The Airport Development District (ADD) is a future growth area and currently has only one service customer, the County Public Works Facility. The ADD will require the installation of additional water distribution and storage facilities. **Map 11-1** shows the Water and Sewer Systems. **Maps 11-2** and **11-3** show well locations in relation to Water Service Areas 1 and 2, respectively.

11.3.3 THE BUCKMAN DIRECT DIVERSION

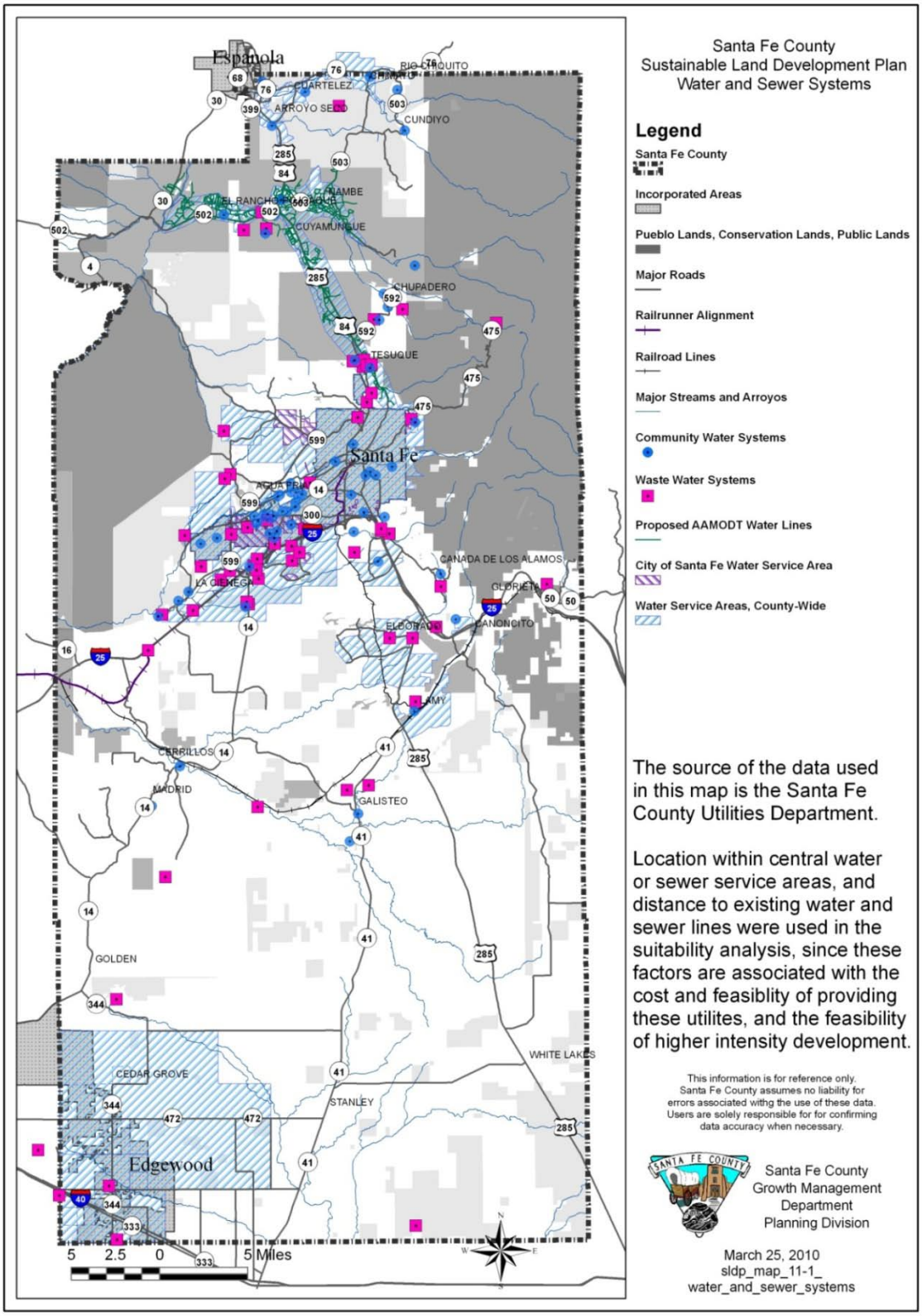
The Buckman Direct Diversion (BDD) project will constitute the major source of supply to the City and County water utilities for the foreseeable future. Located on the east side of the Rio Grande three miles south of the Otowi bridge on NM 502, the project diverts up to 8,730 afy of surface flows from the Rio Grande, provides treatment and potable water for distribution and use.

Figure 11-1: Allocation of BDD Annual Diversion Capacity

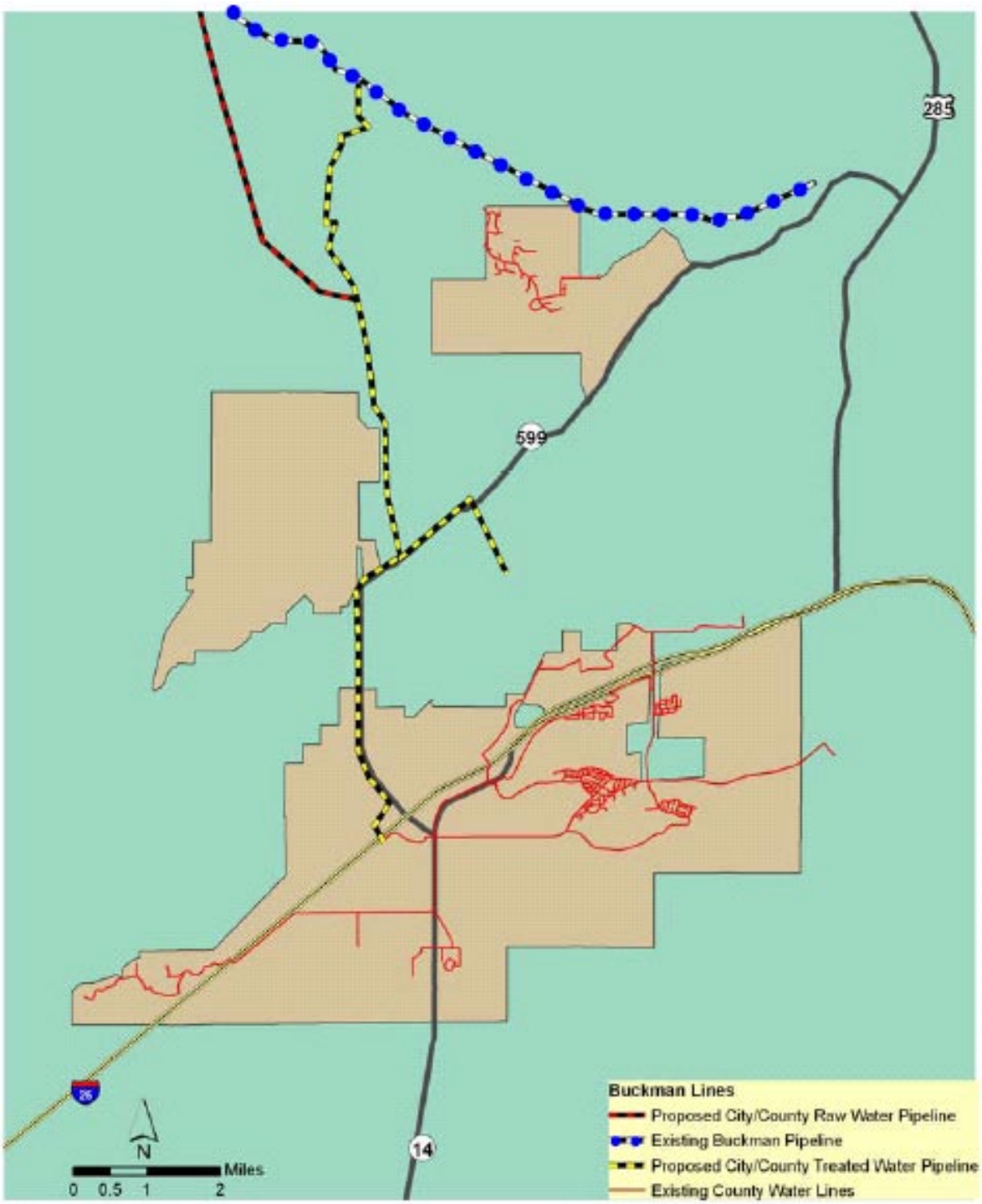
Participants	Allocation of Capacity
Santa Fe County	1,700
City of Santa Fe	5,230
Las Campanas	1,800
Total	8,730

With population growth in the unincorporated County over time, the number of domestic wells drawing from the local aquifer has increased. Under current New Mexico law, transfer of a water right is not required to obtain a domestic well permit. Water supplied from the BDD will allow the County to provide an alternative supply to existing domestic groundwater demand and substitute an imported supply for new demands that otherwise would seek domestic or other groundwater supply from the local aquifer.

Map 10: Water and Sewer Systems



Map 11: Existing and Proposed BDD Lines



11.3.4 THE BACK UP WELL SYSTEM

A necessary component of the BDD from the County perspective is a reasonable back up supply. The County will need approximately 680 afy in order to achieve a 90% redundancy for the BDD. The CMP proposes this redundancy come from ground water sources.

The County will develop ground water resources only in the context of its overall conjunctive management planning, which places the greatest and primary reliance on surface water. The permitting and development of additional ground water must be viewed in the context of an overall management strategy that has a net beneficial hydrologic effect, by causing more water to be imported into the Santa Fe Basin and by reducing overall pumping demands on local ground water in the service area of the County water utility.

To site the 5 proposed wells a map based and site specific suitability analysis was performed which ranked potential well location. The factors utilized are described in Figure 11-5. Once the BCC approves the final well locations the County will request from the State Engineer a ten-year rolling average of its groundwater use consistent with reliance on groundwater as a secondary source. Approval of a rolling average will drastically reduce the number of acre-feet per annum of water rights required for permitting in County wells within the Santa Fe Basin.

Once the Board of County Commissioners approves the final well locations the County will request approval from the State Engineer to apply a ten-year rolling average to its groundwater use consistent with reliance on groundwater as a secondary source. At present, the County has approximately 200 acre-feet of Santa Fe Basin water rights available for long-term groundwater back-up on an annual basis. Using a ten-year rolling average, 200 acre-feet per year could produce up to 2,000 acre-feet of back-up supply in any ten-year period. The Conjunctive Management Scenarios will be modeled to simulate 620 acre-feet of backup groundwater supply for three years over a ten-year period to simulate a 3 year drought with small amounts of maintenance pumping for the remaining 7 years.

11.3.5 SAN JUAN CHAMA PROJECT WATER

In 2006, Santa Fe County signed a permanent contract with the U.S. Bureau of Reclamation for 375 afy of water from the San Juan-Chama Project. Under OSE Permit No. 4842, Santa Fe County may divert up to 367.5 afy which may be increased to 468.75 afy if adequate stored water is available for release to allow for the increased diversion. In 2009, the County signed an agreement with the Bernalillo County Water Authority and the United States Bureau of Reclamation to store its San Chama Project Water at Abiquiu Reservoir.

The San Juan-Chama Project diverts water from the San Juan stream system within the State of New Mexico's apportionment of the Colorado River. Under a 1955 State Engineer permit, the Bureau of Reclamation diverts water from the Blanco, Navajo and Little Navajo streams and transmits that water through tunnels across the Continental Divide to the Upper Rio Chama stream system and into storage at Heron Reservoir. The Bureau of Reclamation has contracted for an annual release to project beneficiaries of 96,200 afy based on the project's firm yield. All of the San Juan-Chama Project water is either under contract or otherwise allocated.

The County's San Juan-Chama Project water along with its native rights allow for a more diversified portfolio of supply from the Rio Grande. Because of the Bureau of Reclamation's storage facilities at Heron Reservoir, San Juan-Chama water is relatively reliable. In addition, under Section 205 of the Energy and Water Development Appropriations Act, 2005 (118 Stat. 2949), San Juan-Chama Project water is insulated from flow demands required for the endangered Rio Grande silvery minnow. San Juan-Chama Project water is also immune from priority administration on the Rio Grande.

The 375 afy of San Juan-Chama Project water owned by the County represents only about a quarter of the supplies available for the County's portion of BDD. If possible, the County should seek to obtain additional San Juan-Chama Project water either through permanent contract or through lease.

Figure 11-2: Well Location Suitability Factors

Factor #	Suitability Factors	Well Location Suitability			Weighting
		High Suitability	Moderate Suitability	Low Suitability	
Factor 1	Areas of favorable Hydrogeology	Tesuque Formation	Pre-Cambrian Granite	Espinaso or Galisteo	1
Factor 2	Proximity to Areas of Existing Groundwater Contamination	Less Than Maximum Contaminant level	Within Margin of Error for Maximum Contaminant Level	Greater than Maximum Contaminant Level	1
Factor 3	Areas Served by Domestic Wells	None	Less than 1 dwelling per 1000 square feet	Greater than 1 dwelling per 1000 square feet	1
Factor 4	Feasibility of Pressure Zones	Pressure Zone 1 - 6	Pressure Zone 7 & 8	Pressure Zone 9 -11	1
Factor 5	Proximity to Drainages	>500 feet	100 feet to 500 feet	<100 feet	1
Factor 6	Proximity to Springs	>1 mile	1 mile to ½ mile	< ½ mile	1
Factor 7	Proximity to Faults	>300 feet	100 feet to 300 feet	<100 feet	1
Factor 8	Areas of Aquifer Decline	>1/2 mile	500 feet to 1/2 mile	<500 feet	1
Factor 9	Slope	0 - 15 %	15% - 33%	> 33%	1
Factor 10	Distribution Potential	Can Serve All Utility	Can Serve Portion of Utility	Cannot Easily Serve Utility	1
Factor 11	Distance to Community and Municipal Wells	>1/2 mile	1000 feet to ½ mile	<1000 feet	1
Factor 12	Well Specific Suitability	Well on Site with production greater than 100 gpm	Well on Site with production of less than 100 gpm	No Well on Site	1
Factor 13	Cost Suitability	Less Than 1.5 Million	Between 1.5 Million and 2.0 Million	Over 2 million	1
Factor 14	Water Right Suitability (Streams)	Less than .5 acre-foot Increased depletion	Between 0.5 to 3.0 acre-foot increased depletion	Greater than 3.0 acre-foot increased depletion	1
Factor 15	Water Right Suitability (Springs)	Less than 1.0 acre-foot Increased depletion	Between 1.0 to 3.0 acre-foot increased depletion	Greater than 3.0 acre-foot increased depletion	1

In 2005, the City of Santa Fe entered into a 50-year lease with the Jicarilla Apache Nation for 3,000 afy of San Juan-Chama Project water. That lease has now been terminated. Additional San Juan-Chama Project water may be available for lease, either from the Jicarilla Nation or from others. In considering whether it is appropriate to lease water, several considerations are relevant: (1) whether the lease price is economical in comparison to water right purchases; (2) what assurances may be built into a lease to facilitate lease renewal if desired by the County; (3) what portion of the County's total supply should be leased water in the event a lease is not renewed; and (4) whether the State Engineer will issue a permit approving use of leased water.

As a matter of good water planning, a water utility should not commit to provide permanent service to uses based upon a temporary (leased) water supply. Nonetheless, because within every water utility service area some uses require a permanent supply and others do not, it may make sense for some fraction of a water utility's total expected water demand budget to be supplied from leased water. Given the ratio of residential uses to other uses such as recreational and commercial expected over time within the Santa Fe County service area, this Plan adopts an upper limit of 10% of the total water supply available to the County that could be considered for lease. If for example at an unspecified point in the future, the total County water demand is projected to be 3,000 afy, no more than 300 afy should be derived from a leased water supply.

Figure 11-3 - Categories of Water Rights for Diversion at the BDD

BDD Partner	Native Rights (APY)	San Juan-Chama Project Contract Amount (APY)	San Juan-Chama Project Diversion Amount (APY)
Santa Fe County	1,325	375	367.5
City of Santa Fe	0	5,230	5,125.4
Las Campanas	1,800	1,200	1,200

In order to make its Rio Grande surface water supplies as reliable as possible, the County intends to manage its native and San Juan-Chama water to maximize the availability of each source of supply in combination with the other.

11.3.6 NATIVE RIO GRANDE WATER RIGHTS

If the County does not lease, store or acquire any additional San Juan-Chama Project water, then its current permitted amount of 367.5 afy will be the maximum amount of San Juan-Chama Project water available from the BDD. As a result, over time the County will need to acquire and transfer 1,332.5 afy of native rights for use from the BDD. Over the last several years, the County has acquired and transferred 610 afy to the Buckman Well Field. Now that the State Engineer has issued the BDD permit, the County will transfer the rights permitted in the Buckman Well Field to the BDD. In addition, the County currently has 718 afy permitted and being transferred directly to the BDD in the amount of 597.99 afy. Additional waters that potentially could be transferred into the County wells will instead be transferred to the BDD if the State Engineer approves multi-year averaging of pumping from the County wells.

Table 11-1: Santa Fe County Rio Grande Native Rights

Status	Quantity (AFY)
Completed Transfers to the BDD	749
Buckman Well Transfers Available for Transfer to BDD	526
Pending Applications for Permit to BDD	941
Available for Transfer to BDD	67
TOTAL	2,333

Although 1,332.5 afy is needed, not all of the amounts presently applied for will be transferred. For planning purposes, another 100 to 200 afy of water rights must be acquired and transferred to the BDD to ensure that the County may take advantage of its full capacity in the BDD. Once 1,700 afy is transferred to the BDD, the County expects to continue acquiring and transferring additional water rights in order to meet projected 40-year water supply needs.

In January of 2006, the State Engineer instituted a new policy prohibiting transfers of pre-basin (1956) and post-compact (1938) groundwater rights for use as offsets of surface depletions caused by groundwater pumping of post-basin wells within the Middle Rio Grande. This policy reflects concern by the State Engineer that water users should not become reliant on junior groundwater rights to assure that their groundwater pumping effects on surface flows are in priority.

This issue raises the question whether the County's native water right supplies are sufficiently senior in priority to assure reliability. Of the water rights identified in Table 4 below, 60 acre feet are pre-basin, post-compact groundwater rights and 1,671.24 acre feet are more senior pre-1907 surface water rights.

Figure 11-4: Breakdown of County BDD Native Water Rights by Category and Priority Date

Type of Right	Quantity (APY)	Percentage of Total	Priority
Groundwater	60	3.4%	Pre-1956, Post-1938
Surface Water Rights	1,702.08	96.6%	Pre-1907

More than ninety-six percent of the County's native Rio Grande rights have senior priority, pre-1907 surface water rights and should assure high security in the availability of supply under those rights. In evaluating water rights for acquisition in the future, the County should seek to acquire senior water rights. However such acquisition must conform to the County's long standing policy of protection of acequia rights

11.3.7 THE AAMODT SETTLEMENT

On May 3, 2006, the County along with the Pueblos of Nambe, Pojoaque, San Ildefonso and Tesuque, the City of Santa Fe and the State of New Mexico signed the Aamodt Settlement Agreement. The settlement agreement is intended to resolve all the claims of the four Pueblos to NPT basin water and protect existing uses and must be ultimately approved by Congress.

A key element of the proposed settlement is the construction of a water supply project that will deliver 4,000 acre-feet per year of water to the NPT area. The Project will, by bringing surface water into a Basin whose water resources are taxed, will greatly alleviate the water scarcity and water quality problems that have characterized the area. The proposed project will allocate 2,500 acre feet of water per year to the four Pueblos and up to 1,500 acre feet of water per year to the County. The settlement provides that the County will provide water to County non-Pueblo residents in the area.

The settlement parties have secured 3,700 afy of the 4,000 afy of water that is needed to complete the project. Nearly 1,100 afy of that amount wiil come from a contract with the Bureau of Reclamation for San Juan Chama Project water.

The County undertook a public opinion poll in the summer of 2009, and verified that citizens feel uninformed about the terms of the proposed settlement and thought the process that had culminated in the settlement agreement has not been open. In order to address these concerns, the County, although not a party to the lawsuit, has nevertheless taken on the burden, with the State of New Mexico, of providing more information about the proposed settlement and providing a forum for discussing its pros and cons. As a signatory to the agreement, the County has made a judgment that the settlement represents the best resolution possible to end almost 50 years of litigation. The significant federal contribution and the fact that surface water is being imported to preserve precious ground water resources in the area certainly serves the goals expressed in this plan. The County believes the settlement is the best way to protect the status quo in the basin and avoid many decades of future conflict over water allocation.

11.3.8 COMMUNITY WATER SYSTEMS

Community water systems are defined by the State as those that serve a minimum of 25 people six months or more per year. A number these systems exist in Santa Fe County. Information about these systems is available in water use reports of the Office of the State Engineer (OSE) and the New Mexico Environment Department (NMED) databases.

The OSE Water Use and Conservation Bureau issues water use reports every five years that show the breakdown of water use by county and demand sector. The most current report details data from 2005 (Longworth, *et al.*, 2008). For Santa Fe County, this report presents data from the SFCWU, City of Santa Fe, and 53 other water suppliers (including MDWCAs, water co-ops, mobile home parks, and private entities), and estimates water use for rural and urban self-supplied homes (Longworth et al., 2008). In the Pecos River Basin, the Glorieta Baptist Conference Center, Glorieta Estates Water Co op, and Lifeway Glorieta Conference Center served an estimated 3,400 people and withdrew 283 acre-feet of water in 2005. Santa Fe County rural self-supplied water withdrawals from the Pecos River Basin amounted to 139 acre-feet, serving a population of 296 (Longworth, *et al.*, 2008). The County utility supplied 2.4 percent of total County water withdrawals, serving 2.8 percent of the County's total population. The City of Santa Fe supplied 58 percent of total County water withdrawals, serving 54 percent of the County's total population. Self-supplied homes withdrew 18 percent of the County's water withdrawals, serving 22 percent of the County's total population. The remainder of the County was supplied by small water systems.

As a comparison to the OSE estimates, the NMED Drinking Water Bureau database lists 105 active water systems in Santa Fe County, and each system is classified according to U.S. EPA rules as either a community, non-transient non-community, or transient non-community system (NMED, 2008). Community systems serve either at least 15 connections year-round or

regularly serve at least 25 year-round residents; non-transient non-community systems serve at least 25 of the same non-residential individuals during 6 months of the year; and transient non-community systems regularly serve at least 25 non-residential individuals for 60 or more days per year (NMED, 2008). The following lists each of the Santa Fe County water systems included in the Drinking Water Bureau database and the population served by each system. Water quality data are available in the database, but the NMED Drinking Water Bureau does not list any estimates of water demand (NMED, 2008). The NMED drinking water database lists more systems than the OSE water rights database (WATERS).

Domestic wells in Santa Fe County are listed in the OSE WATERS database. The domestic well statute (NMSA 72-12-1.1) has recently been challenged in New Mexico District Court (Bounds and the San Lorenzo Community Ditch Assoc. v. State of NM and NM State Engineer) and the case is currently under appeal. The final ruling may have implications for future domestic wells in Santa Fe County.

11.3.9 CONJUNCTIVE MANAGEMENT PLAN FOR THE SANTA FE BASIN

The County developed a plan to achieve a sustainable water supply into the future. As expressed in the Conjunctive Management Plan, surface water will be the primary water source for the County Water Service Area. Conservation and rainwater capture and water reuse will be part of the County's drought management strategy. Implementation of the Conjunctive Management Plan includes the following:

1. Establishing surface water as the primary source and groundwater for supply redundancy in the Santa Fe Basin;
2. Limiting aquifer depletion by reducing groundwater reuse;
3. Promoting aquifer recharge;
4. Water conservation and reuse; and
5. Creating regulatory framework for implementation of Conjunctive Management Plan

11.3.10 THE 40-YEAR WATER DEVELOPMENT PLAN

The primary purpose of the 40-Year Water Development Plan is to assess future water needs in relationship to the quantity of water rights under ownership by Santa Fe County. Santa Fe County has either purchased or contracted to purchase water rights for use in the Santa Fe County Water Utility and the future Pojoaque Valley Regional Water System. Santa Fe County's portfolio of water rights includes San Juan Chama Project Water, declared Rio Grande Surface Water, adjudicated and permitted Rio Grande Basin Groundwater, adjudicated La Cienega and Santa Cruz Surface Water and several 72-12-1 or domestic wells.

The 40-Year Water Plan is currently in the process of being amended to account for new development since the plan was first adopted in 2002. The County has retained Daniel B. Stephens & Associates, Inc. (DBS&A) to prepare the updated 40-year plan and a water conservation plan. The amended plan will summarize the current water system, water supply, water rights, and historical and projected water demand, and will provide recommendations for ensuring an adequate future water supply, including a detailed water conservation plan. In addition to providing an amended plan to ensure a sustainable future water supply, the revised plan will fulfill Condition 11 of the Buckman Direct Diversion (BDD) permit, which requires Santa Fe County to submit a formal water conservation plan (NM OSE, 2006) and addresses several other regulatory requirements regarding water rights and water conservation (which are the same for both surface water and groundwater [NMSA 72 5 28(C)]).

As noted, the amendment to the 40-year water plan will include a conservation plan. The conservation plan will fulfill a statutory requirement (NMSA 1978 Section 72-14-3.2) that calls for conservation planning as a prerequisite for applying for funding from key state funding agencies. Specifically, any public supply system with diversions of at least 500 acre-feet annually for domestic, commercial, industrial, or government customers for other than agricultural purposes may develop, adopt, and submit to the OSE a comprehensive water conservation plan, including a drought management plan. After December 31, 2005, neither the Water Trust Board nor the New Mexico Finance Authority accept applications from a covered entity for financial assistance in the construction of any water diversion, storage, conveyance, water treatment, or wastewater treatment facility unless the covered entity includes a copy of its water conservation plan.

11.3.10.1 THE WATER ALLOCATION POLICY

The primary purpose of the Line Extension and Water Service Policy, enacted by Resolution No. 2006-57, was to provide ground rules for new water service from the County's water utility. The Line Extension Policy established the principle that new water deliveries require an executed Water Delivery Agreement and holders of such agreements may be required to deposit water rights (or the cash equivalent of the value of the water rights) prior to any deliveries from the utility, and pay a significant initial service fee. The Line Extension Policy also established the principle that persons desiring new water deliveries will be required to pay for the cost of infrastructure required to supply water, a concept that is proposed to be expanded generally in this Plan. The policy also established a biannual procedure by which requests for new water deliveries may be processed and evaluated, and established criteria for construction of line extensions. The policy also established a maximum amount a residential property may expect to receive annually (including guest homes and accessory structures) of 0.25 afy.

11.3.11 CONSERVATION AND SUSTAINABILITY

11.3.11.1 EXISTING COUNTY STRATEGIES

Santa Fe County has realized for many years that good water planning requires timely decisions about long-term water supplies, and requires a critical assessment of current water supplies. The County's present hydrologic zoning (zoning made dependent on local sources of ground water) recognized the deficiencies and represented an early attempt to apply regulatory tools to preserve precious water supplies. The water conservation plan provided information and guidance on watershed issues, identified and prioritized projects to address those issues and recommending means for implementation. Issues addressed include climate change; prolonged drought; agriculture, acequias and senior water right holders; regional planning issues; previous and current County planning efforts; land development submittal process and implementation; phased implementation of the Water Conservation Program and funding strategies. Current conservation actions include:

- Ordinances enacted in 2002 and amended in 2006 address water conservation for all residential and commercial uses. The ordinances now requires that a water harvesting plan accompany applications for development and that roof catchments be provided on all new construction to capture a minimum of 85% of the roof area drainage for landscape irrigation. All new commercial and dwelling units over 2,500 square feet of heated area must include a centralized cistern; smaller commercial and dwelling units may use rain barrels. The ordinances established a domestic well metering program to analyze the effectiveness of water conservation techniques and to ensure that the designated water budget for each property is not exceeded.
- Ordinance No. 2003-6 requires hot water circulation pumps on all new construction.
- The County utility implemented a tiered rate structure which charges substantially higher rates for those using more water on the County water utility.
- The County's Water Allocation Policy placed a limit of 0.25 acre feet per year for each residential structure using water from the County utility.
- The LDC requires that water restrictive covenants that run with the land restrict subdivisions or land divisions that seek a density adjustment based on water conservation.
- The LDC now requires sub-metering of landscape water use.
- Water use restrictions in new subdivisions are tied to plat requirements.
- The County now analyzes water budgets for new developments and works with developers to provide the best available conservation technology in each new development.
- Implementing public outreach and education activities.

- The County utilizes indoor water conservation measures such as requiring repairs to leaks on private water lines within a specified timeline and compliance with water conservation plumbing standards such as flow rate limits on faucets and showerheads and the installation of rain sensors on outdoor irrigation systems.
- The County restricts construction of new swimming pools dependent upon water availability and supplemental use standards, and requires design components such as the integration of water capturing and use of automatic pool covers.

11.3.11.2 RAINWATER CAPTURE, TREATMENT AND USE.

Conservation of water in new and existing development is required. All development within non-recharging basins will provide full rainwater capture without density bonuses. Existing homes in non-recharging basins will be required to add rainwater capture within five (5) years of adoption of the SLDP. Development currently using groundwater should transition to surface water use to the maximum extent feasible. All new commercial or dwellings units of 2,500 sq. ft. of heated area or greater will include a cistern that is buried, partially buried or within an insulated structure and is connected to a pump and a drip irrigation system to serve all landscaped areas. Cisterns should be sized to hold 1.15 gallons per square foot of heated area but this figure may be adjusted based on proposed landscaping. The County will periodically review and update demand projections to accurately anticipate future needs.

11.3.11.3 GRAYWATER REUSE

Require use of graywater for plant watering and non-potable water uses. Graywater systems allow non-potable water, such as wastewater from sinks, the washing machine or the shower, to be reused for other household purposes. Approximately 60% of all water used in the average home can be reused as graywater, which is safe to use for irrigation, toilets, and exterior washing.

11.3.11.4 COOPERATIVE PARTNERSHIPS

The County participates in a number of cooperative partnerships with entities to address water issues in individual communities. The County has entered into agreements to provide supplemental or backup water supply to small water suppliers. These kinds of agreements exist with the Agua Fria Mutual Domestic Water Association, the La Cienega Mutual Domestic Water Association, the Glorieta Mutual Domestic Water Association, the Cuatro Villas Mutual Domestic Water Association, the Chimayo Mutual Domestic Water Association and the Las Campanas Homeowners Water Cooperative. Similar agreements should be sought with the Eldorado Area Water and Sanitation District and the Canoncito Mutual Domestic Water Association, the Sunlit Hills Water Cooperative, the Canoncito MDWA, Commonweal Conservancy, and the Glorieta Lifeway Conference Center. In the case of the Chimayo Mutual Domestic Water Association and the Cuatro Villas MDWA, the County has become part-owner to facilitate a regional solution to serious water issues encountered in those communities. These partnerships are becoming the model for assisting small systems.

Mutual Domestic Water Consumers Associations (MDWCA) or Water Cooperatives need systems with reliability and redundancy. In order to accomplish this, the County can provide backup water and direct financial assistance as a partner to address the specific water system needs.

The County currently is providing water to the Property Control Division of the State of New Mexico for the State Penitentiary Complex and the New Mexico National Guard.

11.3.11.5 WATER SERVICE AREAS (WSA)

To facilitate implementation of this plan, the County's existing Water Service Area (WSA) will be expanded so that WSA 1 WSA 2 are coincidental with SDA 1 and SDA 2 respectively. Extensive work must be done to prioritize

development of infrastructure in each WSA based on funding availability and development trends. The SDA map is shown as Map 2-3.

11.3.12 WATER QUALITY

Comprehensive water quality management includes water quality testing, monitoring and pollution regulation. Threats to water quality include naturally-occurring contaminants, point source pollution, such as failed or improperly located septic tanks, and non-point source pollution, such as stormwater.

11.3.12.1 SURFACE WATER QUALITY

General quality of surface waters in Santa Fe County is between very good and excellent. The concentration of TDS in surface waters is typically less than 250 mg/L, substantially below the non-enforceable EPA National Secondary Drinking Water Standard of 500 mg/L and well below the 1,000- to 3,000 mg/L range that the New Mexico Interstate Stream Commission (ISC) uses to classify "slightly saline" waters (Duke, 2001).

Most surface waters in the County are classified as moderately hard to hard because of their relatively high concentrations of calcium and magnesium. Nutrients dissolved in surface waters occur in the County primarily as a result of agricultural land uses, although urbanization and wastewater discharges also contribute to nutrient concentrations. The main stem of the Rio Grande receives dissolved nutrients from agricultural sources as far north as the San Luis Valley in southern Colorado and the Rio Chama above El Vado Reservoir. Noticeable nutrient source areas include irrigated areas near Española, one of the more urbanized locales near Santa Fe County, and the lower Santa Fe River downstream of the City of Santa Fe. Surface water in the Pojoaque Valley also occasionally contains elevated levels of nutrients, including ammonia.

Impaired surface water bodies may be subject to a total maximum daily load (TMDL), which is a watershed or basin-wide budget for pollutant influx to a watercourse. A TMDL can also be established for a portion or a segment of a watershed and are set for one or more constituents that have historically exceeded water quality standards. The NMWQCC is responsible for setting TMDLs in New Mexico.

The Santa Fe River is the only watercourse in the County for which the NMWQCC has set TMDL-based limits, specifically, for the reach of the river lying between the Santa Fe wastewater treatment plant (WWTP) and Cochiti Reservoir. This reach does not have any impact on the City of Santa Fe water supplies that are provided to Santa Fe County. Nevertheless, loading limits have been established for chlorine and stream bottom deposits in this reach. Both DO and pH have been assessed on this reach, but have not been assigned TMDL-based limits. Also, although nitrate levels downstream of the WWTP were observed to be as high as 5.0 mg/L during the National Water Quality Assessment Program, no TMDL-based limits have been established for nitrate.

The effectiveness of the proposed BDD City/County water treatment plant in removing radiological and other contaminants of concern associated with discharges from LANL was assessed in a 2008 study (Howe, 2008). The assessment report stresses the importance of the treatment plant continuously meeting all regulations. Standards are given for those contaminants addressed in the assessment report, including standards set by the 2000 Radionuclides Rule (U.S. EPA, 2000) for alpha activity, beta activity, radium, and uranium and standards for perchlorate, chromium, and polychlorinated biphenyls (PCBs) (Howe, 2008).

The treatment plant will use a coagulation/filtration treatment process to remove particles from water; this is the best available treatment technology for uranium removal and is expected to also be the best available treatment technology for plutonium (Howe, 2008). The capability for removing cesium, radium, and strontium will depend upon whether these contaminants are sorbed to sediments. Rio Grande water quality data indicate that the few exceedances of target maximum concentrations for these contaminants were associated with sediments (Howe, 2008). While the coagulation/filtration treatment technology is expected to remove these contaminants, an ion exchange treatment process could be added to the treatment plant in the future if it becomes necessary (Howe, 2008).

The New Mexico Environment Department DOE [Department of Energy] Oversight Bureau performed a LANL legacy contaminant study at the BDD site (Englert et al., 2008). The purpose of the study was to identify the downstream extent of an abandoned channel near Cañada Ancha that had been shown by a previous study to contain the highest levels of legacy contaminants, and to determine whether planned construction activities would intercept these sediments (or if their disturbance could be avoided). Potential LANL impacts were evaluated by comparing individual radiochemical measurements to LANL-derived upper limits for background concentrations (Englert et al., 2008). All radionuclide detections were below their respective upper limits for background except the following:

- One plutonium isotope (Pu-239/240) was detected in two slough samples at levels up to 8 times greater than its upper limit for background and 30 to 50 times greater than the means and medians of the original LANL background data set.
- Cesium-137 was detected in slough samples at levels of up to 3 times greater than its upper limit for background and 11 to 14 times greater than the means and medians of the original LANL background data set.

These samples were collected from locations over 4 feet deep, below sediments that did not exceed background levels. The study concluded that the BDD construction area is north of the areas with radionuclide detections above background and that the legacy sediments are unlikely to be disturbed by the construction (Englert et al., 2008). The City of Santa Fe will frequently monitor and test untreated and treated water from the BDD to ensure that the treated water meets all drinking water standards. Although it is anticipated that runoff containing small amounts of LANL-originated contaminants may occasionally flow from LANL property to the Rio Grande following runoff events (BDDP, 2009), the BDD Board, NMED, and LANL are working together to put an early warning system in place that will automatically stop diversions containing these runoff flows (BDDP, 2009).

11.3.12.2 GROUND WATER QUALITY

Except for several isolated locations where either natural or human processes have led to elevated levels of specific dissolved constituents, groundwater in Santa Fe County is suitable for domestic consumption. Nitrate is observed at relatively high concentrations in several locations in the County, including west of the City of Santa Fe, northeast of El Dorado, and in the northern portion of the County near Santa Cruz (DBS&A and Lewis, 2003). Though this constituent occurs naturally within regional groundwater, nitrate background levels are generally very low in comparison to the drinking water standard of 10 mg/L as nitrogen. Elevated nitrate levels are usually attributed to sources such as fertilizer application, septic tank discharge, or surface water bodies that receive some form of effluent.

As part of an assessment of general groundwater quality in Santa Fe County, the County's contractor on the project, DB Stevens & Associates (1994) developed mathematical relationships between measured TDS levels and corresponding measures of electrical conductivity (EC). In most cases, the resulting equations suggest that multiplying EC by a factor of approximately 0.6 to 0.7 will produce a viable estimate of TDS. Using this general rule, measurements of EC can be used to describe the spatial distribution of dissolved solids levels within Santa Fe County.

Most EC levels in southern Santa Fe County indicate that TDS levels in this area exceed the New Mexico groundwater standard of 1,000 mg/L. Near the town of Galisteo, measured EC levels range from about 650 to 2,200 µmhos/cm. In this same area, near the west boundary of the County, EC measurements generally range from 1,000 to 5,000 µmhos/cm.

Duke (2001) catalogued known groundwater contamination sites, showing observed contaminants ranging from gasoline components to chlorinated solvents, pesticides, and radionuclides. Sources associated with the contaminants include leaking underground storage tanks, dry cleaning facilities, sewage treatment plants, and railroad and mining operations. Contamination has temporarily affected the use of some City of Santa Fe supply

wells and some domestic wells. Additionally, the presence of contaminated groundwater limits the suitability of some locations for future development. The majority of these known contamination sites are located near urbanized areas, such as the City of Santa Fe, the Pueblo of Pojoaque, and the City of Española, just north of the County.

Two inorganic constituents that occur naturally in groundwater will likely be of concern to the County because of changes to drinking water standards that will soon be enforced by the EPA. One of these constituents is arsenic while the second constituent is uranium.

Most groundwater within the County may not meet the 10 microgram/L (0.010 mg/L) and some community systems may have to provide treatment for removing arsenic. At present, the City of Santa Fe is blending surface water and groundwater to meet the revised standard.

11.3.12.3 SUMMARY OF WATER QUALITY BY GEOGRAPHICAL AREA

A summary of the overall water quality in Santa Fe County, beginning in the northern part of the County and moving generally southward, was provided in the Jemez y Sangre Regional Water Plan (DBS&A and Lewis, 2003), as follows:

- In far northern Santa Fe County, groundwater quality is generally very good except in the more congested areas, where septic tanks and drain fields have locally raised nitrate levels. Additionally, naturally occurring arsenic exceeds the revised MCL in this area.
- In general the quality of the groundwater near Pojoaque and Nambe is good, although local water quality problems include naturally occurring high levels of fluoride, uranium, and arsenic. Also, areas with higher population density (such as Pojoaque) have higher levels of nitrate associated with the use of septic tanks.
- Groundwater quality near Tesuque is also of high quality in most of the area, with only a few localized areas having elevated nitrate levels due to agricultural fertilizers or concentrated septic leach fields. Except in local areas where nitrate levels are high, the calcium-bicarbonate groundwater meets drinking water standards and contains relatively low levels of total dissolved solids. The revised arsenic standard is exceeded in some parts of this area.
- Surface water quality to the southwest of Tesuque exhibits localized impacts associated with cattle use. Additionally, some wells in the Buckman well field experience elevated levels of natural radionuclides of concern, and the revised arsenic standard is exceeded in some locations.
- The water quality in the central part of the county is generally very good, but groundwater in the area is hard due to elevated concentrations of calcium and magnesium. The TDS concentration is generally less than 350 mg/L. Nitrate from an unknown source has been detected in many of the City wells at concentrations slightly above the 10-mg/L standard and the revised arsenic standard is exceeded in some locations. Downstream of the City's wastewater treatment plant, nitrate concentrations in the groundwater range from 4 to 6 mg/L.
- Water quality in the area just south of Santa Fe is generally very good, although the groundwater is hard due to concentrations of naturally occurring calcium and magnesium. Nonetheless, given the few potential sources for contamination in this area, very few groundwater contamination problems exist. Nitrate occurs in wells along the mountain front in concentrations commonly ranging from 3 to 5 mg/L (as nitrogen).
- Water quality in the southern part of the County is naturally quite variable. TDS can reach as high as 3,500 mg/L, much higher than the New Mexico drinking water standard of 1,000 mg/L. The cyanide heap leach operation in the Ortiz Mountains resulted in cyanide and metals contamination in groundwater and surface water near the mine. The pesticide Atrazine has been detected in wells in Lamy, the Girls Ranch, and Glorieta. A leaking underground storage tank has resulted in gasoline contamination of groundwater near Galisteo.

11.4 WASTEWATER

There are several wastewater service providers currently operating in Santa Fe County: many are privately owned community systems.

11.4.1.1 WASTEWATER SERVICE

Wastewater service areas in the County will be classified by their proximity to established urban centers and Tribal communities such as the Cities of Santa Fe and Espanola and the Town of Edgewood and Pojoaque Pueblo. The second category will be represented by community systems governed by mutual domestic associations, homeowner's associations and other private community entities. The third category is represented by on-site treatment systems, based primarily on septic tank technology.

Examples of the first category include conveyance of wastewater from locations such as Turquoise Trail, Aldea de Santa Fe, and the Airport Development District to the City of Santa Fe. The City and the County of Santa Fe are in the process of setting up a template agreement that will establish the legal grounds for conveyance of wastewater to City facilities.

The second category of users will be served by regional facilities whether County or privately owned. Examples of these facilities include Oshara, La Pradera, Rancho Viejo. Valle Vista currently falls into this category but will be better served by including in the first category. There is a potential that some privately owned regional facilities could become part of the County regional facility.

11.5 STORMWATER MANAGEMENT

Santa Fe County is subject to high intensity, short-duration convective thunderstorms which often result in flash flooding. Other than hurricanes, flash floods cause more damage and loss of life than any other flood related event. In addition to flooding, stormwater can also increase erosion, sediment transport and pollution of surface and groundwater sources.

Impervious surfaces in the built environment, such as buildings, roads, parking lots and compacted soil block rain and stormwater from naturally percolating into the soil and becoming surface runoff. As stormwater runoff travels over the surface, it picks up pollutants from roads, lawns, roofs and agricultural fields, carrying them into bodies of water, such as local streams. Because of the dangers of pollution and flooding, effective stormwater management is key to sustainability. Sustainable stormwater management would involve programs that encourage practices other than traditional stormwater collection and discharge.

11.5.1.1 MS-4 COMPLIANCE

MS-4 stands for municipal separate storm sewer systems and is an arrangement of conveyances. Technically, an MS-4 is a conveyance that discharges into the waters of the U.S. Because these systems can easily send harmful pollutants into bodies of water, operators of MS-4 systems must comply with federal regulations.

11.5.1.2 STORMWATER MANAGEMENT PROGRAM (SWMP)

The goal of Santa Fe County's Stormwater Management Program is to promote prevention of flood-related damage through identification of problem areas, encouraging avoidance of flood prone areas through land use and other planning efforts, and by reviewing proposed land development projects for compliance with County

floodplain regulations. Too often, drainage becomes an issue after an event because no comprehensive approach was in place. With a No Adverse Impact (NAI) approach, stormwater related damage and the associated public burden can be reduced. A Stormwater Master Plan, with an integrated implementation and improvements plan, would help address some of the County's most challenging drainage issues.

Stormwater management practices should be based on two complementary goals: minimizing the potential liabilities of flooding, while providing public recreation facilities and amenities of greenways and other features that assist in managing stormwater.

11.5.1.3 STORMWATER MASTER PLAN

A Stormwater Master Plan should be created to establish Flood Districts based on watershed boundaries. Eight major watersheds have been identified in the County (**see Map 4-1,** in above chapter). The County should prioritize the details of each watershed based on need and funding availability. The Stormwater Plan should also identify, describe and map existing and future conditions. These studies will supplement ongoing compliance with EPA NPDES mandates, including quantification of flows through hydrograph methodology, hydraulic analyses of major arroyos and tributaries and requiring flood insurance restudies to reduce floodplain in areas where facilities are constructed. An added benefit of the Plan would be that when a development is proposed or permit requested, pre-existing knowledge of the stormwater issues for the area would exist, reducing the need for detailed engineering studies and further reducing development costs.

The overall Plan approach should include using the CIP to identify regionalization and standardization of stormwater facilities. The Plan should also identify the best available practices in mitigating the impacts of each development with the objective of minimizing the potential negative effects of public safety and welfare. Agricultural practices that reduce the effects of sediment transport soil loss and erosion should also be identified.

11.5.1.4 PROJECT PRIORITIZATION

Prioritization of projects should be based on the criteria stated below:

- Public Impact. Evaluation of the population most likely to be effected by the project.
- Land Value. Review of impact upon land values for developed and undeveloped land most likely affected by each project.
- Public Perception. Evaluation of the public's desire to see their money spent on "worthwhile" projects and the public's perception of need.
- Emergency Access. Evaluation of the impact upon access of emergency vehicles plus an assessment of each projects contribution to needed all-weather transportation system and accessibility for all users.
- Cost Avoidance. Evaluation of whether project will reduce future costs, including potential damage, construction of oversized facilities, and the ability to construct; should also address other costs associated with lost opportunity and the risk associated with inadequate or undersized facilities.
- Funding. Evaluation of the potential for project funding from grants, private sources, federal agencies, as well as in-kind contributions such as land donations.
- Interrelationships. Evaluation of whether project can function independently or is needed to complete or increase the effectiveness of the existing regional and local drainage system.
- Timelines. Evaluation of all aspects of scheduling and implementation, including availability of right-of-way, permit review, to complete a project in a reasonable time frame.
- Environmental. Evaluation of environmental benefits derived from improving or mitigating the threat to public health resulting from stagnant water, erosion, wastewaer overflows and contamination of the

domestic water supply. It should also include information on the project's wildlife habitat enhancement, recreational opportunities and water quality.

- Recurring Costs. Evaluation of long term costs related to O& M, repair, capital replacement and liability.

11.5.1.5 LOW IMPACT DEVELOPMENT

Implementing low impact development solutions will contribute significantly to sustainable stormwater management in the County. Low Impact Development (LID) is a stormwater management approach based on the integration of complementary land planning and engineering design tools. The approach concentrates on managing rainfall at the source by using decentralized, small scale controls. Low Impact Development techniques include bioretention, green roofs, permeable pavers, rain barrels and cisterns, soil amendments and tree box filters. Many of these techniques are not only cost-effective and environmentally sound, but can also have secondary aesthetic benefits to a community. While an open, un-landscaped retention pond can be an unattractive nuisance, a stormwater park centered around a landscaped pond with a walking trail becomes a public gathering place. Using public-private partnerships and the development review process to encourage the creation of multi-purpose stormwater infrastructure and public amenities is an opportunity for the County to maximize the benefits of necessary improvements.

Open spaces and vegetated areas can naturally improve environmental quality by managing storm water, reducing flood risk and improving water and air quality. Conserved environments and natural spaces increase property value for neighborhoods and reduce the need for expensive built infrastructure management systems. A conserved site provides water filtration, runoff management, and reduces pollution naturally, without the need for expensive facilities or built systems.

11.6 GOALS, POLICIES AND STRATEGIES

Goal 34: Land use and development should be consistent with water management, environmental and hydrological capabilities and constraints.

Policy 34.1: New development should be appropriately located in relation to water resources and provide a sustainable water supply.

Policy 34.2: Require all land use and development policies to be consistent with the County's arid desert climate in relation to water, including water use, conservation, adequacy and availability, and impacts to water resources.

Policy 34.3: Maximize use of surface water resources and minimize use of groundwater resources by linking future development to surface water availability when available. To the extent that development seeks densities greater than that permitted by base zoning densities, mandate hookup to County and other public and private water utilities and companies when water lines are within 1 mile of buildings and structures in order to make surface water available to groundwater users to protect groundwater supplies.

Policy 34.4: Permit cluster and higher densities only where there are community or public water systems and monitoring to limit water use to .25 acre-feet per dwelling unit or less.

Policy 34.5: Establish a process for the creation and submittal of a water service availability report (WSAR) and require County decision-makers to analyze the availability of adequate potable water for a proposed project. Require the water availability report to contain the following information on water availability: system capacity; capacity of a well field, stream, spring or other source of water supply; historical average flow of potable water; historical peak flow of potable water; number of hook-ups; estimated potable water demand per hook-up; and number of hook-ups for which contractual commitments have been made. For WARs including the use of groundwater supplies for water availability require the inclusion of additional review factors such as more detailed analysis of the basin or basins involved, the outcome of any adjudication of the resource, State Engineer reports on the source and an analysis of the sufficiency of the groundwater source to meet the projected water demand from the proposed project.

Goal 35: New development will incorporate water conservation and reuse.

Policy 35.1: Require new development to incorporate water conservation strategies that lower water use.

Policy 35.2: Establish water reclamation standards and require all new development to use graywater and rain catchment systems.

Strategy 35.2.1: Incentivize new development to include gray water and rain catchment systems in their plans.

Policy 35.3: Require resorts, golf courses and active recreation areas to use native plants, to provide habitat for birds and other wildlife habitat.

Goal 36: Water conservation will be required to maintain and improve reduced County-wide per capita water consumption.

Policy 36.1: Improve water well data collection Countywide.

Policy 36.2: Improve enforcement of existing water restriction covenants.

Policy 36.3: Develop an educational and technical replacement program for water efficient technology in coordination with the County Water Conservation Program.

Strategy 36.3.1: ***Implement the water conservation activities outlined in the Water Conservation Plan***

Policy 36.4: Enhance xeriscaping programs and limited water use systems for landscape irrigation including public facilities.

Strategy 36.4.1: ***Assess the potential to implement a toilet and showerhead replacement rebate program –to allow County Utility customers who replace high-flow toilets and showerheads with low-flow models to receive rebates on their water bill.***

Strategy 36.4.2: ***Conduct commercial and government sector water use audits. Analyze use and identify most appropriate conservation measures for each customer.***

Goal 37: Protect groundwater as the County's secondary source of water to serve as a back-up supply.

Policy 37.1: Maintain an adequate water rights portfolio to support diversions from the BDD.

Policy 37.2: Complete acquisition and transfer of native rights.

Policy 37.3: Minimize and strictly limit use of local groundwater resources to preserve aquifer resources where surface water is available.

Policy 37.4: Evaluate potential to establish Critical Management Areas to protect groundwater resources and limit groundwater production in areas where senior water rights and stream and spring flow should be protected.

Policy 37.5: New development whose water supply comes from domestic wells should be approved only when senior water rights are not impaired, spring flows and stream flows are not impacted, environment and water quality are suitable, recharge in the sub-basin is occurring and there is no publicly owned community water system within one mile of the property boundary provided that adequate capacity exists in the system and where services are available.

Policy 37.6: Encourage a coordinated effort to remove non-native species of vegetation that contribute to the depletion of groundwater resources.

Policy 37.7: Coordinate with community water systems as needed to ensure adequate potable water supply.

Policy 37.8: Provide assistance to community water systems in need.

Goal 38: Provide for a sustainable long-term water supply capable of meeting current and future needs.

Policy 38.1: Encourage and support coordination and cooperation among all regional water stakeholders.

Policy 38.2: Coordinate with regional stakeholders, governments and service providers, including acequia associations, the City of Santa Fe, and the Pueblos of Nambe, Pojoaque, San Ildefonso and Tesuque to ensure a safe, reliable and sustainable water supply.

Policy 38.3: Coordinate with the Cities of Santa Fe, Edgewood and Española, adjoining counties, the state and mutual domestic water associations to achieve a coordinated sustainability effort.

Strategy 38.3.1: ***Coordinate with other Counties, the State, and the NMOSE to designate both the Santa Fe Basin and the Estancia Basin as Special Groundwater Management***

Areas to focus attention, resources, and effort toward a more sustainable water supply posture for the future.

Strategy 38.3.2: ***Coordinate with NMOSE to suspend the granting of new appropriations or declarations of water rights until a more comprehensive understanding of the hydrogeology is achieved and a definitive inventory of declared or recognized water rights is completed.***

Strategy 38.3.3: ***Coordinate with the Estancia Basin Water Planning Committee to establish basin-wide water resources coordinating and planning policies and strategies.***

Strategy 38.3.4: ***Establish a working group to explore the need for legislation for a regional water authority.***

Policy 38.4: Coordinate with the City of Santa Fe and public and private water utilities to develop water management plans (supply and treatment), monitor water usage (database) and create education and awareness outreach programs.

Policy 38.5: Coordinate with the communities and mutual domestics to acquire transferable water rights, inventory transferable water rights and coordinate water conservation initiatives.

Policy 38.6: Require coordination between new development and providers to maximize sustainability and efficiency of water supplies.

Policy 38.7: Develop storage and alternative water supplies.

Policy 38.8: Continue to identify, acquire and transfer additional sources of supply consistent with the 40-year water plan.

Policy 38.9: Continue to acquire senior water rights over lower priority rights, while protecting acequia rights in the process.

Policy 38.10: Continue acquisition of San Juan-Chama Project water rights.

Strategy 38.10.1: ***Secure a storage contract in the Abiquiu Reservoir to hold San Juan-Chama allocation for use when needed.***

Strategy 38.10.2: ***Establish a working group to explore aquifer storage and recovery (ASR) in the future as a method to store water underground when surplus supplies exist; then recover at a later date or let it recharge the aquifer.***

Strategy 38.10.3: ***Establish a working group to explore opportunities for a desalination program to extend aquifer life expectancies.***

Policy 38.11: Promote connection to public and/or private community water systems when available.

Strategy 38.11.1: ***Develop an economic assistance program for residents who need financial assistance to hook-up to a local sewer or water line.***

Strategy 38.11.2: ***Complete a domestic well feasibility study to determine expansion of utility lines to areas currently served by domestic wells.***

Strategy 38.11.3: ***Coordinate with the City of Santa Fe to resolve sewer access issues for property owners who have provided easement agreements to the City.***

Policy 38.12: Ensure adequate provision of water, wastewater and stormwater infrastructure and its equitable financing.

Strategy 38.12.1: ***Establish local financing mechanisms, such as special assessment or improvement districts, for communities to create water and/or sanitation districts.***

Strategy 38.12.2: ***Conduct a rate study to determine how to pay for additional needed water infrastructure.***

Strategy 38.12.3: ***Organize the County water system as a public utility to gain access to funding for capital needs.***

Strategy 38.12.4: ***Develop a capital improvement plan for the provision and extension of lines, storage and associated equipment necessary to make surface water resources more readily available.***

Policy 38.13: Provide no more than 10% of the total water supply available from leased sources.

Policy 38.14: Enhance County data related to existing water resources.

Strategy 38.14.1: ***Develop accurate population estimates for County communities in conjunction with the 40-year water plan updates.***

Strategy 38.14.2: ***Develop and implement studies to document what constitutes sustainable use of groundwater in the County, as well as to explore alternative public and private surface water supply availability; best industry practices for fiscal and engineering implementation of modern techniques of importation, use of deep saline waters, aquifer storage and recharge; and rainwater capture, treatment and use.***

Policy 38.15: Project the potential impacts to the County's water supply from global warming.

Strategy 38.15.1: ***Study past drought cycles to determine magnitude of cyclical drought problem.***

Strategy 38.15.2: ***Develop plans to address emergency drought preparedness and emergency coverage.***

Policy 38.16: Support the recommendations of the 40-Year Water Plan and the Conjunctive Management Plan.

Strategy 38.16.1: ***Support the process to include public participation for future infrastructure projects.***

Policy 38.17: Support outreach and education programs to inform residents and communities about sustainable water use, wastewater, stormwater and watershed management.

Strategy 38.17.1: ***Develop comprehensive watershed management plans with communities that address sustainable water use, wastewater and stormwater management. At a minimum, plans should include accurate population estimates, potential for recharge of effluent, potential water sources, wastewater treatment alternatives, funding sources and alternatives, infrastructure needs and potential for connection to the County water/wastewater system.***

Strategy 38.17.2: ***Develop and distribute informational water/wastewater materials to local schools, to County satellite offices, to developers, and to service providers. Include information about: water rights; water conservation; wastewater recycling and treatment options; the need to obtain permits and inspection of all improvements impacting drainage; aquifer recharge and topsoil enhancement;***

arroyo management and erosion control; and stormwater management and catchment systems.

Strategy 38.17.3: ***Coordinate with local businesses to implement an educational water conservation program for tourists and local residents.***

Policy 38.18: Protect water supplies and water rights for community-based and traditional agriculture.

Policy 38.19: Support the mutual domestic water associations in their efforts towards establishing historical senior priority irrigation and surface water rights.

Policy 38.20: Protect against contamination and degradation of water resources.

Strategy 38.20.1: ***Establish a comprehensive wastewater management program that includes septic tank inspection; a survey of existing sewer systems to ascertain current conditions; and the development of remedial programs as needed to bring systems to current standards and to ensure future compliance.***

Policy 38.21: Coordinate with the Soil and Water Conservation Districts, the State Engineer's Office, and the Water Quality Bureau of the NM Environmental Department to develop and fund a program to ensure that all abandoned wells and drill holes are securely capped to protect aquifers from surface contamination.

Policy 38.22: Prohibit the use of dangerous and/or toxic chemicals near surface or groundwater resources.

Policy 38.23: Establish a development review process which ensures compliance with all NMED water and wastewater regulations.

Policy 38.24: Ensure best management practices are used to limit pollution from stormwater runoff, septic systems and other liquid waste disposal.

Strategy 38.24.1: ***Coordinate with agencies and organizations to develop a program to assist homeowners with septic tank compliance.***

Policy 38.25: Require best management practices for storm water management including use of vegetative buffers, on-site swales, roof drains and permeable surfaces for retention/detention/treatment and re-use of storm water to limit run-off. Require mitigation of runoff from impervious surfaces.

Policy 38.26: Use off-site and on-site stormwater discharge and conveyances to create and enhance open space, trails and parks.

Policy 38.27: Extend water quality testing throughout the County including tests for arsenic and other pollutants and study instances of groundwater contamination.

Strategy 38.27.1: Conduct regular water fairs to involve the communities in monitoring efforts and to educate the communities on water issues.

Policy 38.28: Require public or community water systems in areas where trace constituents (arsenic, uranium, nitrate, fluoride, etc.) exceed water quality standards and in areas where water quality is naturally poor or degraded due to septic tanks.

Policy 38.29: Reduce the discharge of pollutants to the County's small municipal separate storm sewer systems "to the maximum extent practicable."

Policy 38.30: Protect and preserve riparian areas and recharge zones.

Strategy 38.30.1: Coordinate with the County Water Conservation Program and conservation groups to monitor and protect the flow of water in perennial and intermittent rivers and streams.

Policy 38.31: Require new development to preserve on-site natural features critical to healthy watersheds and ecosystems, including restoration of piñon-juniper, ponderosa pine and other vegetation, protecting reservoirs and drainageways and restoration of stream reaches to their designated uses.

Policy 38.32: Require new development to capture storm water to enhance aquifer recharge and minimize erosion and line ditches, or utilize piping where appropriate, to reduce water loss from infiltration.

Policy 38.33: Minimize the threat of flooding and erosion through the 2008 adoption of a No Adverse Impact Floodplain and Stormwater Management Ordinance.

Policy 38.34: Protect, enhance and restore wildlife habitat and vegetation along the Santa Fe River and tributary arroyos, minimizing any undesirable effects.

Policy 38.35: Require new businesses to provide proof of adequate restroom facilities before granting business permits.

Policy 38.36: Require connection to community/regional water and wastewater systems at the time of development or when systems become available.

Policy 38.37: Require all private water and wastewater systems are designed and built to public standards.

Policy 38.38: Create opportunities for demonstration and pilot projects of Advanced Treatment Systems.

CHAPTER 12: ADEQUATE PUBLIC FACILITIES AND FINANCING ELEMENT

12.1.1 KEY ISSUES

1. **Existing sprawling conditions results in inefficient infrastructure and public services.**

2. **New development needs to pay for infrastructure and service needs generated by development.**

3. **Need to maintain adequate levels of public services.**

4. **Need to ensure fiscal sustainability of the County.**

5. **County currently does not have a Capital Improvements Program to direct and pay for growth**.

12.1.2 KEYS TO SUSTAINABILITY

1. **Fiscal stability is a cornerstone a sustainable community.** Ensure the fiscal sustainability of the County through the efficient provision and phasing of public facilities and services that are funded through a full range of revenue-generating tools.

2. **Improve the balance between non-residential and residential growth** through compact, mixed-use development zoning to increase revenue and reduce the burden of taxes on existing residents.

3. **Ensure that new development pays for the infrastructure and service needs that the development generates both on- and off-site**. Establish the use of impact fees and public improvement districts for new development. New development should be required to participate in funding all on- and off-site public facilities and public services the need for which is generated by the development.

4. **The County should maintain adequate levels of service for road capacity**, law enforcement, fire protection, emergency medical response times, open space, parks, recreation areas, trails, sewer and water, community facilities and environmental capital facilities, services, operation and maintenance. Proposed projects should be required to demonstrate the adequacy of public facilities and services prior to approval.

5. **The County should use the Capital Improvements Plan (CIP)** to direct growth, inform the development review process and attract economic development. The CIP is one of the most important implementation tools of the SLDP and provides certainty and predictability to public service providers and private property owners regarding future improvements and expectations.

6. **The County should employ fiscal impact assessments (FIA**) and adequate public facilities assessment to ensure that the County costs attributed to new growth do not exceed the tax revenue generated by the project. FIA's should be established in accordance with a standard format established by the County.

12.2 CRITICAL FINDINGS

A principal purpose for developing a new Growth Management Plan and Land Development Code for the County is to develop goals and policies that will bring the County, its residents and businesses, financial stability for the twenty-year life of the SLDP.

12.2.1 FISCAL BALANCE AND RESPONSIBILITY

A balanced, vigorous economy in combination with fiscally responsible policies ensures the long-term fiscal health of the County and its residents and businesses. Though currently non-residential development basically balances residential developments' fiscal loss to the County (*see* fiscal impact analysis), the negative fiscal impacts of residential development must be minimized to maintain long-term fiscal sustainability, through increasing service efficiencies, maintaining balanced land uses and shifting growth-related development costs to new development.

12.2.2 COSTS OF SPRAWL DEVELOPMENT

Low-density, dispersed sprawl development is expensive to serve because of the cost to expand facilities, including water/sewer and road infrastructure. Not only is infrastructure expensive to construct, but maintenance costs are an increasing proportion of County expenses. As costs of fuel and materials rise, costs to serve also increase. Personal transportation costs also increase with escalating fuel costs, resulting in reduced discretionary spending, especially for commuters who drive to more urban areas for employment. Rural living may seem more affordable initially, due to lower housing costs, increased transportation costs erode this savings in the long term. If septic systems fail in rural areas, it is costly to provide sewer service to dispersed development. In areas with clustered or compact development, sewer systems are more economical to provide and have fewer negative impacts to the environment.

12.2.3 FISCAL SUSTAINABILITY

New development necessitates public facilities and services, and if proportional improvements are not made to serve new development, the overall level of service declines for County taxpayers. New development, under existing regulations, fails to contribute equitably to the funding of facilities and services necessitated by such development. However, numerous facility and service deficiencies within the County have been identified that are a result of existing, not new development. Tools for equitably funding improvements to correct deficiencies in a timely manner will be identified.

12.2.4 ADEQUATE PUBLIC FACILITIES PROMOTE ECONOMIC DEVELOPMENT

Non-residential development, which provides economic opportunity for residents and a net fiscal gain to the County, is dependent upon the adequacy of emergency services, law enforcement, fire protection, water, sewer and transportation. Such facilities and services, if provided at appropriate levels of service, attract economic investment.

12.2.5 DIRECTED GROWTH SAVES OPERATING AND CAPITAL COSTS

Significant public savings are realized when growth takes place where development already exists or in mixed-use centers if development does not exist. Incentivizing and directing growth to SDA 1 and SDA 2 areas, if coordinated with other service providers with respect to the timing and location of installation or replacement of utilities, maximizes infrastructure investment and minimizes long-term operating and maintenance costs.

12.2.6 ADEQUACY AND CONCURRENCY

The existence of adequate public facilities assure a positive fiscal impact for the County, provide a high quality of life through infrastructure and service provision, implement the goals, objectives, policies and strategies of the General Plan, and any applicable area, specific or traditional community plan, and protect the public health, safety and general welfare of the community.

A number of regulatory, fiscal and administrative techniques exist that, if properly employed, allow communities to ensure that development projects are timed, located, designed and financed without negatively impacting the community. "Adequate public facilities" and "concurrency" are two similar techniques that tie development pace and location to the availability of public facilities and services. Both terms refer to land use regulations that are designed to ensure that the necessary public facilities and services, at adopted levels of service required to support new development, are available and adequate at the time that development occurs. An Adequate Public Facilities Regulation (APFR) establishes level of service (LOS) standards roads, law enforcement, jails, fire protection, emergency response, open space, parks, recreation areas, trails, sewer and water, community facilities and environmental capital facilities, services, operation and maintenance that will be in place at the time of final discretionary development approval. Concurrency and adequate public facilities regulations ensure that the service levels enjoyed by existing development are not diluted below the adopted LOS due to new development. APFRs control the timing of new development. If adequate infrastructure is not available at adopted levels of service, as shown in the CIP, the application for discretionary development approval will be denied or conditionally approved through phasing of the development until the CIP facilities are available. The major objectives of an APFR are:

1. To link the provision of needed public facilities and services to the type, amount, location, density, rate and timing of new development;
2. To ensure that new growth and development do not outpace the ability of service providers to accommodate such development at established level of service standards; and
3. To coordinate public facility and service capacity with the demands created by new development.

12.2.7 SPECIAL ASSESSMENTS AND IMPROVEMENT DISTRICTS

Special assessments are revenue-raising devices designed to recover the cost of capital improvements that directly benefit properties within a designated "benefit area". Fees are collected from property owners for tangible public infrastructure improvements that a local government provides and that benefit the properties being charged. Unlike impact fees and mandatory dedications imposed under a County's police and land use control powers, special assessments may be used to pay for improving existing infrastructure deficiencies.

A wide variety of assessments and improvement districts may be created to fund infrastructure improvements or construction. These include PIDS, TIDDs and SADs in New Mexico. All of these special districts and techniques involve the designation of a geographic area and use of statutory powers to raise revenue or impose charges for facilities and services within the defined geographic area to fund infrastructure improvements and construction. Tax exempt bonds are generally issued to pay the costs of the improvements, which would be secured by the real property in the area that is benefited by the improvement. Properties benefiting from the improvements are assessed a fee to pay the principal and interest on the bonds.

12.2.8 USER OR IMPACT FEES

"Pay-as-you-grow" programs help protect existing residents from growth-related costs. These programs include a variety of techniques that allocate the public costs of development fairly and do not unduly burden existing residents, such as development impact fees and exactions, or provisions for financing infrastructure and services in development agreements.

Communities across the country, including Santa Fe County (the Fire District Impact Fee), have adopted some form of development impact fees pursuant to statute to mitigate the impacts of new growth and maintain consistent levels of

service for both existing and future residents. Development impact fees are one-time charges against new development to raise new revenues to pay for new or expanded public facilities necessitated by new development.

12.2.9 EXACTIONS AND DEDICATIONS

Before approving development projects, the County may require the developer to dedicate land for public purposes. Typically, exactions are imposed at the time of zoning or subdivision approval. Courts have required that municipalities document the need for development exactions with studies that link the public purpose to be achieved with the nature and extent of the conditions imposed. This is most easily undertaken for on-site exactions, such as subdivision fee requirements and land dedications. The goal of providing adequate public facilities to serve a new development is a recognized valid purpose, and if the exactions will mitigate development impacts proportionally caused by the developer upon whom the exaction is levied, the Nollan/Dolan requirements will be met.

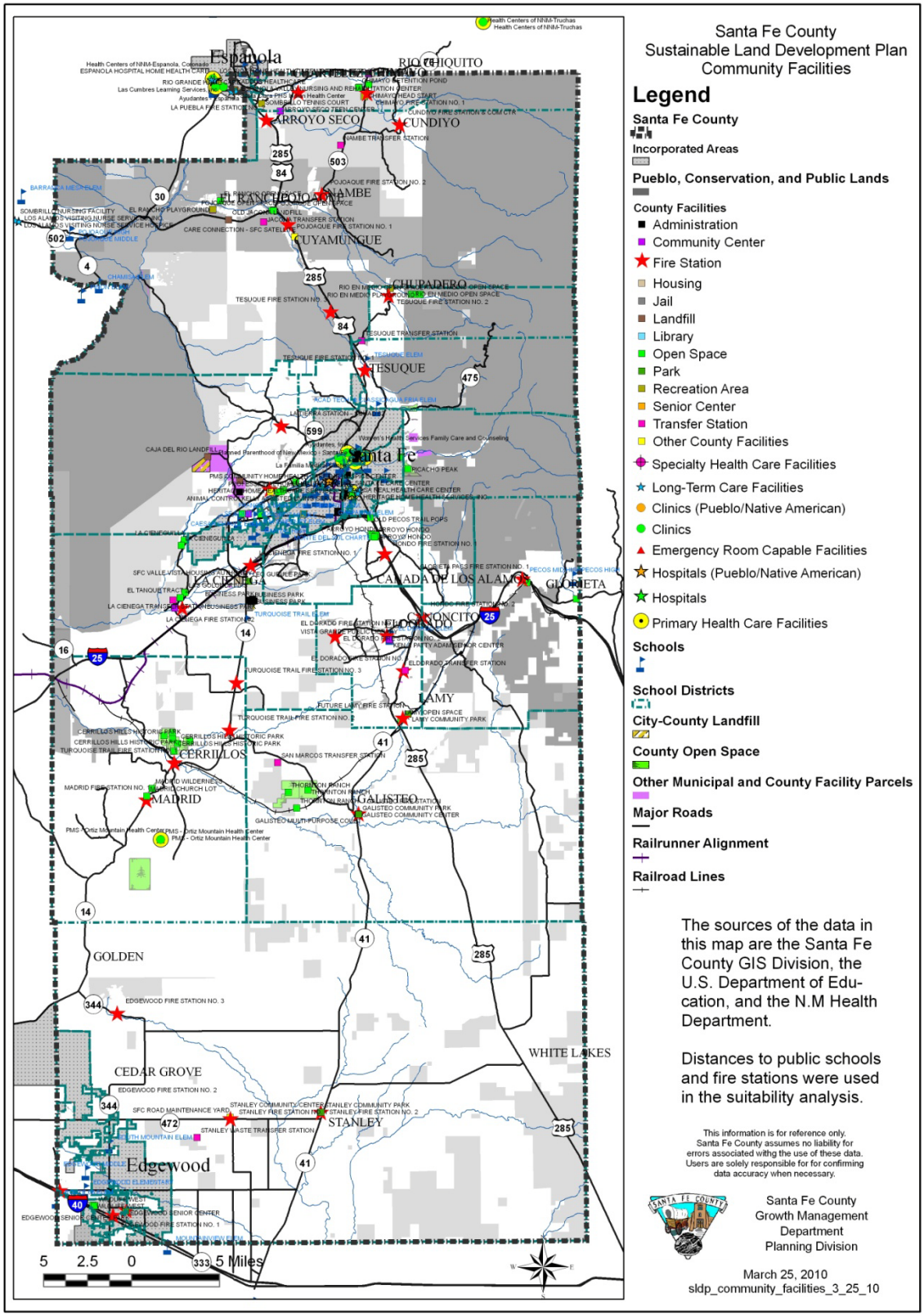
Where exactions are meant to fund off-site facilities called for by several development projects, both the remoteness and proportionality tests must be satisfied by studies 1) showing the future scope of growth, 2) naming the needed facilities, 3) defining facility costs allocated to new growth, and 4) specifying service units and service areas. The results of these studies are then inserted into a funded capital improvements program.

12.2.10 DEVELOPMENT AGREEMENTS

A development agreement is a contract between the County and a developer, whereby the developer promises to pay for certain on-site or off-site improvements or to perform certain obligations in exchange for the vesting of discretionary approval. A voluntary development agreement may be sought by a developer to avoid denial, or timing and phasing of the project by reason of failure to meet the adequate public facilities requirements of the SLDC. Development agreements differ from other public contracts because they are executed in conjunction with police power actions regulating the zoning, subdivision or development of private property. A development agreement may require payment or advancement of public road improvements or construction or obligate the developer to perform those improvements at its expense. Development agreements are useful tools for a community because they:

- Provide a mechanism for the County and developers to form agreements, binding on all parties, regarding development, financing and land use of the development project;
- Promote land development regulation by allowing the County to adopt development agreements that include terms, conditions, and other provisions that may not otherwise be able to be mitigated or implemented without the use of a development agreement;
- Promote stability and certainty in development project regulation by providing for the full enforceability of such agreements by all parties;
- Provide a procedure for the adoption of such agreements that ensures the participation and comment of the public and elected officials; and
- Provide mechanisms for establishment of public improvement districts and public infrastructure zones for the financing of capital facilities and public services as provided for in the Sustainable Land Development Plan and/or Capital Improvements Plan and/or other adopted plans.

Map 12 -1 Community Facilities



12.3 ANALYSIS AND RECOMMENDATIONS

12.3.1 BALANCE RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT

Two decades will commence wherein much of the baby boom may retire (2010-2030). This is also the period of the SDLP and CIP. Baby-boom retirement may cause the ratio of jobs to housing units to fall from about 1.0 to 0.75 in Santa Fe County. This must be combated with an effort to actively solicit compatible nonresidential development.

A solid job base within the County enables fiscal stability. Efforts should be made to recruit industries that are compatible with the desired future employment base of the County. That employment base should emphasize the above industries due to their high value-added to the local economy.

The relationship between residential and nonresidential development is key. Fiscal projections show that overall residential development in Santa Fe County is a fiscal drain while overall nonresidential development produces fiscal surpluses. With a proper balance of residential and nonresidential development, fiscal surpluses can be achieved. This will require a reasonable level of nonresidential development over the 20-year period. About 11,333 new jobs are projected for the County; 7,796 of these will take place in the City of Santa Fe, and 3,536 jobs will take place in the Unincorporated Area County. With regard to the latter, the County will experience dwelling unit growth in the amount of 23,910 units over the period 2010 to 2030. 11,715 units will be built in the Santa Fe Urban Region (City and Urban Environs). The remaining 12,195 units will be built in the Unincorporated Area of the County. This amounts to 51 percent of the residential units in the Unincorporated Area and 31 percent of the new job base in the Unincorporated Area of the County.

Currently, for the 20-year period of the Plan, dwelling unit growth exceeds job growth by a factor of 2 to 1 (23,910 housing units versus 11,333 jobs). Present projections show that employment growth will lag behind dwelling unit growth in Santa Fe County over the next 20 years. In 2010, with virtually no baby-boom generation retirement, the employment base (jobs) is 95 percent of the dwelling unit base. By 2030, when significant retirement of the baby-boom generation will be a reality, the job base will diminish to 83 percent of the dwelling unit base.

12.3.2 ENCOURAGE POSITIVE AND AVOID NEGATIVE FISCAL IMPACTS

12.3.2.1 ENSURE THAT PUBLIC OPERATING AND CAPITAL SERVICES ARE KEPT UP

The County's residences and businesses depend on adequate law enforcement and fire services as well as a variety of public works, general government, and recreational/cultural services from the County. These services must be continuously reviewed and evaluated to ensure their quantity and quality. So, too, with capital facilities. Sheriff and fire vehicles, County offices, public spaces, water/sewer lines, parks and recreation facilities, and other capital facilities must be kept in a reasonable state of repair.

12.3.2.2 ENSURE THAT PUBLIC SERVICES ARE EFFICIENTLY DELIVERED

Regular review should take place regarding delivery of public services. The patrol/shift schedules of law enforcement personnel should be reviewed for efficiency. Fire response and equipment should be evaluated. Various public works services (road repair, snow removal, solid waste pickup) should be overseen to determine potential efficiencies.

12.3.2.3 ENSURE THAT ALL POTENTIALLY AVAILABLE REVENUES ARE PURSUED AND COLLECTED

Constant review of revenues must take place to be assured that the County is maximizing potential revenue receipts. Those revenues must come from chargeable services, impact fees, utility fees, parking facilities, space rentals, special events, special assessment districts, intergovernmental (shared) revenues and special grants.

12.3.2.4 ASSESS PRIVATE PROPERTY VALUE ON A REGULAR BASIS

Establish information and assessing systems to capture property improvements and classification changes affecting property value.

12.3.2.5 USE INTERIM PROPERTY TAXES TO BETTER ESTABLISH THE QUANTITY AND QUALITY OF PUBLIC SERVICES

Available and adequate public services and facilities add to property values. In the interim, it may be necessary to use property taxes to deliver a particular group of operating or capital services. Improved services ultimately improve the County tax base. Appropriate and adequate services bring added tax base (especially nonresidential) that lowers property taxes over time.

12.3.3 MAINTAIN ADEQUATE PUBLIC FACILITIES

Levels of service need to be established to provide a base against which expenditures and services can be compared, in order to provide a framework to view existing levels of service so that future levels of service, if appropriate, can be made comparable. Public services, both operating and capital, need to be analyzed relative to particular circumstances and mission to determine relative strength with relation to similarly situated counties. The array of reviews should be equitably apportioned such that the responsibilities of new and existing residents are fairly balanced.

12.3.4 FISCAL IMPACT ANALYSIS

Fiscal impacts analyze public costs versus revenues from future development. Costs are the annual operational outlays and debt service outlays related to the General Fund, Special Funds, Capital Funds, Debt Service Funds, and Enterprise Funds. The County's annual budget amounts to $224 million annually (all five funds) or about $1,475 per capita. Of this, $63.15 million is in the General Fund. A major component of General Fund revenues is the property tax, which yields $38 million annually, based on 33 percent value assessment and an approximate 4.67-mill residential tax rate and 11.850-mill nonresidential tax rate. Another major component of revenue is the Gross Receipts Tax (GRT), which brings $7.6 million to the County General Fund. State and federal grants, license and permit revenues, fees and charges for services, and a host of other sources of revenue contribute the remaining $17.5 million in General Fund revenue.

12.3.4.1 GENERAL FISCAL IMPACT PROCEDURES AND DATA

The fiscal impact analysis is based upon conditions that will occur in 2010, 2017, 2024, and 2030 reflecting the projected residential and nonresidential development that will take place at those times. The fiscal impact analysis calculates development increments to the County Unincorporated Area, the City of Santa Fe, and for Santa Fe County as a whole. The model is based upon assumptions of development taking place in the various SDAs of the Unincorporated County, resulting from the directed growth policies of the SLDP, as well as in the City of Santa Fe, on an annual basis.

All budget information is for FY2010, the most current information available. In the fiscal impact analysis, all five County funds specified above are analyzed, and reflects the impact on all of the individual funds. Information on

jobs is for 2008; information on housing is for 2005 through 2007 (*American Community Survey*); and information on structure value is for FY2010.

12.3.4.2 REVENUES RELATED TO FORTHCOMING DEVELOPMENT

The value of the residential portion of the development for each area is taken from an estimate of the average new single-family detached, attached, and multifamily units in the County, using a multiplier for development prices in each of the SDAs and for the City. The relative multipliers are derived from prices reported for new housing in the 2000 Census. There is also a different percentage of detached, attached, and multifamily units projected as part of the growth of the City and each of the SDA areas. New nonresidential value added also varies by area but is taken from an average value of new square footage (by type of industry), space multipliers by type of employee, and numbers of employees destined for particular types of structures. Different industry mix additions are projected for each area, and the share of occupancy—retail, office, industrial, and agricultural space—is calculated by the number of employees likely to occupy these types of facilities. Each of these types of space has a different value per square foot and a different square footage per employee occupant. This value, multiplied by the residential and nonresidential property tax rate for the County, determines future property tax revenues.

Other revenues are projected per capita or per employee (GRT) and reflect the relative revenue distribution of the FY2010 Santa Fe County Budget.

12.3.4.3 COSTS RELATED TO FORTHCOMING DEVELOPMENT

Costs per new resident are determined by the share of County services estimated to be delivered to residential versus nonresidential uses. The share reflects the distribution of property values and parcels in Santa Fe County. This procedure determines a cost per resident and cost per employee by multiplying the current County budget: first, by the averaged percentage of current residential value and parcels and dividing by residents, yielding a per-resident cost; and second, by the averaged percentage of nonresidential value and parcels and dividing by employees, yielding a per-employee cost. This procedure is done for each fund except the Enterprise Fund, which is wholly a residential sector–benefiting fund. Costs per resident and costs per employee are multiplied by the expected number of new residents and employees from 2010-2030 in SDAs 1-3 and the City of Santa Fe.

12.3.4.4 REVENUES MINUS COSTS EQUALS FISCAL IMPACT

Over the period 2010 to 2030 there will be development in Santa Fe County of about 24,000 dwelling units and 11,333 jobs. Of the above dwelling unit growth, 12,195 units will be in the Unincorporated Area and 11,715 will be in the City of Santa Fe. Of the 11,333 jobs, 3,534 will be in the Unincorporated Area and 7,799 will be in the City of Santa Fe.

The fiscal impact study analyzed two alternative scenarios for the growth of unincorporated Santa Fe County. Under both scenarios, revenues from City of Santa Fe growth are identical and as such are not summarized here. The first scenario, the baseline scenario, reflects growth into the future under existing financing mechanisms. This projection for the future demonstrates the following results**:** Unincorporated County residential is negative ranging from -$57,826 in 2017 to -$102,572 for a total loss for the year Plan period of -$1,049,525**.**

The second scenario reflects growth under a situation where PIDs and a portion of costs-of-sprawl savings reduce General Fund and Special Fund costs (by 10 percent); and impact fees, infrastructure zones, and utility districts increase capital revenues in the Debt Service and Capital Outlay Funds (by 10 percent).

The 20 year net gain for the sprawl pattern with residential and non-residential combined is $24,591,443; and the 20 year net gain for the SLDP compact growth pattern is $52,591,443, for a combined gain for the 20 year SLDP compact growth pattern of $27,651,479. Analyzing Unincorporated County residential only, the 20 year net loss for the sprawl pattern of -$1,049,525 compared with the 20 year net gain of the SLDP compact growth pattern of

$23,702,704, produces a comparable savings of $24,752,229! Estimates for fiscal impacts with existing financing mechanisms:

- Unincorporated County residential sprawl is negative, ranging from -$57,826 (in 2017) to -$102,572 (in 2030) with a total loss for the 20-year Plan period of -$1,049,525.
- Unincorporated County residential sprawl is negative, ranging from -$1,134,702 (in 2017) to -$3,330,113 (in 2030) with a total loss for the 20-year Plan period of -$34,974,579.
- Unincorporated County total residential and nonresidential under the sprawl pattern is positive ranging from $215,235 (in 2017) to $717,401 (in 2030) for a total gain for the 20-year Plan period of $7,356,607.
- Result: Unincorporated County residential is negative fiscally throughout the 20-year period while the total Unincorporated County is positive fiscally throughout the 20-year period
- Unincorporated County total residential under SLDP compact growth pattern is positive, ranging from $752,960 (in 2017) to $2,255,807 (in 2030) for a total gain for the 20-year Plan period of $23,702,704
- Unincorporated County total residential and nonresidential under the SLDP compact growth pattern is positive ranging from $1,120,218 (in 2017) to $3,358,536 (in 2030) for a total gain for the 20-year Plan period of $35,008,086.
- Result: Unincorporated County is positive fiscally throughout the 20-year period

A comparison of the two Figures indicates that:

- The 20-year net gain for the sprawl pattern with residential and non-residential combined is $24,591,443 compared to the 20-year net gain for the SLDP compact growth pattern is $52,242,922, resulting in a combined gain for the 20-year SLDP compact growth pattern of $27,651,479.
- For Unincorporated County residential only, the 20-year net loss of the sprawl pattern is -$1,049,525 compared to the 20-year net gain of the SLDP compact growth pattern of $23,702,704, and results in a savings of $24,752,229.

12.3.5 COSTS OF SPRAWL

Over the past two decades, a number of costs-of-sprawl studies have been undertaken in individual states and nationwide. These studies have similarly posed two alternative scenarios for the governing entity: one representing current (historical) development patterns and financing mechanisms; the second representing more compact development patterns and the use of “pay as you grow” fees, PIDs, and public infrastructure zones. The latter would be analogous to development within Santa Fe County according to the binding principles of the SLDP.

The results of these studies in such diverse locations as Delaware, Florida, Kentucky, Michigan, New Jersey, and South Carolina—as well as for the United States as a whole—on either a per-unit or percentage basis, have had remarkably similar results. This has enabled a series of commodity savings (land, infrastructure) and cost savings (housing and fiscal impact) coefficients to be calculated that represent the differences between historical and more compact development in a particular area.

The basis of these coefficients is difference: the difference between developing in a spread versus compact development fashion. The application of these coefficients to projected residential development enables a prediction to be made about the likely costs of sprawl savings resulting from the Santa Fe County Sustainable Land Development Plan.

12.3.5.1 LAND CONVERSION

Land conversion due to development is projected using a simulation model. This model translates households and employment projections to the demand for residential and nonresidential land. The model accounts for both vacancy of structures and inefficient use as well as other land development requirements that consume extra land. The model uses different development locations and densities for sprawl development patterns versus more compact growth development patterns, calculates the land converted under each development alternative, and expresses these, as well as their differences, in acres. The model employs historic information to determine the location and density of development under the sprawl conditions and the new development forms and density under more compact growth development patterns. Sprawl conditions are what would have happened had there been this amount of development under present development pattern; more compact growth is what will happen under the SLDP. The savings of more compact, closer-in development are shown in the results column.

Savings Noted From Costs of Sprawl Studies		
Land Savings and Costs	**Number of Units**	**Results**
0.06 acres/ unit	12,195	731.7 acres
$768.54	12,195	$9,372,345

12.3.5.2 ROAD CONSTRUCTION

The Rutgers Road Model, utilized in this fiscal impact analysis, incorporates a relationship between lane-mile density and population density. The relationship is nonlinear and convex. This means that higher-density areas will require fewer new roads than lower-density areas. The relationship between centerline roadway density and population density is best described by a power function. Major and minor collector (non-subdivision) roads are in the model. The underlying assumption in the road estimation analysis is that there is a nonlinear relationship between population density and local road density. Such a model does not depend on the network-based traditional four-step transportation planning process of trip generation, distribution, modal split, and traffic assignment. The results of the two scenarios appear below.

Savings Noted From Costs of Sprawl Studies		
County Road Savings and Costs	**Number of Units**	**Results**
0.0018 centerline miles/unit	12,195	21.951 centerline miles
$1,643.10/unit	12,195	$20,037,605
Savings Noted From Costs of Sprawl Studies		
State Road Savings and Costs	**Number of Units**	**Results**
0.00005 centerline miles/unit	12,195	0.60975 centerline miles
$132.05/unit	12,195	$1,610,350

12.3.5.3 WATER/WASTEWATER SERVICE

Water infrastructure comprises several components: the water source, the treatment facility, storage facilities, and the distribution system. The cost of supplying water to new developments varies because infrastructure needs differ depending on the type of location in which development is occurring. In rural and ex-urban areas, infrastructure typically is nonexistent and costly to extend. Therefore, new water infrastructure in the form of drilled groundwater wells and septic systems is required. In close-in areas, new developments can be connected up to existing public or private utility water and sewer service. In fringe communities, community package sewer treatment systems may be required. The first step in determining water infrastructure costs is to isolate the different potential areas where development could take place.

When water treatment plants and distribution systems are designed, their size is determined by the number of houses or buildings they will serve, with costs calculated on the number of laterals required. For new residential development, the number and type of new dwelling units is projected. To calculate the number of laterals required to service the new dwelling units, a water-cost model assumes that each detached single-family unit will require a lateral. Clustered single-family and single family attached units have fewer laterals than the number of units because they share the lateral network system. The second step in estimating water costs is calculating the number of laterals required to service projected new development. The number of laterals equals the total number of detached units, the number of attached units divided by two, and the number of multifamily units divided by four.

The water-cost model assumes that new development in close-in areas will be served by an expansion of surface water treatment facilities. New development in more distant locations will generally require new wells, community sewer treatment facilities, and distribution systems. A reduction in individual laterals (suburban areas) or dug wells/septic systems (rural areas) contribute to the savings noted below. Existing facilities serving communities are generally built to serve a specified, limited number of homes in a development. Thus, it can be assumed that they are operating at capacity, or are too distant, to effectively serve new developments within a reasonable cost structure.

12.3.5.4 STRUCTURE COST

The Rutgers Structure Cost Model calculates changes in the price of residential and nonresidential structures related to the location, mix, and density at which these structures are developed. Typically, in close-in areas, densities and floor-area ratios (FARs) are higher and the mix of housing types is greater. This lowers the land cost of property development and to a lesser degree the price of developed properties. In rural undeveloped areas, densities and FARs are lower and usually only single-family development is present. This raises the land component of property costs and the size and price of developed properties in outer-areas as opposed to inner locations. The model is sensitive to the types of changes in housing units and density taking place under each alternative development scenario. The model stores property value by location and further calculates changes in property values relative to changes in housing mix and density of development. These differences—location, mix, and density—are the basic differences between more compact (SLDP) and sprawl development scenarios. An array of property prices is determined for the two scenarios, and differences between the alternatives are viewed in light of property array differences in the locations in which households and employees have settled.

Savings Noted From Costs of Sprawl Studies		
Housing Cost Savings	**Number of Units**	**Results**
$8,110/unit	12,195	$98,901,450

12.3.5.5 FISCAL IMPACTS

An analysis of the net costs of public-service provision involves three basic steps: the calculation of (1) costs, (2) revenues, and (3) net fiscal impact. This is done for the primary local service provider (Santa Fe County) using its information on basic fiscal indices.

In order to calculate future per capita local costs, information on expenditures is taken from the county budget. Annual expenditures for county services is then divided between services rendered to local residences and businesses, using information on the distribution of land-parcel value between residences (single-family and apartments) and businesses (commercial and industrial). The percentage value distributions for residential properties are averaged and applied to the expenditures for county services and divided by the existing population to derive non-educational expenses incurred by residents. This is the first component of future per capita County costs. As a subset of this procedure, the remaining portion of County cost is divided by the existing amount of "at-place" employment, and the results are expressed as the cost per new employee.

Revenues for the County are calculated as follows: Gross receipt taxes are estimated from resident job-holders. This is an estimate of the number of local residents multiplied by the resident wage income. Property tax revenues are calculated to supplement gross receipt revenues, relating to the value of properties and the local property tax rate. Non-tax revenues are expressed per capita and are projected into the future relative to the increment of population. Calculated savings recur annually. Revenues minus costs equal fiscal impacts.

Savings Noted From Costs of Sprawl Studies		
Fiscal Impacts	**Number of Units**	**Results**
$195.40/unit	12,195	$2,382,903

12.3.5.6 SAVINGS RELATED TO SLDP GROWTH

Sustainable growth and its component activities have quantifiable public- and private-sector savings. These savings are achieved by reducing consumption of roads and water/sewer infrastructure, agricultural and environmentally fragile lands, lowering the costs of residential and nonresidential property development, and lowering the cost of providing basic public services such as public safety, public works, and public

Over the 20-year period, they amount to approximately $135.26 million—$16.75 million annually, or $11,100 per dwelling unit. These savings are based on conserving 732 acres of developable land; not building 22.5 centerline-miles of local and state roads; savings of $5.33 million related to water and sewer costs; savings of about $8,100 per unit in housing development costs; and savings of close to $200 per unit in local fiscal impacts.

Combining the $84 million savings derived in Tables 1a and 1b with the savings of $135.26 million derived from Table 2, the savings to the public and private sectors over a 20-year period by using the patterns of growth and the financing mechanisms of the SLDP result in a total of $219.26 million, or approximately $11 million per year.

12.3.6 ADEQUATE PUBLIC FACILITIES

Adequate Public Facilities Regulations (APFRs) ensure that adequate capital facilities are in place at the time final discretionary development approval is granted. Adequate public facilities are measured by adopted levels of service in the SLDP and the CIP. Under an APFR, development approval is granted if adequate public facilities are available for the year of the CIP in which the development application is made. Development applications should be denied if adequate capital facilities are not in place or scheduled in the CIP for the year the development application is made. Conditional development application may be granted requiring phasing or timing in accordance with the schedule of improvements in the CIP.

12.3.6.1 LEVELS OF SERVICES

Levels of service ("LOS") standards define the County's role as a service provider and, in partnership with other service providers, define public and private responsibilities for the provision of facilities. An LOS standard is a locally desired ratio of service and facilities demand to supply.

LOS standards for community facilities and services are most commonly presented in terms of the resident population served. Another method is to express LOS standards in terms of the functional population served. LOS can be determined by investigating the existing levels of service that are provided to the existing resident population. LOS service indicators can be evaluated based on a service provider's LOS goals, performance data provided by other communities, and/or professional standards. LOS is typically measured and projected in terms of service area population (e.g., two police officers per 1,000 persons; 0.25 acre feet of water per dwelling unit). The LOS concept applies to schools, public facilities, transportation networks, water and sewer, surface water discharge, law enforcement, jails, fire, emergency response, parks and recreation, libraries and any other public service provided by local governments. Community facilities are shown in **Map 12-1.**

Figure 12-1: Existing Public Facilities Existing Levels of Service Standards

Facility		Level of Service	
		Unit	Employees
Roads		8.8 miles per 1,000 residents	0.27 employees per 1,000 residents
Sheriff, Fire, Emergency Response	Sheriff	2.4 vehicles per 1,000 residents 120 ft^2 building per 1,000 residents	1.44 officers per 1,000 residents
	Fire (EMS)	2.12 vehicles per 1,000 residents 26,730 ft^2 building per 1,000 residents	1.09 officers per 1,000 residents
Parks, Trails, Open Space	Parks	1.25 acres per 1,000 residents	
	Trails	0.5 miles per 1,000 residents	
	Trailheads	0.12 acres per 1,000 residents	
	Open Space	85 acres per 1,000 residents	

Source: Rutgers University, Center for Urban Policy Research, 2010

Qualitatively, LOS are indicators of the attractiveness of a community to existing and future residents and businesses. Adequate public safety provision, air quality, environmental preservation, recreational and cultural opportunities and accessible open space are just a few of the elements that the County influences that make Santa Fe County a desirable place to live. Counties that provide a high level of services project an image that attracts new residents, tourists and businesses.

LOS has been determined for various categories of public operational and capital services delivered by Santa Fe County. LOS reflects the existing amount of the item divided by persons serviced, usually in the full County

(151,873) or, in some cases, the unincorporated portion (estimated at 66,675). Service levels are expressed in units per 1,000 persons (Unincorporated Area), cost per unit, and cost per capita.

12.3.6.2 TRANSPORTATION

Geographically, Santa Fe County encompasses approximately 2,000 square miles. Development in the unincorporated County is primarily rural, with areas of concentrated development. Within the County, there are approximately 2,900 centerline road miles, of which the County has responsibility for 586 miles for its Unincorporated Area population base. The Countymaintains 146 miles of paved roads, 20 miles of chip-and-sealed roads, 110 miles of base-course roads, 20 miles of cold millings, and 290 miles of gravel, stabilized dirt, or dirt roads.

The aggregate road system (2,900 miles) serves a Countywide population of 151,823, or 0.0191 miles of road per capita. Santa Fe County's responsibility is 586 miles for an unincorporated population base of 66,675 residents; this is 0.0088 miles of road per capita, or 8.8 miles per 1,000 residents.

There are 18 public employees assigned to roads, which amounts to 0.00027 employees per capita, or 0.27 employees per 1,000 residents.

12.3.6.3 LAW ENFORCEMENT, FIRE, AND EMS

Law Enforcement. There are 72 commissioned officers in the Santa Fe County Sheriff's Office. These 72 officers serve a population of approximately 50,000. This is the unincorporated population of 66,675 residents, minus a population of 16,675 that is not served by the Santa Fe County Sheriff's Office. This amounts to 0.00144 officer per capita or 1.44 officers per 1,000 residents. The Sheriff's Office requires County funds of $10,247,800 annually, or $142,330 per commissioned officer. This includes salaries, benefits, insurance, and equipment costs.

Within the Sheriff's Office are 120 vehicles serving a population of 50,000. The level of service per 1,000 resident is 2.4. The cost per vehicle is $30,000; the cost per capita is $71.50, or $71,500 per 1,000 resident.

The Sheriff's Office is physically housed in a building of 6,000 square feet. This building, serving a population of 50,000, exhibits a level of service per 1,000 resident of 120 square feet. The cost per building is $200 per square foot, or $1.2 million; the cost per capita (service population) is $24; the cost per 1,000 residents is $24,000.

Fire/EMS. There are 73 full-time uniformed career positions in the Santa Fe County Fire Department. These officers are cross-trained as firefighter/EMT or paramedic personnel. There are 204 volunteers and 12 administrative staff, for a total of 289 employees. They handle 5,500 calls per year, of which one-third is fire and two-thirds EMS. The budget for personnel is $110,000 per uniformed officer, which includes salaries, benefits, insurance, and equipment costs. The 73 uniformed positions amount to 0.00109 firemen per capita, or 1.09 per 1,000 residents.

There are 32 fire stations, comprising 133,650 square feet; the building amounts to 2.673 square feet per capita, or 26,730 square feet per 1,000 resident. The aggregate buildings amount to $26.73 million in value, or $200 per square foot, equating to $535 per capita and $535,000 per 1,000 resident.

There are 106 vehicles comprising 33 engines, 29 tankers, 21 brush trucks, 1 aerial truck, 8 ambulances, and 14 rescuers. Vehicles represent an incidence of 0.00212 per capita, or 2.12 vehicles per 1,000 residents. These trucks are valued at $19.5 million, or $183,350 per vehicle. Vehicles range in cost from $100,000 (brush trucks) to $750,000 (aerial). The cost of vehicles per capita is $390; per 1,000 residents $390,000.

12.3.6.4 PARKS, TRAILS, TRAILHEADS AND OPEN SPACE

Parks. Currently, the County of Santa Fe has 83.4 acres of parks in 13 locations serving an unincorporated area with a population of 66,675. Individual sizes vary from 0.25 acres to almost 70 acres per facility. The total of 83.4 acres amounts to a level of service of 1.25 acres of parks per 1,000 residents. The cost per park acre is $7,000; the cost per capita is $8.76, or $8,760 per 1,000 residents.

Trails. Currently, there are 34 miles of trails in 9 locations in Santa Fe County. Trails vary in length from one-half mile to 10.5 miles. The 34 miles of trails equates to a level of service of about one-half mile of trails per 1,000 residents in the unincorporated area; the cost per mile of trails is estimated at $500. At that cost, the cost per capita is about $0.25, or $250 per 1,000 residents.

Trailheads. There are about 8.0 acres of trailheads in 6 locations serving the unincorporated population of Santa Fe County (66,750). This total of 8.0 acres amounts to 0.12 acres per 1,000 residents. The cost per unit of trailhead acreage is about $1,000 per acre; this amounts to $0.12 per capita, or $120 per 1,000 residents.

Open Space. Currently, there are 5,648 acres of open space in 17 locations in Santa Fe County. This amounts to 85 acres per 1,000 residents. Open space varies from 5 acres to more than 1,900 acres per location. The cost of open space is $1,000 per acre. This amounts to $85 per capita, or $85,000 per 1,000 residents.

12.3.7 ADOPTED LEVELS OF SERVICE TO MEET ADEQUACY OF PUBLIC FACILITIES AS SHOWN IN THE CIP

In contrast to the existing LOS, as shown in the preceding sections, the adopted LOS of the SLDP, as shown in the CIP, are shown in Figure 12-5.

12.3.7.1 TRANSPORTATION

The adopted LOS for roads in SDAs 1 and 2 is “D” and “C” for SDA3, for all development applications within an impact area of one-half mile from a proposed development. All new County roads should meet the sustainable design and infrastructure standards, be fully paved, with adequate provision for drainage on both sides of the road and sufficient rights-of-way to allow for reasonable expansion. Where appropriate, new roads should allow for bicycle and pedestrian ways.

12.3.7.2 LAW ENFORCEMENT, FIRE AND EMERGENCY RESPONSE

Law Enforcement. Available information for counties of a population size of 100,000 to 200,000 residents from the *U.S. Census of Governments* (2008), there are approximately 0.90 sheriff’s officers and office personnel per 1,000 residents. Currently in Santa Fe County (dividing by total County population to be consistent with the Census procedure), the figure is 0.85. This figure includes one-third of RECC employees. As the remainder of the County develops, the U.S. average of 0.90 officers and office personnel per 1,000 residents will become the County standard.

Capital facilities for the sheriff’s office should reflect expenditures in the CIP for the primary period. Currently, this is $41,000 per 1,000 residents for a 7-year period (using full County population).

Fire and Emergency Response. Currently there are approximately 0.93 paid employees in the fire department per 1,000 residents (full county population), which includes two-thirds of RECC employees. The Santa Fe County Fire Department is known for its competency and ability to service the County. This level of service should remain the same for all future development. Capital facilities for the fire department should reflect expenditures in the CIP for the primary period.

Figure 12-2: Adequate Public Facilities Adopted Level of Service Standards

Facility	Applicability	Level of Service	Impact Area	Year Planned Capacity Will Be Available
Roads—SDA 1 & 2	All applications	LOS "D"	Traffic impact area is 1/2 mile	Third year of CIP
Roads—SDA 3	All applications	LOS "C"	Traffic impact area is 1/2 mile	First year of CIP
Sheriff, Fire (Emergency Response)	All applications	Residents* capital¥ 0.90 Police 0.93 Fire	Countywide	First year of CIP
Water	All applications	0.25 acre/ft (res) 0.27 acre/ft(nonres)	Countywide water service area	First year of CIP
Sewer	All applications	Sewer connection or community water system (<40 acres)	County sewer service	First year of CIP
Community parks, trails, scenic vistas, open space	All applications	Parks 1.25 acres Trails 1.00 miles Trailheads 0.36 acres Open Space 8.5 acres	County limits	Third year of CIP
Stormwater management	All applications	As determined by design standards	Drainage basin	First year of CIP or on site

LOS = level of service; CIP = capital improvements program; and ISO = International Standards Organization.

* Officers per 1,000 residents ¥ Capital expenditures per 1,000 residents

Source: Rutgers University, Center for Urban Policy Research, 2010

12.3.7.3 WATER AND SEWER LINES, TREATMENT PLANTS AND RELATED FACILITIES

Currently residential potable water has a maximum desired service level of 0.25 acre-feet per dwelling unit per year. This amounts to 81,463 gallons per year, or 226 gallons per day per dwelling unit. Average-to-peak is 125 percent, meaning that the actual capacity needed is 283 gallons per day. For nonresidential development, maximum desired future service level is 0.27 acre-feet per 10,000 square feet of development. This amounts to 87,980 gallons per year, or 244 gallons per 10,000 square feet.

The national average for counties with populations of 100,000-200,000 residents, there are 0.23 water/sewer employees per 1,000 residents. In Santa Fe County, there are currently 0.09 water/sewer employees per 1,000 residents. The County has scheduled $126,315 per 1,000 residents in water projects for the first phase of the CIP (7 years).

The CIP contemplates such a standard in its projections for water/sewer line/treatment in Phases 1, 2, and 3. Capital improvements are scheduled at an average of $46,000 per 1,000 residents for a 7-year period. This is a reasonable standard of construction.

Santa Fe County should maintain its maximum standard for new dwelling units and nonresidential development as well as consider raising its current level of county water and sewer employees to one-half the nationwide average. This would amount to 0.115 water/sewer employees per 1,000 residents. The County should not fall below $100,000 per 1,000 residents for a 7-year period for water and sewer capital projects.

12.3.7.4 PARKS, RECREATION, TRAILS, TRAILHEADS, AND OPEN SPACE AREAS

Parks, trails, trailheads, and open space areas should maintain or increase existing standards. Within the Capital Improvement Program, parks, trails, trailheads, and open space are scheduled at an average of $138,160 per 1,000 residents for a 7-year period.

Parks and Recreation Areas. The existing standard for parks and recreation areas is 1.25 acres per 1,000 residents; this should be maintained into the future.

Trails. The existing standard for trails is 0.5 miles per 1,000 residents. This standard is low for the County, as its trails are not adequately developed. This should increase to 1.0 miles of trails per 1,000 residents.

Trailheads. Trailheads in Santa Fe County essentially do not exist. There are only 8 acres of trailheads in 6 locations, or 0.12 acres per 1,000 residents. This standard should be tripled to 0.36 acres per 1,000 residents.

Open Space. Currently there are 85 acres of open space per 1,000 residents in Santa Fe County. Two major purchases of open space are contemplated in Phase 3 of the CIP. These will answer open space needs, but strategic parcels should be obtained at the current rate of 85 acres per 1,000 residents.

12.3.8 FUNDING CAPITAL FACILITIES AND OPERATING SERVICES

A key component of growth management techniques is maintaining fiscal responsibility and fiscal health. Fiscal stability is a cornerstone of a sustainable community. Existing residents should not suffer a decline in the quality of their services or be unduly burdened by costs of new growth. New residents and business should pay their fair share of the costs associated with extending infrastructure and urban services to new growth areas.

The quality of life in Santa Fe County is contingent on the County's continued ability to provide quality services at a reasonable cost to taxpayers. If development projects go forward without a plan for recouping increased service provider expenses, existing tax payers subsidize those expenses. To achieve equity and fairness in the funding and provision of public facilities and services, the Sustainable Land Use Development Plan recommends strategies to:

- Enhance the local property and sales tax bases more rapidly than the fiscal obligations for capital facilities, operations and maintenance; and
- Ensure that new development funds the costs of capital facilities and services required to serve that new development; and
- Ensure that facilities and services are planned in a way that allows ongoing operations without significant increases in the costs to residents and businesses.

- The financing mechanisms for the SLDP and CIP involve a variety of revenue sources brought together to pay for some or all of the costs. Within the CIP, identifying the appropriate revenue source begins with assigning funding sources to projects by type. This determines the gross need for various types of funding resources. Subsequently each project is analyzed individually, to determine its appropriate funding sources. Both of these steps must be undertaken for all projects in the current, secondary, and tertiary sections of the CIP. Financing mechanisms take into account the various priorities and magnitude of funding, producing a realistic appraisal of the sources of revenue needed to fund the CIP and ultimately the SLDP. At the heart of implementing financial goals and policies lie the financial mechanisms for financing the CIP as well as other facilities and services. The CIP was discussed above and the financing plan will be discussed below.

- Achieving fiscal balance is an important aspect of planning for the provision of adequate public services and facilities. The SLDC should consider mechanisms to equitably finance necessary improvements to serve development such as improvement and assessment districts (transportation, business, neighborhood, etc.); tax increment development districts (TIDD); user and impact fees; utility districts; exactions and dedications; development agreements; Countywide improvement districts; use of general bonding capacity; and others.

12.3.8.1 SPECIAL ASSESSMENT DISTRICTS (SADS), PUBLIC IMPROVEMENT DISTRICTS (PIDS), TAX INCREMENT DEVELOPMENT DISTRICTS (TIDDS), AND PUBLIC INFRASTRUCTURE ZONES

Special assessments are revenue-raising devices designed to recover the cost of capital improvements that directly benefit properties within a designated benefit area. Fees are collected from property owners for tangible public infrastructure improvements that a local government provides and that benefit the properties being charged. Unlike impact fees and mandatory dedications imposed under a County's police and land use control powers, special assessments may be used to pay for improving existing infrastructure deficiencies.

Existing residents may be experiencing deficient services and infrastructure that were not put into place because County policies prior to the current SLDP process failed to ensure adequate public facilities and impact fee funding requirements. These residents may opt for a SAD, PID or a public infrastructure zone to raise monies to bring deficient capital facilities to County standards. The APFR of the SLDP and SLDC will ensure that development application with accompanying deficiencies will not occur.

Subsequent to the adoption of the PID legislation in 1993, the use of PIDS has, for all practical purposes, replaced the use of SADs. The primary reason is that PIDS, in addition to financing the capital improvements, are authorized to continuously pay for on-site maintenance and repair. Nonetheless, there are currently very few PIDs in Santa Fe County. These types of districts, combined, have the capacity to finance several hundreds of millions of capital improvements. This type of revenue alternative barely exists in Santa Fe County today.

12.3.8.2 USER OR IMPACT FEES

"Pay-as-you-grow" programs help protect existing residents and taxpayers from growth-related costs. These programs include a variety of techniques that allocate the public costs of development fairly and do not unduly burden existing residents, such as development impact fees and exactions, or provisions for financing infrastructure and services in development agreements.

Statutorily authorized development impact fees ("impact fees") are substantial sources of revenue for new capital facilities, the need for which is generated by new development. Impact fees are used to close the gap for County capital expenditures. Impact fees have been established as reasonable sources from new developments relative to the impact these developments have on required capital needs according to a standardized approach to calculating these fees. This standardized approach determines the land use assumptions and impacts on levels of service multiplied by the net cost to restore service, as required by statute.

Specifically, impact fees would be determined through a rational nexus procedure that would determine:

- Service areas;
- Levels of service in terms of functional population served;
- Costs per unit of measurement;
- The share of each jurisdiction funding the improvement;
- The number of dwelling units or non-residential equivalent dwelling units to be served;
- Whether the improvement is to be funded through current debt service or use of other funds; and
- Net obligation in current dollars.

Communities across the country, including Santa Fe County (the Fire District Impact Fee), have adopted some form of development impact fees pursuant to statute to mitigate the impacts of new growth and maintain consistent levels of service for both existing and future residents. The current level of impact fee in Santa Fe County is approximately $50 per unit for a fire department impact fee. This impact fee is insufficient by several magnitudes of cost. There are no impact fees for the sheriff's department, correction facilities, equipment and substations; roads; water, sewer and stormwater management; parks, open space, trails recreation areas and scenic vistas. Pursuant to SLDP financing goals and objectives, these impact fees should be put in place. Utility user and impact fees have the capacity to pay for at least $150 million in capital obligations over the 20-year period of the Plan.

12.3.8.3 EXACTIONS, MITIGATION FEES AND DEDICATIONS

Before approving development projects, the County may require the developer to dedicate land for public purposes where proposed public infrastructure is located on the development land or to pay exactions or fees for off-site mitigation. Typically, exactions are imposed at the time of discretionary development approval. Courts have required that municipalities document the need for development exactions with studies that link the public purpose to be achieved with the nature and roughly proportional extent of the conditions imposed. This is most easily undertaken for on-site exactions, such as subdivision fee requirements and land dedications. The goal of providing adequate public facilities serves a recognized valid purpose if the exactions will mitigate development impacts proportionally caused by the developer upon whom the exaction is levied.

12.3.8.4 DEVELOPMENT AGREEMENTS

A development agreement is a voluntary contract between the County and a developer, whereby the developer promises to pay for certain on-site or off-site improvements or performs certain obligations in exchange for the vesting of future discretionary development approvals on the same project. A voluntary development agreement may be sought by a developer to avoid denial, or timing and phasing of the project by reason of failure to meet the adequate public facilities requirements of the SLDC. A development agreement may require payment or advancement of public facilities or improvements or obligate the developer to construct improvements at its expense. If the advancement of facilities benefits adjacent properties, the proportionate cost of servicing the adjacent properties should be reimbursed to the developer by the adjacent properties at the time of their development approval. Development agreements are useful tools for a community because they:

- Provide a mechanism for the County and developers to form agreements, binding on all parties, regarding development, financing and land use of the development project;
- Promote land development regulation by allowing the County to approve development agreements that include terms, conditions, and other provisions that may not otherwise be authorized without the use of a development agreement;
- Promote stability and certainty in development project regulation by providing for the vesting of rights for the developer and full enforceability of such agreements by all parties;
- Provide a procedure for the adoption of such agreements that ensures a public hearing for the benefit of the community and elected officials; and
- Provide mechanisms for establishment of public improvement districts and public infrastructure zones for the financing of capital facilities and public services as provided for in the SLDP, CIP and other adopted area, specific and community plans.

In Santa Fe County, the few development agreements that exist involve on-site infrastructure as compared to its full potential use for the funding and advancement of off-site CIP projects.

12.3.8.5 GENERAL OBLIGATION AND REVENUE BONDS

General obligation bonds (GOBs) pledge the full faith and credit of the County for Capital improvements. GOBs are primarily used for the non-revenue-producing and the non-development generated share of major capital improvement projects, including the County's share of state, regional and county-wide roads and highways, correctional facilities, storm water management facilities, parks, recreational areas, trails, scenic vistas, governmental facilities, structures and buildings, and repair and replacement of deficient facilities. GOBs can also be used for land purchases for rights-of way and other public facility sites on the Official Map. GOBs can fund equipment purchases in the form of large public safety or public works apparatus, central computer systems, and correctional facilities. Each GOB funded project may have a component portion financed by development fees, dedications and exactions, PID funds, revenue bonds, state and federal grants and tax distributions or TIDD bonds and funds.

Santa Fe County issues GOBs at a level of $20 million every four years. The County has recently issued bonds for the Judicial Courts facility and other purposes.

Santa Fe County, using the standard of 4 percent of assessed valuation (approximately $6.7 billion), has the capacity to issue GOBs in the amount of about $268 million. It currently has obligations of about 46 percent of that amount ($124 million). GOBs require electorate approval by majority vote.

The County of Santa Fe has used increments, or pieces of increments, to issue GRT-supported revenue bonds. GRT-supported revenue bonds are often restricted to certain purposes. These bonds are currently "maxed out" for the next 5 years, over which period the County may not incur additional debt using this form of bond. GRT bonds will become available in the last 2 years of the first 7-year CIP cycle.

Revenue Bonds are currently purchased by the County for a term of 15 years at the prevailing interest rate. These bonds are rarely paid off earlier; instead the capacity for future debt is allowed to accrue. Interest rates on General Obligation and Revenue Bonds are substantially lower in the current low-interest-rate market than they have been in the past.

12.3.8.6 OPEN SPACE BONDS AND COUNTY LAND BANK

The SLDP proposes that the open space system, as shown on the Official Map, would be partially financed through a Countywide PID.

The SLDP contemplates, in addition to sewer and water revenue bonds, raising approximately $70 million through a combination of $20 million from a General Obligation Bond, $30 million from a Countywide PID general obligation bond, and $20 million from open space impact fees, to raise the County's share for: (1) financing the acquisition and construction of the entire Official Map and CIP designated County parks, open spaces, trails, recreation, and scenic vista lands and facilities that is not otherwise raised through development open space impact fees, dedication of land and establishment of on-site PIDs; and (2) establishing a County Land Bank for the transfer and purchase of development rights ("TDRs" and "PDRs") to compensate, through the beneficial use determination process for restrictions on environmentally sensitive land, habitats, hillsides and flood hazard areas that cannot otherwise be mitigated by full or partial development on the land, or where development of the land would constitute a public nuisance exempt from state or federal constitutional taking claims. The $70 million would be further reduced by open space impact fees on residential and non-residential development.

12.3.8.7 UTILITY SOURCES OF FUNDS

Utility sources of capital funding are paid off by ratepayers within the utility service area. The water/sewer utility rate is comprised of charges for operations and debt service related to capital improvements. This utility should be expanded to augment water and sewer projects needed to prevent septic and individual groundwater well

contamination. This requires paying for upgrades to existing service and new extensions of service in the highest priority SDA-1 and SDA-2 growth areas, particularly the Community College District.

The County Water/Wastewater currently supports $4 million in expenditures and about $2.5 million in capital development support. The utility will be substantially benefited by available supplies of surface water from the Buckman Diversion Project. With this Buckman water supply, the utility will be able to support water/wastewater infrastructure development at ten times its current level in 15 years. This would be accomplished by mandating new users to attach to its water lines. A policy of mandated hook-ups within the expanded service area would generate sufficient numbers of new users, enabling a decrease in the current utility rates used for operation and maintenance. Taking into account operation and maintenance as well as bonded capital costs, there may be no increase to taxpayers.

12.3.9 IMPACT FEES

An impact fee is a charge or assessment imposed on new development in order to generate revenue for funding or recouping the costs of certain capital improvements or facility expansions necessitated by and attributable to new development. Impact fees include amortized charges, lump-sum charges, capital recovery fees, contributions in aid of construction, development fees, and any other fee that functions as described. Impact fees do not include utility hook-up fees, dedication of rights-of-way or easements, or construction or dedication of on-site water distribution, wastewater collection or drainage facilities, or streets, sidewalks or curbs if the dedication or construction is required by a previously adopted valid ordinance or regulation and is necessitated by and attributable to the new development.

The goal of an impact fee program is to equitably distribute the costs of serving new development while achieving sufficiency of capital improvement revenues. Impact fees exist together with proceeds from bond issues, motor fuel taxes, improvement and utility districts, and developer dedications as means of achieving adequate capital facilities. Together these sources should provide sufficient resources for the County to make the necessary investments for the projects shown on the CIP and have adequacy of public facilities.The essential issue with respect to impact fees is the need for the expansion of public facilities in order to adequately serve new development with:

- public roads;
- public parks, recreation areas, open spaces, scenic lands and trails;
- law enforcement protection equipment and facilities, including corrections;
- fire and EMS equipment and stations;
- potable water acquisition and distribution;
- waste water collection, treatment, and disposal;
- stormwater prevention and protection facilities.

Cities and counties in New Mexico are authorized to impose impact fees pursuant to the New Mexico Development Impact Fee Act."(§5-8-1 to 5-8-42 NMSA 1978).

New developments may be charged impact fees in order to generate funds needed to pay for capital facility expansion, or to recoup the cost of improving those facilities. Impact fees are typically dollar amounts that are charged for each residential dwelling unit, 1,000 square feet of commercial or industrial floor area, or per room for tourist facilities. There is a separate portion of the total fee paid for each of the individual public capital facilities. Once paid, the receipts are deposited into separate interest-bearing accounts for each category of impact fee. Balances may be removed from the separate accounts only to fund capital improvements that are specified in the CIP and are consistent with the limitations imposed by the New Mexico "Development Impact Fee Act."

The amount of an impact fee is set following a methodology that has evolved under legislative and judicial scrutiny. The standard is that an impact fee cannot exceed a "proportionate share" of a local government's actual or anticipated cost of accommodating new development with what are called "system improvements." System improvements are expansions of off-site public capital facilities shown on the CIP that are designed to provide service to the community at large. System improvements may be contrasted with "project improvements," which serve a particular development. An example of

project improvements would be on-site neighborhood streets. A proportionate share is defined by a reasonable means to calculate improvement costs and to distribute those costs over all benefitted developments in a manner where the amount paid is proportionate to the impact of the development being assessed the fee.

There are two major components of impact fee methodology. The first is the cost component. The second component deals with anticipated revenue. In order to establish impact costs it is necessary to begin with the cost per unit of capital facility. If the relevant facility was a public road, the unit cost would be the cost per lane-mile (one lane of roadway one mile long). For parks it would be cost per acre, and cost per mile for trails. These costs derive from CIP projects. In the CIP, specific improvements are incorporated with the number of units (acres, lane-miles, etc.) to be constructed and the cost of the improvements. The cost per unit is the first component of establishing an impact fee. The second component projects the amount of revenue that is expected to be available to pay for the various system improvements by means other than impact fees. These revenues would include items such as proceeds from bond issues, and grants in aid; any other revenue that is expected that could be used to pay the improvement costs. These anticipated revenues are also found in the CIP. The cost per unit of the system improvements is adjusted to reflect anticipated revenues and the result is net system cost per acre, lane-mile, or other measure of infrastructure. An impact fee schedule is computed by multiplying the net system improvement cost by the level of service and again by the demand units. A demand unit is the number of residents at the development, the number of vehicular trips, or other appropriate measure of demand. For example, a single-family home with 2.5 persons would have 2.5 demand units for parks. With a park level of service of 0.005 acres per capita, the number of acres of parks attributable to a single family home would be 0.0125 (545 square feet). This is multiplied by the net system impact cost, to set the park impact fee for a single-family home. For non-residential developments the demand units are usually expressed per 1,000 square feet of floor area.

The cost of system improvements attributable to a particular development is determined by multiplying the impact fee per unit (per residence, 1,000 square feet, etc.) by the impact fee established in the fee schedule. The role of the impact fee is to shift to new development the net costs of off-site system improvements shown on the CIP. This shifting of net costs will equitably distribute system improvement costs between the community at large and new development. Adjusting impact fees for available revenues assures that the cost shifted will be no more than that needed. The revenues derived from impact fees are then used to provide the needed improvements within the 7-year statutory period.

Many jurisdictions use “service areas” in establishing, collecting, and spending impact fees. A service area is the area that will be served by the system improvements or facility expansions specified in the capital improvements plan. Many public facilities have a jurisdiction-wide service area. Trails, open spaces, police protection, and fire/EMS are examples of jurisdiction-wide service areas. Other public facilities serve smaller areas. Typically, potable water and wastewater services have smaller service areas. Service areas are developed to provide a degree of congruity between the developments paying the impact fees and the areas benefitted by the improved facilities paid for with those impact fees.

12.3.10 CAPITAL IMPROVEMENT PLAN

The Capital Improvement Plan (CIP) is a significant component of the SLDP and Sustainable Land Development Code. The CIP’s phases comprise primary (seven years), secondary (seven years), and tertiary (six years).

The term “Capital Improvement Plan” (CIP) has been used instead of the national customary usage, “Capital Improvements Program,” in order to be consistent with the terminology of the New Mexico Development Fees Act, §5-8-37 NMSA 1978. This will ensure that the first 7 years of the CIP will also act as the 7-year “capital improvement plan” required by the Development Fees Act for impact feesShort- and long-range Capital Improvements Programs (CIPs) and Operating Budgets are important tools that ensure the County has the capacity to provide and maintain necessary public facilities and services and that the facilities and services are cost-effectively planned and equitably financed. The short-range CIP / Budget should identify and estimate costs of capital improvements and annual obligations (for staffing, training, *etc.*) required to serve development for the next 5 years. The long-range CIP / Budget should identify and estimate costs of improvements and annual obligations needed to serve development for years 6 through 20. This plan is not an engineering document, but estimates capital improvement and annual operating costs based on baseline data provided by County staff.

As part of the planning process, the County has created a new CIP to guide the development of facilities and services in a sustainable, planned manner. Projects within the CIP are prioritized by determining their sustainability score on six levels:

- Removes/prevents imminent threat to public health or safety;
- Improves the quality / corrects deficiency of existing services;
- Provides incentive for economic development;
- Reduces long-term operating costs;
- Furthers the goals of the SLDP; and
- Efficiency and leverage per square mile.

Each project will be given a score from one to five for each criterion, one being the project does not support the priority, five being full support of the priority. The 1st, 5th, and 6th criteria are each given additional weight. The overall priority within the CIP is then determined by the calculated total score (out of 35) for the project.

12.3.10.1 PRIMARY PROJECTS

Primary projects are those that will be funded during years 1 to 7 of the CIP period. The 7-year period has been selected because impact and other development fees are statutorily authorized only for all or part of projects financed over a 7-year period to cover the need generated by new development.

Primary projects have received the highest priority using a rating scale. Primary projects are those that will be financed through a multi-pronged financial program utilizing: (1) bond proceeds, taxes and other general revenues constituting the County general fund; (2) county-wide assessment and public improvement districts ("PID") bond proceeds, assessments, taxes, fees, rates, charges and other revenues; (3) County utility bond proceeds, rates, charges and fees; (4) discretionary development approval conditions relating to mitigation and advancement of infrastructure and services; (5) federal and state grants, loans, tax distributions, incentives and ICIP revenues; (6) economic development corporation revenues and tax increment development district ("TIDD") funding; (7) development construction and advancement of infrastructure pursuant to development agreements; and (8) impact fees, exactions and dedications required as a condition of development approval. Primary project identification and funding is critical for the County to implement the goals, objectives, policies and strategies of the SLDP. Primary projects may involve one or a mix of: (1) public facilities, the need for which is reasonably generated by new development; (2) regional and county-wide facilities; and (3) replacement and repairs to existing deficiencies. This is critical for determining the extent to which impact fees, dedications and exactions are statutorily authorized to fund conditions attached to development application.

12.3.10.2 SECONDARY PROJECTS

Secondary projects are anticipated to be funded during years 8 to 14 of the CIP funding cycle. The funding of these projects is critical to the SLDP priority growth area and adequate public facility policies, particularly for SDA 2 areas. Secondary priority is primarily due to two restraints: (1) the need to expand the CIP to serve a greater number of SDA 2 projects and (2) a lack of fundable revenue sources to finance these projects during the first seven years. Secondary projects may include the recurring public safety and public works projects of the primary phase.

12.3.10.3 TERTIARY PROJECTS

These projects, for years 15 to 20, are kept as part of the CIP and involve future projects as well as the need to complete current or secondary project systems. Again, the tertiary projects may include the recurring public safety and public works projects of the earlier two phases.

12.4 GOALS, POLICIES AND STRATEGIES

Goal 39: Protect and enhance the County's fiscal resources and ensure high quality public facilities and services.

Policy 39.1: Ensure that administrative fees are sufficient to cover the costs of development review and permitting and that user fees for public services reflect true costs to provide service.

Policy 39.2: Review and adjust County fees and rates on an annual basis, including fees for development review, solid waste and water/sewer connections and other services.

Policy 39.3: Support economic strategies that enhance the value of commercial uses, maximize absorption rates and increase real estate values.

Policy 39.4: Ensure the fiscal sustainability of the County through the efficient provision and phasing of public facilities and services, the use of fiscal impact assessments, and the use of the full range of revenue-generating tools.

Policy 39.5: Establish and assess public improvement districts to finance on-site development public facilities construction, operation, maintenance and repair.

Policy 39.6: Provide incentives for the installation of renewable energy and water recycling infrastructure.

Policy 39.7: Establish impact fees for new development for the provision of off-site public facilities and services, including but not limited to law enforcement, fire and emergency medical service, roads, water, sewer and stormwater, open space and trails.

Policy 39.8: Require new development to fund the proportionate share of on- and off-site public facilities and services, the need for which is generated by the development.

Policy 39.9: Use development agreements to encourage the advancement of facilities for projects that would otherwise be denied development approval for lack of adequate public facilities; for design, engineering and installation of on-site facilities for regional use (oversizing) and establish policies for reimbursement of the developer.

Policy 39.10: Establish funding mechanisms including public improvement and special assessment districts, development agreements and other means to fund local infrastructure and capital needs for existing deficiencies.

Policy 39.11: Establish a process for the creation of fiscal impact assessments (FIA) in order to identify the fiscal implications of a proposed project. Use these assessments to permit development only after a determination of the adequacy and financial provision for public facilities and services is adequate. Require the FIA to include assessment of the need for construction, operation and maintenance of: roads; stormwater management systems; fire, law enforcement and emergency response; trails, parks and open space; scenic vista sites; environmentally sensitive areas; and historic, cultural and archaeological artifacts and sites. Ensure the FIA estimates the minimum number of full time paid public service workers necessary to provide the services mentioned above, including costs for maintenance and operation of facilities and services. Require the use of nationally accepted and longstanding fiscal and economic models to estimate the fiscal and economic effects of development.

Goal 40: Ensure that adequate public facilities and services are provided and maintained .

Policy 40.1: Direct new development to SDA 1 and SDA 2 lands where infrastructure and service levels are adequate to minimize development costs.

Policy 40.2: The provision of new infrastructure and facilities should be coordinated with existing infrastructure and facilities and should maximize use of existing facilities capacity to the extent that any exists.

Policy 40.3: Establish and maintain adequate levels of service for road capacity, operation and maintenance; law enforcement; fire protection and emergency medical response times; parks, trails and open space; water, sewer and stormwater drainage.

Policy 40.4: Require adequate public facilities in a timely manner as a required precondition to development approval in order to assure a positive fiscal impact for the County, provide a high quality of life through infrastructure and service provision and protect the health, safety and general welfare of the County.

Policy 40.5: Require an adequate public facilities and services assessment (APF assessment) for all new development. Use APF assessments to approve or deny applications or to conditionally approve applications by phasing development approval of the project over a period of years but will be available for the initial or subsequent phases of the project for a future year in which the CIP shows adequate public facilities and services to be built and available based on the scheduled availability of public facilities and services as shown in the CIP.

Policy 40.6: Require the adequate public facility assessment for facilities and services to ensure that the cumulative impacts of development are measured and considered.

Policy 40.7: Require every applicant obtaining discretionary development approval to enter into a development agreement with the County, and any other applicable service provider, to implement the conditions of development approval for adequate public facilities and services.

Policy 40.8: Coordinate with other service providers on the timing and location of installation or replacement of utilities.

Goal 41: Equitably finance facilities and services.

Policy 41.1: New development should provide for and finance improvements consistent with the degree of impact to public services and/or infrastructure directly or indirectly attributed to the project.

Policy 41.2: Require that all costs of upgrading and/or constructing public and community facilities, and basic infrastructure exclusively needed to serve new development be the responsibility of new development and not existing residents.

Policy 41.3: Require financing strategies for new development that maximize the use of pay-as-you-go methods to gain the most benefit from available revenue without placing unreasonable burdens on new development.

Strategy 41.3.1: Develop and adopt the Capital Improvements Plan (CIP).

Policy 41.4: Annually update and prioritize the Capital Improvements Program (CIP) to ensure that projects are consistent with goals of the SLDP and targeted to Sustainable Development Areas. Prioritize County CIP and ICIP projects, state and federal projects that are located within priority Sustainable Development Areas.

Policy 41.5: Support identification and prioritization of improvements in an updated Capital Improvements Program.

Policy 41.6: Coordinate long-term capital improvement plans with service providers to efficiently provide and equitably fund infrastructure and services in a manner consistent with the needs of targeted industries and existing residents.

CHAPTER 13: HOUSING ELEMENT

The "Housing" element in Santa Fe County is a vital foundation that supports a comprehensive network integrating issues that affect community and economic development, land use, regulatory, infrastructure and related socioeconomic and environmental opportunities.

13.1.1 KEY ISSUES

1. **Santa Fe County must assess existing inventory of affordable homes, assess county and city absorption rates of affordable housing, special needs and rental opportunities provided to our workforce population.**

2. **Need affordable housing programs that address the spectrum of housing needs such as homelessness, affordable rental, deeply assisted homeownership, foreclosure prevention, rehabilitation of existing housing, energy retrofitting.**

3. **Affordable housing needs to remain affordable through energy efficient design.**

4. **Affordable housing strategies in the County need to be developed for the entire County to include traditional communities and rural communities.**

5. **The County needs to evaluate the current affordable housing initiatives and develop a systematic approach to address service gaps and leveraging external funding sources.**

13.1.2 KEYS TO SUSTAINABILITY

1. **Affordable housing should be required for new development within the unincorporated areas of the County and should be supported through developer incentives and direct assistance to qualified households.**

2. **Affordable housing should be integrated into mixed-income neighborhoods.**

3. **Energy and water efficiency will be considered as integral for all affordable housing projects.** Green building standards will be required to reduce the impacts of development on the environment and encourage healthy living conditions.

4. **Affordable housing initiatives in the County should complement and assist other social, environmental and land use strategies and policies to include appropriate affordable housing regulations.**

5. **A needs based approach should be used for regulation and provision of affordable housing in different parts of the County.** Housing should be directed to areas served efficiently by adequate facilities and services.

6. **The County should support programs for provision of special needs for housing** to include seniors who have specific needs in regard to housing costs, maintenance, accessibility, design and proximity to goods and services.

7. **Develop and support programs with private sector partners by outsourcing or collaborating with community** groups and non-profits that are have internal capacity and existing housing programs in order to be more efficient, cost effective, and maximize leverage of County funding.

8. **Support programs to maintain and rehabilitate existing housing stock to ensure energy efficiency and long-term affordability.**

13.2 CRITICAL FINDINGS

The County estimates a modest annual population growth rate but other demographic factors such as an aging population and changing economic conditions will play a significant role in the tactical development of policies and actions related to housing needs and demand. Also noteworthy is the different geographic areas within the County and their respective unique community fabrics and development patterns. In turn, housing initiatives in different areas of the County will require diverse approaches as well as in

their respective addressing of resource sustainability. Primary discussion in this section will focus on the role of affordable and workforce housing but general housing market conditions are taken in consideration and context.

13.2.1 AFFORDABLE HOUSING

Affordable Housing Program. Santa Fe County enacted an affordable housing program in 2006, in collaboration with a task force that also participated in developing the City of Santa Fe Affordable Housing program. The current affordable housing ordinance will need to be reviewed to establish geographical variation to applicability, to address unique local need, conditions and development patterns, and providing for a variety of incentives provided, including water availability, density bonuses, energy efficiency, development fee exemptions or credits, developer direct subsidy, reduced water utility connection charges or lot size reductions. A key strategy for affordable and workforce housing program will be to establish the link between the demand for affordable homes and other development. For example, as new non-residential development occurs, demand for affordable and workforce housing also occurs. With increasing energy and fuel costs, the combined costs for occupying a home become even more burdensome for residents. While home ownership is often a personal and community goals, there are many instances where rental housing is more affordable and more appropriate. There are currently very limited opportunities in the County for rental housing, and very few multi-family housing developments. Opportunities for rental housing should be provided. There is also a need to address standards for mobile home development to enhance its viability as an affordable housing option.

Homeownership Opportunities and Workforce Housing. During the mid years of this decade, significant increase in housing prices coupled with a stagnant wage-based income further widened the housing affordability gap in Santa Fe County. Over 30% of households paying mortgages in the County spend more than 35% of their monthly income on housing expenditures. Recent data shows that a higher percent of the City of Santa Fe's middle-income workers (earning between 100 and 150 percent AMI) and low-income workers (50 to 80 percent AMI) are moving out of the City and commuting in for work than workers at other income levels. Employers in the region will find it increasingly difficult to attract and retain employees due to the lack of affordable quality housing. Housing support programs may include down payment assistance, monthly rent assistance, low interest home improvement loans, , rehabilitation of substandard and inefficient housing units, foreclosure and homeless prevention.

Adequate and Attainable Housing. Provision of adequate and attainable housing is a vital foundation for supporting sustainable community and economic development. Demographic factors such as an aging population and changing economic conditions play a role in the development of policies and actions related to housing needs and demand. Unique community characteristics and diverse development patterns in different parts of the County impact policy and implementation strategies.

National definitions housing are created by the U.S. Department of Housing and Urban Development (HUD). According to HUD, the term ***affordable*** refers to the ability of a person or household to pay no more than 30% of their (gross) income for housing. ***Low/Mod income*** household is HUD's definition for families earning 80% or less of Area Median Income (AMI). The majority of federal and state subsidy programs are geared to assist Low/Mod income households.

However, in many communities, households earning more than 80% of the Area Median Income are also in need of some form of housing assistance, due to locally unsustainable wage levels or high housing prices. ***Attainable*** is a term that Santa Fe County may use to refer to households earning between 80% and 125% of AMI. Housing programs to meet the needs of both low/mod income households as well as families earning above 80% of AMI contribute to the social and economic sustainability of growth.

Workforce Housing. This term refers to the concept of providing programs that meet the County's diverse workforce housing needs, consisting of both owner- and renter-occupied housing that is affordable to the local workforce and carefully located to meet their needs. Lack of housing that is affordable to the local workforce causes increased commuting times, increased pollution, increased roadway congestion and less time at home with family. Quality of life suffers and the social balance of the community is disrupted.

From an economic perspective, adequate workforce housing supports a high-quality employment base for local and regional employers. Workforce housing is necessary if the County is to maintain and enhance its economic health and vitality. The provision of affordable housing helps to prevent neighborhood deterioration and a declining tax base. It is normal in Santa Fe County and many other regions of the country for workers to seek housing in other more affordable communities, forcing them to commute long distances to work. This economic factor affects the time available for work and the long-distance commutes have huge impacts on local and global air quality and global warming.

Special Needs Housing. There are also ***special needs*** populations outside of the workforce who need housing assistance. These groups include, seniors, persons with disabilities and the homeless.

Sustainable Housing. Sustainable neighborhoods provide a mixture of housing forms, sizes, prices and densities, as well as opportunities for social interaction, such as neighborhood parks or neighborhood-based schools. Conventional subdivisions are often designed and marketed to separate housing products from other community, civic, shopping and economic activities. Finally, from an environmental perspective, housing should be sustainable in terms of energy efficiency and its ecological footprint. The design of neighborhoods should support alternative transportation methods and public health goals through the integration of pedestrian facilities and proximity to employment opportunities.

13.2.2 PUBLIC HOUSING

The Santa Fe County Housing Authority ("Housing Authority") was created on November 17, 1972 and remains one of the largest landlords in Santa Fe. The Housing Authority currently manages 200 public housing units, 241 Housing Choice Vouchers (previously called Section 8), a Public Housing Homeownership Program, a Section 8 Homeownership Program, a Family Self-Sufficiency Program (FSS) and the Capital Fund Program ("CFP"). The Housing Authority's budget primarily consists of rental income and subsidies provided by the U.S. Department of Housing and Urban Development. It is the mission of the Santa Fe County Housing Authority to provide drug-free, safe, decent and sanitary housing to low-income and very low-income families in an environment that fosters self-sufficiency and community pride

The Santa Fe Civic Housing Authority, Inc. (SFCHA) is a non-profit public housing agency whose fundamental mission is to provide decent, safe and affordable housing for the residents of the city of Santa Fe. The Authority administers programs funded by the Department of Housing and Urban Development (HUD).

The **New Mexico Mortgage Finance Authority** is a quasi-public entity that provides financing for housing and other related services to low- to moderate-income New Mexicans. As the state's official housing agency, MFA administers more than 35 programs that finance housing for the homeless, develop new affordable housing, and help families become first-time homeowners. MFA partners with lenders, realtors, non-profit, local governments and developers throughout the state to make its programs available to all eligible New Mexicans.

In 1997, MFA became the state government's designated housing agency, bringing all of New Mexico's housing departments together under one roof. All state housing programs are now administered by the MFA. To date, the MFA has provided more than $4.1 billion in affordable housing for New Mexico's families. The principal program utilized by the state to provide affordable housing is the federal low income housing tax credit accorded to private for profit developers.

13.2.3 NONPROFIT AND COMMUNITY ORGANIZATIONS

Regional housing organizations have been key partners to issues involving affordable housing and include:

The Santa Fe Community Housing Trust is a nonprofit community development organization operating in northern New Mexico. The Housing Trust provides homebuyer education and counseling, assists homebuyers in obtaining mortgage financing, operates down payment assistance programs and certifies buyers for City, County, State and Federal housing programs. In its role as an affordable housing developer, the Housing Trust forms partnerships with banks, businesses, other nonprofits, and local government to produce high quality energy efficient housing. From 1994 through 2010, the Trust has developed and sold more than 500 homes in locations throughout Santa Fe.

Homewise, Inc. was founded as Neighborhood Housing Services of Santa Fe in 1986. Since its founding, Homewise has provided assistance to over 1,200 people purchase homes and has helped over 600 people keep their homes by providing financial and technical assistance for home repair. In addition, Homewise has trained and counseled over 3,000 people toward successful homeownership and has built over 150 affordable homes. The mission of Homewise is to help modest-income New Mexicans become successful homeowners in order to strengthen families, create wealth, and build strong communities. By providing opportunities for successful homeownership through innovative home purchase, home improvement, and education programs, Homewise helps New Mexican families realize their dreams of owning a home.

Santa Fe Habitat for Humanity promotes affordable homeownership for Santa Fe area residents by constructing simple, adequate houses through the cooperative efforts of volunteers, partner families, donors and staff. Annually, the Family Selection Committee solicits applicants for Partner Families throughout Santa Fe County, whose income is between 30% and 50% of the median. Applicants must be legal residents and have lived in Santa Fe County for at least one year. Families are selected based on their need, ability to pay and willingness to partner with Habitat. Selected families who are successful in completing the requirements will receive a no-interest mortgage on a house built to accommodate their family size and budget.

Enterprise Community Partners is a national nonprofit with 25 years of experience in the community development and affordable housing field providing capital and technical expertise in affordable housing and community development to local governments and non-profits. Central to its mission is Enterprise's fundamental commitment to give people living in poverty an opportunity to move up and out. Enterprise believes that these opportunities are best provided in communities with a diverse mix of affordable and market housing options, access to jobs and social supports, and a strong commitment to the environment and civic participation.

13.2.4 EXISTING CONDITIONS

There are an estimated 24,551 households and 27,027 housing units in unincorporated Santa Fe County in 2010. Almost 68% of households own their home, but despite a healthy rate of home ownership, affordability remains a challenge.

Santa Fe County established requirements for affordable housing through the Santa Fe Community College District Ordinance in and through the EZ ordinance. The County also adopted an inclusionary zoning ordinance (2006-02) to require development projects to provide affordable housing in the Central and Northern areas of the County. Over 200 affordably priced units have been created under the County affordable housing program, with an additional 200 units obligated to be constructed in the near future. There are also several master-planned development projects that may generate an additional 550 affordable units as obligations under these projects. While these units were approved and are obligated, market conditions will dictate the actual construction of the units. An Affordable Housing Fund has been created and adopted via ordinance and pursuant to the New Mexico Local Affordable Housing Act and Regulations. Regulations and related policies are pending approval and will support Housing Assistance and other tools in support of affordable housing priorities.

13.2.4.1 HOUSING MARKET ANALYSIS

During the mid years of this decade, significant increase in housing prices coupled with a stagnant wage-based income further widened the housing affordability gap. The median housing price for Santa Fe County (including City) was $289,000 in 2000 and, despite significant recent national downward trends in housing activities and pricing, $402,057 at the end of the second quarter in 2009. In comparison, the median household income of County of Santa Fe households increased by about 11 percent between 2000 ($59,300) and 2007 ($66,000) according to the Department of Housing and Urban Development. In 2007 at the height of the housing market, median price (over $500,000 in the County) of single-family homes in the County of Santa Fe was about 800 percent higher than the median household income. Households can typically afford to purchase homes priced between about 300 and 400 percent higher than their annual household income, depending on the size of their down payment and other factors, indicating an overall lack of affordability for homes purchased by the majority of the local workforce. The homeownership rate is 68% for Santa Fe County and 58% for the City; compared to 67.5% nationally. The current national homeownership rate has retreated to 2000 levels due largely in part to the economic downturn.

The subprime mortgage crisis helped to fuel the decline of economic growth and previously robust housing markets throughout the nation. Santa Fe County is not immune to the decline, but has not been as severely impacted as other parts of the nation. However, the downturn of the national economy in the third quarter of 2008 further compounded the housing affordability gap in the County. Construction activities have slowed in response to the increase in inventory and absorption rate for both residential and commercial units. Over 30% of households paying mortgages spent more than 35% of their monthly income on housing expenditures. With increasing conventional carbon based energy and fuel costs, the combined costs for occupying a home have become more burdensome, which has amplified the need for affordable housing for greater numbers of residents

13.2.4.2 WORKFORCE HOUSING

The persons and families that need affordable workforce housing are, for the most part, "working people." This is a particular hardship for those who work in entry level jobs that are vital to sustaining a good economy and a good quality of life for everyone, and also includes essential workers (police, fire, health care, utilities, teachers and child care workers) retail, industrial, office and service industry workers, entry- and mid-level professionals and public sector (government and non-profit community organizations) employees. The relationship between commercial enterprises and workforce housing is key to employment supply and demand factors, focusing location of residence, business location and transportation and accessibility.

The 2008 Housing Needs Assessment prepared by RRC and Associates concludes that a higher percent of the City of Santa Fe's middle-income workers (earning between 100 and 150 percent AMI) and low-income workers (50 to 80 percent AMI) are moving out of the City and commuting in for work than workers at other income levels. This is evidenced by the fact that a much higher percentage of workers in the City of Santa Fe that moved out of the City and into the County within the past 5 years earn between 100 and 150 percent AMI (35 percent) than resident workers (23 percent). Also, a somewhat higher percentage of those living in the County that moved out of the City of Santa Fe within the past 5 years earn between 50 to 80 percent AMI (25 percent) than resident workers (19 percent).

Homeownership is higher among in-commuters (87 percent) than resident workers (55 percent) or out-commuters (66 percent). In-commuters are also more likely to have children under the age of 18 in their household (49 percent) compared to out-commuters (36 percent) and resident workers (31 percent).

Resident households earning less than 50 percent AMI and over 150 percent AMI are more likely than other income groups to remain in the City. Households earning less than 50 percent AMI often have fewer housing options and resources to move and those earning over 150 percent AMI can generally afford and find suitable housing options in the City of Santa Fe. A similar percentage of in-commuters that used to live in the City and current worker households in the County earn between 80 and 100 percent AMI.

These findings indicate that some of the growth being experienced in the County of Santa Fe is the result of middle income workers moving from the City seeking affordability and/or a place to raise children. This supports the need for greater affordable transportation options for commuters as well as provision of services for families in the County, including schools and recreation.

Impacts on Employers. Housing and the cost of living in Santa Fe County are a problem for retaining and recruiting a qualified workforce. While employers noted a number of problems related to housing, with over 53 percent of County employers indicating that they had lost an employee due to housing or cost of living, compared to 40 percent in the City, most employers were generally not willing to support housing for employees (48 percent) or were uncertain (44 percent).

About 60 percent of employers in the County of Santa Fe noted that the availability of affordable workforce housing is "one of the more serious problems" in the County, and 7 percent felt it was the "most critical" problem (source: RRC 2008 Housing Needs Assessment). In the City, 54 percent of employers felt it to be one of the more serious problems with 11 percent saying it is "the most critical problem." The data shows that provision of affordable workforce housing is perceived to be significant by both County and City employers.

While employers are also supportive of city and County efforts to address housing through partnerships and regulation and use of city-County lands (66 percent support); however, they are generally not willing to assist in the provision of housing for workers in the region. 51 percent indicated they would support commercial development requirements, such as affordable housing required in conjunction with new development.

13.2.4.3 SENIOR HOUSEHOLDS

Retired people often have smaller household sizes, reduced incomes, and can suffer impaired abilities and mobility as they age. Without housing choices, long-time residents may be forced to leave the community they have always lived in to find appropriate housing as they age. It is expected that senior housing will be a growing concern as baby boomers age.

Senior housing is generally based on market-rate rents, and provides a community for seniors to live in that provides for their increasing needs. Communities that are designed for those 55 years of age and older are increasingly committed to an "active lifestyle" for seniors and cater to the increased health and vitality of today's seniors. Community input has indicated that there are seniors living within the community that are interested in market rate, senior-specific housing. Many middle-income seniors that are looking for housing do not qualify financially for the available government-subsidized senior housing. The preference of many seniors is to obtain modestly-sized residences where they can live near to their children and grandchildren.

Based on the County survey, 19 percent of households are headed by a senior in the County, totaling about 11,790 households (source: RRC 2008 Housing Needs Assessment). Nearly half (44 percent in the County, 48 percent in the city) of senior households had incomes less than 80 percent AMI in 2007. One-third has incomes under $30,000 per year. Projections suggest that demand for senior housing with amenities and services are supported will increase. Within the region, most seniors live in single-family homes (71 percent), and many will seek to transition from larger single family

homes into smaller units in the next decade. Resident senior households are expected to demand an additional 1,328 housing units by 2015, not including in-migration of seniors. Senior households looking to buy will likely be seeking housing priced primarily between $150,000 and $250,000 based on incomes and down payment availability. However, few developments in Santa Fe are specifically targeted for the retiree market with single-story designs and low maintenance yards. Retirees can find much more affordable product that meets their design needs in Albuquerque and Rio Rancho.

A large percentage of seniors who rent are cost-burdened by their housing payment and living in apartments. About 18 percent of senior-headed households in the County of Santa Fe have at least one person with a disability and are in housing that does not adequately accommodate their needs. These are households that are currently in need of assistance in the community. Currently, about one-third of all owner households and three-fourths of renter households require in-home care.

13.2.4.4 HOUSING FOR SPECIAL POPULATIONS

Special populations, seniors, developmentally and physically disabled, large families, single parents, the homeless or near homeless and ex-offenders. Various program strategies can be implemented to meet the needs of special populations, such as property tax abatement for lower income home owners, developing more group homes or shared living for the disabled, increasing emergency shelter options and offering transitional housing. Programs should be developed and continued that combine housing assistance with job training, education and day care. All of these programs will address housing and social needs for County and City of Santa Fe residents who encounter multiple obstacles when trying to improve their living situation.

Specific recommendations on special population needs as concluded from local service agency interviews include the following:

- Provide more rental apartments affordable to very low (30 to 50 percent AMI) and extremely low-income (below 30 percent AMI) households. The wait lists for existing City units are currently very long. A variety of housing types and unit sizes are needed in recognition that every household type will need a different type of housing.
- It is estimated that there are between 917 and 1,500 homeless per day in Santa Fe, depending on the time of year, and up to 4,000 individuals per year (Saint Elizabeth's shelter alone has 2,000 individuals per year). More shelter and homeless beds are needed with a winter gap of 603 beds for the homeless and 756 supportive beds.
- There is a lack of housing for purchase for people below 65% of the AMI. These units must be very affordably priced in order for people at this level of AMI to afford the monthly payments. These homes need to be priced in the range of $100,000 to $150,000 and will require concerted efforts in order to produce units at these price points.
- Prevention of homelessness, including foreclosure prevention and assistance with rental payments are important services that should be expanded in the community. There is also a need for better coordination among the multiple agencies working on homeless housing and services would assist the agencies in identifying gaps and overlaps in services.
- There is a known need for rehabilitation of existing homes on the Pueblos, as well as new home construction totaling approximately 311 units. Pueblos average annual income of $25,119 which is 60 percent of national norm and amongst the highest affordability gap in the nation. Pueblo population totals 30,497 for eight Pueblos.
- In the total County of Santa Fe, 9,862 households have at least one person with a disability. Of this, about 26 percent indicated that their homes do not adequately accommodate them. There is a need to update existing homes to accommodate individuals with disabilities.
- Resident housing needs have been defined for households with housing problems (as estimated from 2007 Household and Employee surveys). Aside from new unit development, other programs such as down payment assistance, monthly rent assistance, and low interest home improvement loans, home improvement labor assistance programs and reverse mortgage programs that permit owners to borrow against the equity of their home could help these households address their current problems of cost-burdened, overcrowding and homes in poor condition.
- Homeownership options should be addressed for special needs populations including senior cohousing projects. Homeownership programs should be designed to meet the needs of specific special needs populations.

13.2.4.5 HOMEOWNERSHIP AFFORDABILITY GAP

The affordability gap has widened over the years despite the recent national housing crisis (4th quarter of 2008) and decrease in the median housing price in the region. Compounded by rising unemployment rate and other economic factors such as escalating foreclosure rates, residents continue to experience increasing stress in terms of housing expense ratios. Energy and food costs also continue to be a factor and will likely remain in a volatile state for some time to come and therefore contributing to the affordability gap.

The largest gap, based on the distribution of demand compared to the distribution of units available, is for units priced between 50 and 100 percent area median income. Based on 2007 market conditions and in consideration of recent market adjustments and the subprime mortgage crisis, the projected demand is overestimated for the near future.

The gap may be partly addressed with existing lots to be developed in master planned communities if current market conditions persist. There are trends (2009) that developers are constructing units closer to the affordable purchase price. Moreover, inventory has increased for existing housing units (with 3200 homes on the MLS available in August 2009) and demand seems to have leveled and/or decreased for various types of housing.

Ownership housing programs should continue to focus on the low- and middle-income range between 60 and 100 percent AMI. These are programs that largely serve current residents and help them get established in the community with first-time ownership. Continued subsidized unit production for households earning between 60 and 80 percent AMI and 80 to 100 percent AMI will be needed to support local economic stability, especially with assistance to the local workforce, with some potential need at the 100 to 120 percent AMI level (8.7 percent of units needed) if home prices continue to rise faster than local incomes or if incomes remain stagnant.

13.2.4.6 RENTAL AFFORDABILITY GAP

In 2007, about 30 percent of "total County" units are occupied by renters (12,707 renters in city and 8,126 renters in County), 33 percent of which are single family homes, 35 percent apartments, and 10 percent mobile homes. Thirty-seven percent of all rental units were built in the last seven years.

Current rents in the County average about $812 per month, which is generally affordable to a 2-person household earning about 60 percent of the AMI. Comparing incomes of renters needing and demanding housing to the distribution of existing units shows a primary gap in the provision of housing for renters earning between 80 and 100 percent AMI (Source RRC Housing Assessment 2008).

To catch-up with current rental needs, about 76 units would be demanded by persons in-commuting to jobs in the County and another 528 units would be needed to relieve existing renters in either overcrowded or substandard units. About 40 percent of these units (242 units) will need to be priced for households earning less than 50 percent AMI.

To address future demand in the County, about 164 rentals will be needed by 2012 and another 72 units between 2012 and 2015. About 32 percent of these units will need to be priced for households earning below 50 percent AMI and 23 percent between 50 and 80 percent AMI. This assumption is based on economic recovery that will lead to growth of the local economy.

13.2.4.7 PROGRAMMING NEEDS

The following provides examples of specific programs in support of priority needs--constructing stock, improving and rehabilitating existing stock, and promoting access, lowering costs, etc.—related to the ownership and rental housing gaps. Given the above scenarios illustrating the widening gap of housing affordability, specific focus should be developed and directed towards actualizing the following:

Create an Affordable Housing Investment Fund that will leverage other funding sources to allow program funds to be disbursed throughout the county. The allocation of funds will be done through a transparent public process open to all parties eligible to apply for funding for specific projects.

Down Payment Assistance Loans or Grants for qualified households. May help to alleviate high mortgage balances and provide home equity for initial purchases of affordable homes. Will assist affordability and limit high LTVs (loan-to-value),

especially for the lower income range eligible buyers. Leverage with other programs from the State (NMMFA) and community organizations as well as federal funding opportunities

EAH (Employer-Assisted Housing) Program. This program offers Workforce of Local Government assistance in seeking affordable homeownership or rentals. Essential workforce such as Fire, Emergency and other public safety employees can be given preferences. Activity may be expanded to encourage private entities to develop similar programs that will directly help local workforce achieve and maintain a healthy level of living standards. This will address the continued trend of the local workforce moving out of the area in search of more affordable housing and lend to better community and labor stability.

Low Interest Loans and/or Grants for Energy Efficiency and Water Conservation for Affordable Housing Residents--Intends to help offset high energy costs in the occupancy of affordable units and to offer education and outreach on Energy and Water Efficiency and Conservation efforts. This will affect the long-term affordability of these affordable units as operating and maintaining a home continues to escalate in the region. Santa Fe County has adopted water conservation policies for development and residential units and this will be a vital partnership with the Affordable Housing Program in meeting these measures.

Low Interest Loans and/or Grants for Energy Efficiency and Water Conservation for Development Projects--Intends to encourage a high standard of Green Building, Energy and Water Efficiency and Conservation efforts in new development. Opportunities for Green Infrastructure may also be considered. This will improve not only the long-term affordability of but also the quality standards of these affordable homes and development projects.

Acquisition and Rehabilitation—foreclosure and homeless prevention, assistance for much needed repairs to ensure homes are safe for occupancy. Subject to funding availability and affordable housing needs, funds may be authorized for the market purchase of existing inventory to exercise the first right of refusal or to purchase back foreclosed properties.

Acquisitions of water rights for affordable housing. Intends to assist in the provision of affordable units in areas where infrastructures for water and wastewater services are encouraged. This may also affect higher density in various areas of Santa Fe County in an effort to promote more affordable housing.

Revolving Loans and/or Grants for Infrastructure Improvement and Financing. Intends to provide infrastructure partnership with Development Project and to ensure adequate and high standards are met in these improvements. It will also allow better infrastructure strategic and funding planning for the County. This will also help residents gain better access to improved infrastructure leading to community facilities and networks.

Partnerships with community organizations to leverage and share resources. Outreach and education related to affordable housing efforts may also be funded through these sources.

13.3 GOALS, POLICIES AND STRATEGIES

Goal 42: Effectively and efficiently provide adequate, affordable workforce housing for Santa Fe County residents.

Policy 42.1: Ensure affordable housing units provided meet the County's affordable housing needs.

Strategy 42.1.1: ***Review and amend current affordable housing ordinance to address appropriate locations, services and market conditions for affordable housing as deemed appropriate.***

Strategy 42.1.2: ***Support and expand the use of housing assistance programs, such as homebuyer training and down payment assistance and implementation of a housing investment fund.***

Strategy 42.1.3: ***Support development of affordable housing that considers the lifecycle costs of ownership and maintenance.***

Strategy 42.1.4: ***Support entire spectrum of housing needs from homeless prevention programs to transitional housing, to low-income rental housing, to home purchase assistance, to the rehabilitation of existing owner-occupied homes.***

Strategy 42.1.5: ***Leverage affordable housing efforts and minimize costs by utilizing existing housing expertise and programs.***

Strategy 42.1.6: ***Establish clear, measurable performance goals for all projects and programs supported by the Santa Fe County and hold all partners accountable for results.***

Strategy 42.1.7: ***Continue to support public-private partnerships for the provision of affordable housing.***

Policy 42.2: Maintain and establish appropriate incentives for affordable housing needs including: density bonuses, expedited review, phasing of inclusionary housing, public funding for development generated infrastructure, and free hook-ups to County sewer and water systems.

Strategy 42.2.1: ***Evaluate existing and appropriate affordable housing incentives to support the County's affordable housing needs.***

Strategy 42.2.2: ***Support affordable housing in areas with adequate public facilities including schools, transportation, water, public safety and emergency services, and other social welfare services.***

Strategy 42.2.3: ***Support and continue to provide developer subsidy for affordable units built according to the Affordable Housing Ordinance promoting quality units.***

Policy 42.3: *Support education and outreach opportunities to support residents and builders of affordable housing and expand and prom*ote affordable housing opportunities.

Strategy 42.3.1: ***Support efforts to develop owner-participation and sweat-equity programs to enhance housing opportunities and rehabilitation of units.***

Strategy 42.3.2: ***Support efforts to develop and distribute affordable and workforce housing educational material.***

Policy 42.4: Research potential for establishing live/work options for affordable housing.

Policy 42.5: Require that affordable units meet all County requirements, be built to the same construction and building standards as market-rate units, contain architectural design and construction materials meeting County requirements, and utilize the same green construction techniques and materials as those used for market-rate units.

Goal 43: Support the development of a variety of housing types in appropriate locations to meet the diverse needs of Santa Fe County residents.

Policy 43.1: Support development and preservation of high quality residential neighborhoods with a variety of compatible housing types to serve the various needs of Santa Fe County residents.

Policy 43.2: Ensure that all affordable housing units are of a sufficient quality equal to market rate housing, and use sustainable and green development design to promote long-term neighborhood stability.

Policy 43.3: Support the provision of multiple types of housing in mixed-use and mixed income projects in appropriate areas.

Strategy 43.3.1: ***Require all affordable units to be designed and located as to be integrated with market units in the development in terms of location, architecture, and landscaping.***

Policy 43.4: Support the provision of housing alternatives for seniors.

Policy 43.5: Support diverse housing types and promote mixed use, traditional neighborhood, transit oriented, clustered and planned development patterns that minimize transportation costs.

Policy 43.6: Support appropriate housing opportunities in the rural areas and traditional communities in the County.

Goal 44: Support long-term housing affordability and occupancy.

Policy 44.1: Support energy efficiency measures for existing housing stock by leveraging federal, private and state funding.

Strategy 44.1.1: ***Support rehabilitation and repairs for existing low and moderate income homeowners to reduce energy costs and improve energy efficiency.***

Strategy 44.1.2: ***Leverage affordable housing efforts and minimize costs by utilizing existing housing expertise, funding sources and programs.***

CHAPTER 14: GOVERNANCE ELEMENT

Good governance is effective and practical and should provide a basis to achieve clear and consistent policies and strategies, and should focus on achieving the goals of the SLDP and the County's long-term vision. The role and expectations for governance arising from past and current planning processes that produced good results should continue and new processes should be developed so that the process is more effective and transparent. Establishing greater efficiency and effectiveness in the planning process is an on-going effort that the SLDP seeks to improve upon. Good governance also lays the foundation for building more effective regional partnerships in the County and is one of the key ingredients for sustainable living and development of our communities.

14.1.1 KEY ISSUES

1. **Public has requested more involvement and transparency in County decision making and solving community problems.**
2. **Honor existing Community Plans and Ordinances and support community planning**
3. **Problems with variances and loopholes in the existing land development code has undercut comprehensive growth management and promoted uncertainty and mistrust among residents and developers.**
4. **Provide better coordination with municipalities, counties, Tribal Governments, acequias and land grant communities.**
5. **Inadequate and uncoordinated provision and funding of public facilities and services.**
6. **Lack of a consistent, clear and efficient development review process.**

14.1.2 KEYS TO SUSTAINABILITY

1. **Community participation is a key to sustainability.**
2. **Evolve the community participation process to meet community needs.**
3. **The SLDP should be established as the framework for the SLDC** and all other codes and regulations within the County.
4. **Consistent and Predictable Development Review Process**
5. **More emphasis on regional issues such as environmental and watershed protection,** maintenance of roads, economic development and service provision.
6. **Work with Tribal Governments to address and solve issues of mutual concern.**
7. **Recognize and establish better working relationships with Acequias Associations and Land Grant organizations.**
8. **Ensure that ethical and financially responsible governance occurs.**
9. **Enforcement of County regulations and Community Plans and Ordinances.**
10. **Creation of a New Sustainable Land Development Code**
11. **Establishment and funding of a Capital Improvements Plan.**
12. **Establishment of base zoning districts**
13. **Development of a strategic plan to implement the directives of the SLDP.**

14.2 COMMUNITY PLANNING AND PUBLIC PARTICIPATION

The Sustainable Land Development Plan will set forth a transparent, manageable and legal role for general, community and area-based participation. Effective community planning should be firmly rooted in Countywide goals such as sustainability, environment and economy but also focus on the community. There are several ways which groups and individuals can be involved in issues of community importance including the following:

1. General Public Participation
2. Community Planning and Community Planning Committee's (CPC's)
3. Community Organization's (CO's)
4. Registered Organization's (RO's)

14.2.1.1 GENERAL PUBLIC PARTICIPATION

Public notice and participation in planning and development decisions are important tools for building community trust and are supported through SLDP policies. Stakeholders (private citizens, property owners, residents, business owners, etc) must be notified of planning and development issues using effective tools such as the County's website, local news organizations, e-mail notifications, announcements at public meetings, meetings with elected and appointed officials and quarterly regional meetings held by County staff.

14.2.1.2 COMMUNITY PLANNING AND COMMUNITY PLANNING COMMITTEES

The County established a Community Planning Process in the 1999 Growth Management Plan which outlined a process for preparing community plans and provided for County staff to assist communities in developing plans for communities. The goal of the community planning process is to assist communities to identify and develop solutions to community problems and develop strategies to achieve their vision. Community planning presents an opportunity for residents to plan for and address local community issues, regional issues and county-wide issues, including those which may be overlooked from a county-wide perspective. It also considers a community's history and the ways that past planning efforts have shaped the area. The County community planning process is also concerned about supporting and educating residents in governance, power sharing and community problem solving.

Community plans developed through this process were the product of communities collectively identifying a common set of concerns, creating goals that address these concerns, and creating policies to achieve the goals for future development in the community through a consensus process. Community planning is a way for communities to express a cooperative vision for the future. Thus, the Community Plans and Ordinances are a critical component of the growth management framework and the SLDP. The SLDP will work well with these efforts; while the community plans accomplish planning at a small scale, the SLDP recognizes the need to plan on a larger, County-wide scale, recognizing that problems do not stop or start at the community boundaries, and neither should the solutions.

The Community Planning Process is outlined in Ordinance 2002-3 which established a role for County Planning staff to assist with the planning process and provide for local public involvement in the development of the Community Plan. The Community Planning Process requires that a Planning Committee be recognized by the Board. Members of this Committee should be residents, property owners and business owners in the community and be representative of its diversity. A Community Planning Committee must apply to the Board to receive authorization to proceed with a Community Plan. Existing community plans will undergo a review and revision process within 3 years in coordination with the Community Planning Committees. The Planning Process includes the following requirements:

1) A list of members of the initial Planning Committee at the time of application;
2) The conditions which justify undertaking a Community Plan;
3) A public participation plan assuring diverse representation of community residents, property owners, and business owners that also may include public meetings, surveys, establishment of topic specific subcommittees, outreach to community groups and interested parties, and focus groups;
5) A description of community commitment in terms of resources to be given to the process;
6) A map of the existing and/or proposed community boundary;

7) A recommendation of a community contact person or organization so that the County may notify the community about development projects and other pertinent issues;
8) Proof of reasonable attempts to notify the affected property owners.

14.2.1.3 COMMUNITY ORGANIZATIONS AND REGISTERED ORGANIZATIONS

A formal process to broaden citizen participation will be created through the SLDP to include geographically defined community groups, (Community Organizations) and Countywide organizations (Registered Organizations). A Community Organization ("CO") is an organization that is recognized by resolution of the Board of County Commissioners ("Board") for a specified geographical area. A Registered Organization ("RO") is any organization with a Charter or rules of organization that is interested in development projects or other specific County activities. ROs may include acequia and land grant associations, non-profit associations, assessment and public improvement districts, public or private utilities, school districts, homeowner associations, or neighborhood associations. The purpose for establishing COs and ROs is for communities and community-oriented organizations to have an improved public participation process to meet community needs and to make recommendations with respect to development projects and community development issues. In order to preserve the autonomy and independence of COs and ROs, staff support will be limited to administrative functions, in support of CO and RO rights, including providing notice, scheduling meetings and receiving comments.

Recognition of CO's. COs may be recognized by the Board in its discretion, upon the filing of an application for recognition as a CO to include the following:

1. A map or written description of the organization's geographical boundaries or geographical interests;
2. A list of the officers of the organization, including the CO mailing and e-mail addresses and telephone numbers for the receipt of notices from the Administrator;
3. A signed copy of the relevant organizing documents;
4. A regular meeting location and a regular meeting date;
5. The date the organization was founded; and
6. The number of organization members.

CO Rights and Responsibilities. COs will have the following rights and responsibilities, upon recognition of the CO by the Board:

1. The right to receive notice and provide written recommendations for any discretionary development application pending within the geographic area designated in the resolution of the Board recognizing the CO or notice of any public hearing or public meeting concerning such application;
2. The right to participate as a party in administrative adjudicatory proceedings pending within the area designated in the resolution of the Board recognizing the CO, and as such will, as appropriate, be permitted to present evidence and witnesses at a quasi-judicial hearing before the Board, Planning Commission, or Hearing Officer;
3. The right to receive notice, participate and make recommendations, as deemed appropriate by the Board, for any amendment to the SLDP, SLDC or an area, specific or community plan, official map, CIP, or zoning map, or monitoring of such documents, within the established geographical boundaries or interests of the CO;
4. The right to participate and make recommendations in the development of a community strategic work plan, studies, CIP, ICIP and public improvement and assessment districts, and levels of service for community infrastructure and services;
5. The right to coordinate with ROs, property owners, business owners and residents within the boundaries of the CO in matters related to a pending discretionary development review or administrative adjudicatory application;
6. The right to meet with the Administrator concerning matters of interest to the CO;
7. The right to participate in Town Hall meetings with the Administrator and County planning staff;
8. The right to participate in CO leadership retreats and training programs; and
9. The right to participate in an annual Congress of Community Organizations.

Recognition of RO's ROs may be recognized by the Administrator upon the filing of an application for recognition as an RO to include the following:

1. Defined geographic area and topic(s) of interest;
2. A list of the members of the officers of the organization, including the RO mailing and e-mail addresses and telephone numbers for the receipt of notices from the Administrator;

3. A signed copy of the adopted by-laws or other relevant organizing documents;
4. A regular meeting location and a regular meeting date;
5. The date the organization was founded; and
6. The number of organization members.

RO Rights and Responsibilities. ROs will have the following rights and responsibilities, upon recognition of the RO by the Administrator:

1. The Right to receive notice of any application for discretionary development review pending within the geographic area designated in the application by the RO and as recognized by the Administrator; and
2. The right to receive notice and participate, as deemed appropriate by the Administrator, for any amendment to the SLDP, SLDC or an area, specific or community plan, official map of the SLDP or zoning map of the SLDC within the established geographical boundaries or interests of the RO;
3. The right to participate in Town Hall meetings with the Administrator and County planning staff; and
4. The right to participate in an annual Congress of Community Organizations.

Staff Support for COs and ROs. In order to preserve the autonomy and independence community organizations and the due process rights of applicants, there will be no staff support for Cos and ROs except for the following:

- ✓ For COs and ROs: Provide notice, participate in Town Hall meetings and participate in development of any study, plan or regulation as deemed appropriate by the County Manager;
- ✓ For Cos: Participate in annual CO retreats and training programs, annual Congress of Community Organizations, and development of community strategic work plan.

14.3 INTERGOVERNMENTAL COORDINATION

Many problems faced by local governments are regional in nature, including issues such as population growth, environmental preservation, growth patterns, and the adequacy of public facilities and services. Partnerships should be established with the municipalities and communities, State and Federal governments, tribal governments, institutions and non-governmental organizations and other service providers. These partnerships should focus on coordinated growth management and service provision strategies. **Map 14-1** shows County Commission Districts, political boundaries, community planning areas, and transportation districts in Santa Fe County.

In other communities, lack of intergovernmental coordination has resulted in the loss of population and has created economic stagnation, undermining economic stability and public facilities and services. Adverse consequences can be avoided by coordinated comprehensive planning, the adoption and implementation of key growth management goals, policies and strategies, and sustained monitoring of development over the planning period.

The SLDP lays the foundation for building more effective regional partnerships in the County. Intergovernmental cooperation is any arrangement by which two or more jurisdictions can communicate visions and coordinate plans, policies, budgets and capital improvement programs to address and resolve regional issues of mutual interest. Many issues in today's interdependent, complex society cross jurisdictional boundaries, affecting more than one community, with the actions of one governmental entity impacting others. As noted above, many issues are regional in nature – watersheds, air quality and other ecosystems, economic conditions, land use, service delivery, commuter patterns, housing, employment centers and other growth impacts 'spill over' municipal or County boundaries and impact the region as a whole. The health of Santa Fe County's communities, including Traditional Communities, Traditional Historic Communities, Contemporary Communities, the Pueblos, the incorporated municipalities, the rural areas of the County and the welfare of the region are interconnected.

The County should work closely with other counties, municipalities, communities, Tribal governments, service providers and other governmental entities to coordinate their actions with each other. Since many issues cross jurisdictional boundaries, the activities of one level of government have extraordinary impacts beyond its jurisdictional boundary. Coordinated planning efforts will result in benefits to citizens of all communities in the region, such as:

- **Cost savings** - by increasing efficiency, avoiding unnecessary duplication and using area-wide cooperation and economies of scale to provide services that would otherwise be too costly, as well as to stabilize taxes by improving the performance and delivery of programs and services.
- **Quality of life** – use levels of service for transportation, police, fire, emergency, ambulance, sewer, water and environmental protection, to preserve lifestyle choices and maintain community character.
- **Environmental and cultural resources** – by protecting a 'critical mass' of environmentally and culturally sensitive areas and connecting protected areas to provide habitat corridors, which may include protecting adjacent areas in different jurisdictions, ecosystems throughout the region can benefit.
- **Economic development** - by enhancing economic growth by planning, funding and providing the infrastructure and services needed for sustainable community and regional growth, including requiring developments whose impacts on services and facilities cross the approving jurisdiction's boundaries to pay their fair share of the costs needed to mitigate the impacts generated by their growth and demand.
- **Early identification of issues** - to identify and resolve potential conflicts at an early stage, before public and private entities have established rigid positions, before the political stakes have been raised and before issues have become conflicts or crises.
- **Address regional issues** - by communicating and coordinating actions to address and resolve issues which are regional in nature.
- **Reduce conflicts** - by resolving issues before parties engage in litigation, resulting in diverting funds that could have been used to provide facilities and services, unwanted outcomes, and reducing tensions to improve the working relationships of local government, service providers and community organizations in the region.
- **Consistency and predictability** - of plans, development regulations, policies, implementation actions and development approvals between service providers and among neighboring jurisdictions, for residents, businesses and developers that establishes a framework of reasonable expectations and decision-making in the development process.
- **Jurisdictional cooperation** – established for the purpose of providing regional suggestions, standards and development review, it provides adjacent communities with the information necessary to make informed decisions regarding the regional impact of proposed development and encourages and supports the ability of service providers to adequately plan for the expansion of facilities and services, to meet the future needs of residents and development in the area.

14.3.1 TRIBAL GOVERNMENTS

Building on positive relationships with the Tribal governments is key to achieving coordinated growth management and efficient service and facility provision. This Plan recommends the expansion of coordination and cooperation, recognizing the benefits of information sharing and joint participation in a wide variety of projects that can benefit the community.

Intergovernmental cooperation and communication has occurred more frequently not only because communities and governments have acknowledged they are geographically connected by the natural environment and landscape, but also because limited resources in the area has made cooperation necessary to develop a support system between governments to better serve their communities. In addition, economic development that has occurred by various tribes on tribal land has also had an impact on the way that local governments and tribal governments work together to provide public services.

The first regional Intergovernmental Summit with municipal, County and Tribal government entities occurred in 2000 in order to address and solve issues in a regionally-minded manner. This event began to occur annually, with more government entities in the area attending, and Santa Fe County taking the lead as the annual host. Since the first Summit, intergovernmental cooperation was the goal sought. This cooperation would be made possible by creating Memoranda of Understanding (MOU) with the Tribal governments located within Santa Fe County. The first MOU was enacted in 2003 with the Pueblo of Nambe. In 2004 an MOU was created with the Pueblos of Tesuque, San Ildefonso, and Santa Clara. A MOU with the Pueblo of Pojoaque was then enacted in 2005. These MOUs were the impetus to create workgroups centered on complex issues affecting the region.

The principle goals for the creation of the MOUs with the above Tribal governments were to generate a commitment to establishing a positive government-to-government relationship. The primary intention of the MOUs has been:

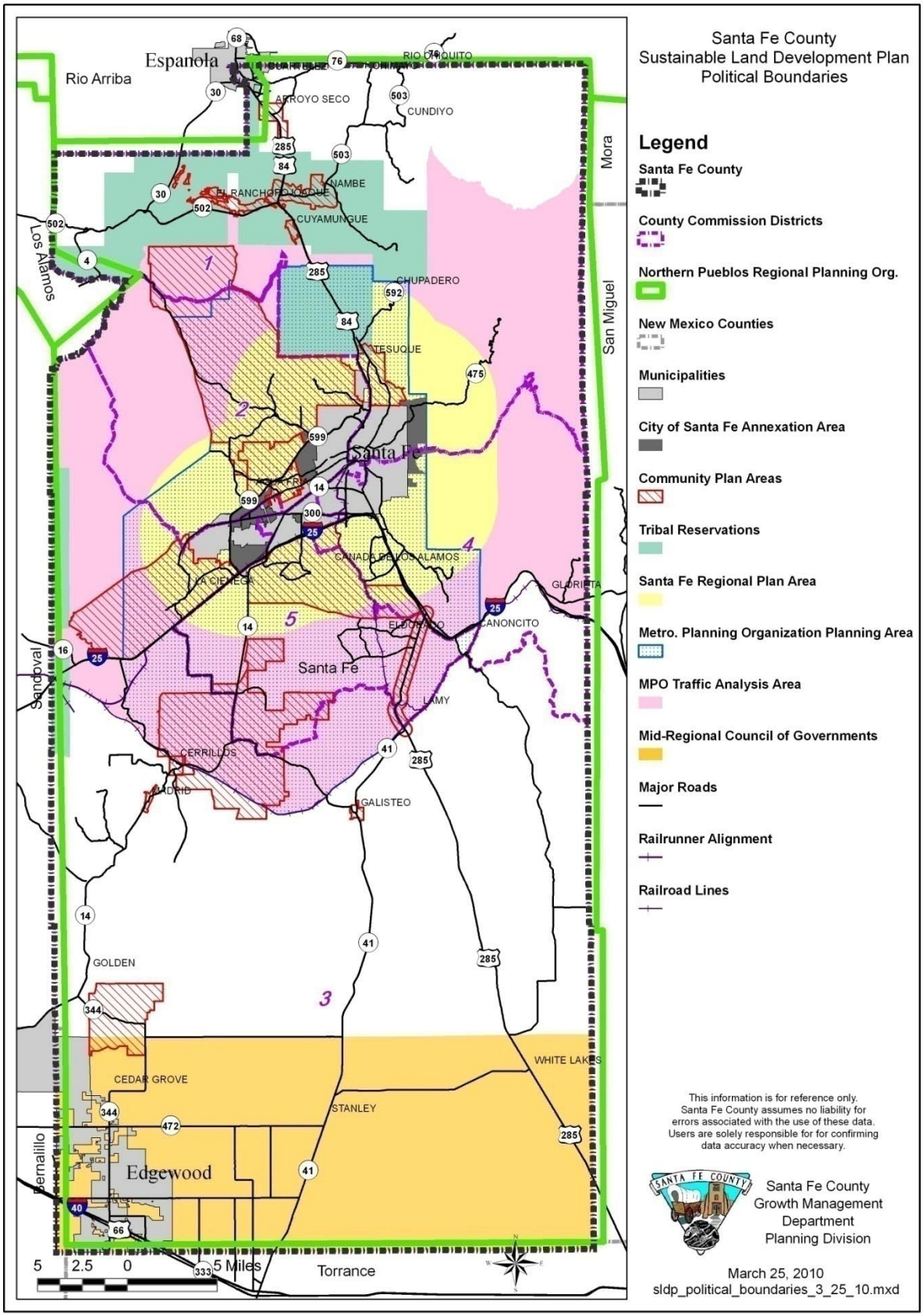
- Meet together to ensure the intent of agreements are carried out;
- Work together to promote and support regional solutions to issues ;
- Achieve open sharing of information, objectives and desired outcomes of goals;
- Identify issues of mutual concern to the parties that have been developed through previous work sessions; and
- Enter into agreements that promote working together in a spirit of cooperation.
- The following initiatives are existing examples where cooperation and the sharing of information occur between Santa Fe County and the Tribal governments through the existence of MOUs and other legislative initiatives:
  - Cross Deputizing of Surrounding Local Law Enforcement Officers with County Sheriff's Office
  - Configuration of Multi-community Countywide Public Transportation Plan
  - Establishment of New Community Specific Voting Precincts
  - Planning of New Water and Wastewater Utility Projects to Serve Multi-jurisdictional Areas
  - 2009 NM Subdivision Act amendments to allow Tribal notification of subdivision applications
  - Land Development Codes Configured in Alignment with Neighboring Governments' Codes
  - Partnership Approach to Seek State Funded Projects
  - Joint Introduction of State and Federal Legislation
  - Establishment of Reoccurring Multi-government Regional Issues Discussion Assemblies

The following items are examples of issues would benefit from intergovernmental cooperation with Tribal governments, including: environmental protection; improvement communication; prevention and clean-up of illegal dumping; road maintenance and easements; development review; sharing mapping data and resolving boundary issues; protection of archaeological and culturally sensitive areas; provision of water and wastewater infrastructure; interest and protection of "downstream users"; regional agricultural protection; economic development ; and renewable energy collaborations.

Continued dialogue and collaboration efforts will need to occur to address areas of mutual concern and the challenges and opportunities that will present themselves in the future. Current objectives for cooperation with Tribal governments include:

- Extension of high speed/broadband access to rural communities;
- Procurement of joint funding for emergency response service equipment, training and programs;
- Procurement joint funding to assist in future water and wastewater systems in priority areas;
- Coordination of efforts to address DWI prevention and substance abuse;
- Creation of community spaces for use by both tribal and non-tribal communities;
- Resolution of boundary issues with multiple parties, including private, Tribal, State, and County landholders; and
- Support for the use of in-place Pueblo and County utilities and infrastructure for future community related uses and needs.

Map 13: Santa Fe County Community and Political Boundaries



14.4 REGULATORY STRUCTURE

14.4.1 HEARING BODIES AND COUNTY STAFF

14.4.1.1 BOARD OF COUNTY COMMISSIONERS

The Board of County Commissioners (Board), in addition to other powers and responsibilities, will have the following powers and duties in relation to the SLDC:

- Initiate amendments to the SLDP for annual consideration.
- Initiate amendments to the text and map of the SLDC after a recommendation from the Planning Commission;
- Issue development orders on quasi-judicial discretionary development application;
- Approve development agreements;
- Adopt and amend an Official Map and Capital Improvement Plan (CIP);
- Establish public improvement and assessment districts, public infrastructure zones, and public utilities;
- Establish and amend schedules for administrative, application and consultant fees, dedications, impact fees, exactions, rates, charges and assessments, affordable housing fees, and security instruments;
- Initiate litigation and seek remedies to enforce violations of the SLDC or development agreements;
- Delegate to the Planning Commission the power to enforce and carry out planning, platting and zoning authority; and
- Hear and rule on appeals from decisions of the Hearing Officer and Planning Commission.

The Board will hold public hearings, issue development orders on applications for legislative or quasi -judicial discretionary development application (except where a final development order is to be issued by the Planning Commission).

14.4.1.2 PLANNING COMMISSION

A County Planning Commission should be created, containing seven members appointed by the Board., In order to meet the requirements of the state planning and zoning enabling acts, The Planning Commission should replace the County Development Review Commission (CDRC) and all local development review commissions (LDRCs). The Planning Commission will have the following powers and duties:

- Perform functions mandated by state law (NMSA §3-21-7);
- Hold public meetings and prepare written recommendations for adoption and amendment of the SLDC;
- Hold public hearings and prepare written recommendations to the Board on all preliminary and final development orders for discretionary development applications, including: major and minor site plans; major, minor and Types I though 4 subdivisions except certain Type III Subdivisions; development agreements; conditional use permits; variances; appeals from Administrator orders; and SLDC and SLDP text and map amendments;
- Hold public hearings and issue concept plan, preliminary and final development orders for the approval, approval with conditions or denial of quasi-judicial discretionary development applications, such as conditional use permits, site plans, subdivisions, variances and appeals from the Administrator; and

- Prepare and recommend to the Board amendments to the SLDP, area, specific and/or traditional community plans or other programs for public improvements, services and the financing thereof.

14.4.1.3 HEARING OFFICER

The position of Hearing Officer should be created to assist in the adjudication of the following quasi-judicial applications for discretionary development review:

- Overlay zoning district classifications;
- Major variances; and
- Beneficial use determinations.

The Board, in approving the SLDC, may also assign the Hearing Officer to the following additional duties:

- Rezoning;
- Site specific amendments to the SLDP, specific or community plans;
- Planned development districts;
- Conditional use permits; and
- Major site plans.

The Hearing Officer will conduct public hearings, make recommended written findings of fact and conclusions of law, and file written reports with the Planning Commission.

14.4.1.4 ADMINISTRATOR

The Administrator will be authorized to administer and enforce the provisions of the SLDC. The Administrator willbe appointed by the County Manager. The Administrator will make final decisions on the interpretation and definitions of the SLDC, the amount and applicability of administrative, application and consulting fees, the administrative enforcement of the SLDC, determine the adequacy of security instruments and escrow deposits, and issue of ministerial development approvals, subject to appeal to the Planning Commission.

14.4.1.5 TECHNICAL ADVISORY COMMITTEE (TAC)

A Technical Advisory Committee will be appointed by the Administrator and to serve as a review process and recommending body to assist the Administrator with the review of applications for discretionary development approval. The Administrator, at their discretion, may also convene the TAC for ministerial development applications. The Technical Advisory Committee will be used to gather advice and recommendations on technical details, including environmental, architectural, historical and cultural preservation, adequacy of public facilities, sustainable design and improvement standards, renewable energy, planning, fiscal, engineering, transportation, utility, geo-hydrological, water availability, air pollution, greenhouse gas emissions and sustainability issues. Meeting at least monthly, the TAC may include representatives from the following County departments: Fire; Sheriff; Public Works; Growth Management; Open Space; Community Services; Utilities; Financial; and Water Resources.

14.4.2 FEES AND APPLICATIONS

14.4.2.1 FEES (ADMINISTRATIVE, APPLICATION)

In order to ensure a more sustainable future for the County and protect existing residents from growth-related costs, application and administrative fees will be required to be paid at the time of submittal of development applications and should cover at a minimum all county staff time tied to applications for development and/or land use changes. The County will need to set up a clear process for the establishment and collection of such fees. Such fees are used to offset the expense of review by County staff.

14.4.2.2 APPLICATION FORMS

Application forms for proposed developments or land use changes should be easy to understand, concise and consistent with a streamlined development review process. The County should revise each of its current application forms and attach them as an Appendix to the SLDC. The Administrator will have the authority to return applications that are incomplete, subject to such review, remedies and enforcement as the SLDC will provide.

14.4.3 PROCESSES AND PROCEDURES

14.4.3.1 PRE-APPLICATION NEIGHBORHOOD MEETING

To ensure early and effective communication regarding proposed development, pre-application neighborhood meetings will be required. A pre-application neighborhood meeting gives the applicant and the community an opportunity to share ideas and input before the project reaches a stage where changes are more difficult to make. Such meetings also provide the public with information on the application process and what is going on in their neighborhoods, along with facilitating ongoing communication between applicants, citizens, associations and other stakeholders throughout the application application process. The meeting should include information indicating ownership of the property along with addresses and contact information. If the owner is an organization, corporation, LLC, etc. a list of the board of directors, along with a contact person should be provided. Such a meeting will be held before filing an application for discretionary development review.

After the meeting the owner should prepare a written report on the results of the meeting, included with the filing of the development application. Details of the meeting, such as the following, should be included:

- Dates and locations of all meetings held;
- List of property owners, CO's and RO's who were sent notice including a copy of the letters, notices and other publications sent out;
- Content distributed at the meeting;
- List of persons and associations to include CO's and RO's present at the meeting;
- Total number of persons participating in the process;
- Summary of concerns, issues, and problems expressed during the process;
- Summary of how the owner has addressed or intends to address the concerns, issues and problems expressed, including those that the applicant is unable to address.

A follow-up meeting after the submittal of SRA's may be required in order to allow a public review of the SRA's and should be held in a manner similar to the pre-application meeting. The report to the administrator should be submitted prior to an application submittal in order to allow the Administrator to determine whether there is a need for a mediation process. The Administrator may advise that the applicant hold a mediation to address concerns. Mediation may be also be directed by the Planning Commission or Board of County Commissioners.

14.4.3.2 GENERAL APPLICATION PROCESS

The general procedure for development applications should be similar to the following:

- Submittal of a complete application containing the required fees, affidavits, data, information, reports, assessments and studies;
- Review of the application by the Administrator, County staff, Hearing Officer, the Planning Commission, the Board and other applicable regional, state or federal agencies;
- Issue of a development order approving, approving with conditions or denying the application, together with written findings describing and supporting the action adopted; and
- Any appeal of the development order.

14.4.3.3 TYPES OF APPLICATIONS

Three basic types of applications should be created to handle all of the different types of applications. All applications fit within the following three types: Legislative Development Applications, Quasi-Judicial Development Applications, and Ministerial Development Applications.

Legislative Development Application
Legislative development applications involve a change in land-use policy by the Board, upon recommendation of the Planning Commission. For such applications a public hearing is required, but the procedural requirements of a quasi-judicial hearing do not apply. Legislative development approval should be required for the following:

- Adoption of any change in the SLDP or adoption of any change to an area, specific, or community plan;
- Adoption of or any amendment to the text or zoning map of the SLDC, the CIP or the Official Map;
- Creation of a planned development (PD) district;
- Overlay zoning district classification; and
- Approval of any development agreements that apply either Countywide or to a large number of properties under separate ownership.

Quasi-Judicial Development Application
A quasi-judicial development application involves the use of a discretionary standard to an application for discretionary development application that is applicable to specific land in common ownership or to an area of land in which the predominant ownership lies in lands in a single common ownership. Such applications should require a public hearing providing procedural due process. Examples include:

- Amendments to the Sustainable Land Development Plan or an area, specific, or community plan;
- Amendment to the text or map of the SLDC;
- Site plans/Master plans;
- Subdivision applications;
- Conditional use permits (CUPs);
- Development agreements;
- Variances;
- Beneficial use determinations;
- Overlay zoning district classifications for Developments of Countywide Impact (DCI's); and
- Administrative appeals.

The Quasi Judicial process will be detailed in the SDLC to ensure that both the applicant and any protestant will have sufficient opportunity for discovery and have equal opportunity to present their case before a hearing Officer. The Quasi-Judicial Process will:

1. Afford the applicant with sufficient opportunity to present evidence supporting the application;
2. Afford -potential protestants with timely notification of the Quasi-Judicial process;
3. Afford both applicant and protestants sufficient time for discovery and other aspects of due-process;
4. Insure that the County shall provide a Hearing Officer, hearing date or dates and sufficient time to hear arguments for and against the application; and

Insure that the hearing Officer shall prepare a written "recommended Development Order" for consideration by the Planning Commission.

Ministerial Application

Ministerial development applications involve nondiscretionary application of the standards of the SLDC to an application and typically occur late in the development review process. A public hearing should not be required for any ministerial development application. Examples include:

- Issuance of building permits, grading permits, minor land use disturbance permits, road construction and driveway permits, utility hook-up permits, floodplain development permits, NPDES permits, LEED construction permits, and neighborhood development permits;
- Administrative interpretations of the SLDC; and
- Issuance of certificates of completion and certificates of occupancy.

14.4.4 STUDIES, REPORTS AND ASSESSMENTS (SRA'S)

The SLDC should require a number of studies, reports and assessments to ensure decision-makers are adequately informed of the impacts of development to make the best decision possible. Studies, reports and assessments should be required for all applications for discretionary development approval on private property, public property leased to a private person or entity, and capital facilities projects in the unincorporated portion of the County, including schools and assessment or improvement districts. Such reports should not be required for small projects as specified in SLDC. .

The following studies, reports and assessments (SRAs) to cover the evaluation of the effects and impacts, if any, of the proposed development project will be required:

- Environmental Impact Report (EIR);
- Adequate Public Facilities and Services Assessment;
- Water Availability Report (WAR);
- Traffic Impact Assessment (TIA);
- Fiscal Impact Study (FIS);
- Emergency Service Study (ESS);
- SLDP, area, specific and traditional community plan consistency report; and
- Such other SRAs as the Administrator may require.

14.4.4.1 ENVIRONMENTAL IMPACT REPORT (EIR)

An environmental impact report (EIR) should be required to inform the County, the public and the applicant of the significant environmental effects and impacts of a project, identify possible ways to minimize the significant adverse effects or impacts, and describe reasonable alternatives to the project. The report should contain a summary of proposed actions and their consequences, including each significant adverse effect and impact, proposed mitigation measures and alternatives that would reduce or avoid an effect or impact identified. The report should also identify areas of controversy known to the County, including environmental issues raised by agencies and the public and a list of issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

Key contents of an EIR include a Summary; Project Setting; Environmental Setting; Consideration and Discussion of Environmental, Historic and Cultural Impacts; Significant Environmental Effects of the Proposed Project; Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects; Consideration and Discussion of Alternatives to the Proposed Project; Organizations and Persons Consulted; and Discussion of Cumulative Impacts.

14.4.4.2 ADEQUATE PUBLIC FACILITIES AND SERVICES ASSESSMENT

An adequate public facilities and services assessment should be required to present the availability of infrastructure and public service capacity for the proposed project. The provision of adequate public facilities in a

timely manner should be a required precondition to development approval in order to prevent urban sprawl, assure a positive fiscal impact for the County, provide a high quality of life through infrastructure and service provision and protect the health, safety and general welfare of the County. Knowing the existing and required levels of service for a project, compared to the capacity available and forthcoming according to the CIP is key to making informed decisions.

An adequate public facilities and services assessment should be used to approve or deny applications or to conditionally approve applications by phasing development approval of the project over a period of years based on the scheduled availability of public facilities and services as shown in the CIP. Every applicant obtaining development approval should then enter into a development agreement with the County, and any other applicable service provider, to implement the conditions of development approval for adequate public facilities and services. Facilities and services to be covered by an adequate public facilities and services assessment should include the sewer; water; transit and roads; stormwater drainage; police; fire; emergency response; solid waste; schools; libraries; parks and recreation; and trails and open space.

The assessment should be used to determine whether the proposed project meets adequate public facilities standards through existing facilities and services available; or should be denied because adequate public facilities and services are not currently available at the adopted level of service; or should be conditionally approved where facilities and services are not immediately available or presently adequate to meet the adopted level of service but will be available for the initial or subsequent phases of the project for a future year in which the CIP shows adequate public facilities and services to be built and available.

14.4.4.3 WATER AVAILABILITY REPORT

A water availability report should be required to allow County decision-makers to analyze the availability of adequate potable water for a proposed project. To protect the public health, prior to approval projects should be able to show that adequate water capacity is available to serve the project as proposed. The report should contain the following information on water availability: system capacity; capacity of a well field, stream, spring or other source of water supply; historical average flow of potable water; historical peak flow of potable water; number of hook-ups; estimated potable water demand per hook-up; and number of hook-ups for which contractual commitments have been made.

If the water currently available is insufficient according to the report the applicant should be required to acquire additional supplies to ensure adequate water availability. Because of the importance of groundwater resources to the County and its residents, reports including the use of groundwater supplies for water availability should include additional review factors such as more detailed analysis of the basin or basins involved, the outcome of any adjudication of the resource, State Engineer reports on the source and an analysis of the sufficiency of the groundwater source to meet the projected water demand from the proposed project.

14.4.4.4 TRAFFIC IMPACT ASSESSMENT (TIA)

A traffic impact assessment (TIA) should be required to assess the impacts on capacity, adopted levels of service and safety which are likely to be created by a proposed project. To aid in the analysis and evaluation of adverse transportation effects and impacts associated with proposed development projects in order to provide the information necessary to allow the County to assess the transportation effects and impacts of site-generated traffic associated with a proposed development project. Such an assessment is necessary to ensure adequate traffic flow and prevent dangerous hindrances to the passage of police, fire and emergency response vehicles. Such an assessment should include a description of the isolated and cumulative adverse impacts of the proposed project on the transportation network, including the relation of these impacts to the existing and future capacity of the road system, ensuring that established levels of service are not broken. Specific components should include site description; study area; existing traffic conditions; horizon years and background traffic growth; trip generation, reduction and distribution; traffic assignment; impact analysis; and mitigation/alternatives.

14.4.4.5 FISCAL IMPACT ASSESSMENT (FIA)

A fiscal impact assessment (FIA) should be required in order to study the fiscal implications of a proposed project. Such an assessment can be used to permit development only after a determination of the adequacy and financial provision for public facilities and services is/are adequate. Such services to be assessed should include the construction, operation and maintenance of roads; stormwater management systems; fire, police and emergency response; trails, parks and open space; scenic vista sites; environmentally sensitive areas; and historic, cultural and archaeological artifacts and sites. Such an assessment should estimate the minimum number of full time paid public service workers necessary to provide the services mentioned above, including costs for maintenance and operation of facilities and services also. Nationally accepted and longstanding fiscal and economic models should be used to estimate the fiscal and economic effects of development.

14.4.5 PLANS

This section identifies County plans and general processes to establish community, area, district and other plans and plan amendments.

14.4.5.1 COMMUNITY PLANS

A community plan is a plan which provides specific planning, design and implementation guidelines which are more specific to the community than the SLDP. Community Plans will be coordinated with planning staff in accordance with the community planning process. Community Plans should be consistent with the SLDP. Existing Community Plans and Community Zoning Ordinances are recognized by the SLDP. It is recommended that over a 3-year period following adoption of the SLDP, that Community Plans and Community Zoning Ordinances should be reviewed and revised to incorporate the binding principles enunciated in the SLDP. The SLDP and SLDC will apply to existing Community Plans and Community Zoning Ordinances in all cases where there is no direct conflict with a provision of an existing Community Plan or Community Zoning Ordinance. Community plans will undergo a review and revision process within 3 years in coordination with the Community Planning Committees. The process for creating or amending a community plan is outlined in the Community Planning Ordinance.

14.4.5.2 OTHER PLANS

Other Plans may be established through the SLDC which may include the following:

- Area/District Plans -Area/District plans may be established to create a plan for larger geographic areas in the County. Area/District Plans may contain specific planning and implementation and may be used to guide development applications, the development of facilities and services and infrastructure, annexation, assessment districts, and other area specific needs. Area Plans will be coordinated through the Administrator and planning staff.

- Specific Plans- Specific plans for an individual property or properties may be established through the SLDC. Procedures to create specific plans may be developed through the SLDC.

14.5 GOALS, POLICIES AND STRATEGIES

Goal 45: Aspire to a more effective, ethical and transparent government

Policy 45.1: Ensure transparent and ethical governance.

Strategy 45.1.1: ***Review and consider amending the current ethics ordinance to address transparency and ethical governance.***

Goal 46: Evolve the role of community planning and public participation.

Policy 46.1: The public should be included in County growth management planning to include community plans, area plans, district plans and development review activities.

Strategy 46.1.1: ***Coordinate the creation of area, district, and/or contemporary community plans for areas such as the airport development district, the Bonanza Creek/National Guard area, and southern Santa Fe County.***

Policy 46.2: Recognize and incorporate existing adopted community plans and zoning ordinances and the role of community planning committees as defined in the Community Planning Ordinance.

Strategy 46.2.1: ***The adoption of the SLDP will re-establish and continue the Community Planning process to allow communities an opportunity to reconvene or initiate a planning process in accordance with the Community Planning Ordinance, as amended.***

Strategy 46.2.2: ***Community plans will undergo a review and revision process within 3 years in coordination with the Community Planning Committees.***

Policy 46.3: Community Plans should be consistent with SLDP.

Strategy 46.3.1: ***Communities may address their unique needs through their Community Plans while remaining consistent with the principals and overall County directives identified in the SLDP.***

Policy 46.4: Establish a structure for community participation by adopting process for Community Organizations ("COs") and Registered Organizations ("ROs").

Strategy 46.4.1: **Establish procedures for Community Organizations (COs) and Registered Organizations (ROs) to comment on planning, regulation and the development review process.**

Strategy 46.4.2: ***Create a pre-application process to allow the public, CO's and ROs to be informed about proposed development projects.***

Goal 47: Promote intergovernmental cooperation and coordination to address regional issues and support County goals.

Policy 47.1: Support coordination and communication among entities and jurisdictions in the County..

Strategy 47.1.1: ***Establish the potential for joint projects, service agreements, and other cooperative arrangements.***

Strategy 47.1.2: ***Support coordination and communication with the communities in the County.***

Strategy 47.1.3: ***Coordinate with municipalities and counties to ensure adequate provision of emergency services and code enforcement and to plan for and address other regional issues.***

Strategy 47.1.4: ***Coordinate and cooperate with the Tribal Governments in Santa Fe County to pursue efficient facility and service provision, coordinated growth management strategies and other mutually beneficial goals.***

Strategy 47.1.5: ***Pursue cooperative utilities projects.***

Strategy 47.1.6: ***Create an Estancia Basin Area Task Force in coordination with the Towns of Edgewood and Moriarity, and the Counties of Torrance and Bernalillo.***

Goal 48: Ensure clear, consistent, and efficient development regulation and review.

Policy 48.1: Implement the SLDP through the SLDC, the Strategic Plan, Official Map and the CIP.

Strategy 48.1.1: ***Establish procedures for Tribal Governments notice and review of projects located adjacent to Tribal lands.***

Strategy 48.1.2: ***Establish baseline data and analysis by which to measure progress in achieving SLDP goals and policies.***

Policy 48.2: The SLDP will be the constitution to the SLDC and all other codes and regulations within the County. The SLDP is the standard against which all development applications, the SLDC, other applicable ordinances, codes, regulations and decisions are made.

Policy 48.3: Establish a Countywide Planning Commission that expands the role of the County Development Review Committee.

Policy 48.4: Updates or amendments to the SLDP, area plans, specific plans, and community plans should be prepared in accordance with the SLDP.

Policy 48.5: Develop a process for the creation of area plans to guide development applications, the development of facilities and services and infrastructure, assessment districts, and other area-specific needs.

Policy 48.6: Research potential for electronic applications.

Policy 48.7: Provide forms, permitting information, documents, plans, reports and on-line mapping on the County website.

Strategy 48.7.1: ***Establish a communication plan and notification process to improve communication with the public, including use of e-mail blasts, the County website, and regular press releases.***

Strategy 48.7.2: ***Expand communication and outreach to diverse populations.***

Strategy 48.7.3: ***Provide Spanish translation of County documents.***

CHAPTER 15: IMPLEMENTATION

The binding principles, goals, policies and strategies of each Element form the core of the SLDP's Policy Framework. The Policy Framework directs the Implementation Element, which describes the major tools for implementing the SLDP and achieving the SLDP's policy framework: the Sustainable Land Development Code (including the Zoning Map); the Official Map; the Capital Improvements Plan; and the Work Program (including the Strategic Plan and the Action Plan).

15.1 OVERVIEW

The County recognizes the pivotal role that local governments play in helping to achieve the vision for a long-term sustainable future and is a model for other New Mexico counties and cities by developing and implementing an actionable and defensible Sustainable Land Development Plan. In particular, the County will promote simple, easy to use best practices that promote sustainability. Since local government typically is resource-stressed, the County also will promote tools that offer cost-effective solutions and long-term savings.

The Plan implementation program identifies a number of tools available to the County that may be employed to bring the goals, policies and strategies of the Plan to fruition:

1. Sustainable Land Development Code
2. Official Map
3. Capital Improvements Plan and Financing
4. Infrastructure Capital Improvement Program
5. Work Program

These implementation tools are interrelated and work together providing continuity and breadth to the implementation program.

15.2 WORK PROGRAM

Successful implementation of the SLDP requires coordination by all County departments, other jurisdictions and service providers, and private decision-makers over the course of many years.

The Work Program is an implementation document for the County. It is designed to outline programs, plans and tasks. The Work Program for the SLDP will be a separate document and will include two parts, the ***Strategic Plan and the Action Plan***. The first portion is the ***Strategic Plan*** which includes the highest priority actions to be accomplished in the next two years (2010-2012). The ***Strategic Plan*** will include the strategies identified within the SLDP as well as other non-land-use related strategies that will implement County Policy. The second portion is the ***Action Plan*,** which includes strategies to be implemented in years three through twenty (2013-2030). Annual updates should consider new priority programs and the addition of programs which were included in a previous strategic plan, but not implemented.

Annual updates of the strategic plan should consider new priority programs and the addition of programs which were included in a previous strategic plan, but not implemented and should reflect County and community accomplishments, new approaches to community issues, changing conditions, shifting priorities and new demands. Tasks that are not funded in the recommended years should be evaluated for removal from the list or to be shifted back for later implementation. Programs that are completed should be removed from the list. The Work Program tables include information about implementation tasks, including:

Start Date / Priority. Identifies the timeframe in which the task should begin based on its priority.

Strategy Number. Cross-references the strategy number as it appears in the SLDP.

Project/Activity. Identifies the task and describes the project, action or document necessary to carry-out the strategy.

Plan Element. The related SLDP Element.

Tool. The primary tool or technique used to carry out the task.

Responsible Entity. The Department or Agency that will be responsible for leading the project. The abbreviations used in the matrix represent the following County departments:

Abbreviation	Department or Division
AS	Administrative Services
B&D	Building and Development
C	Corrections
CA	County Attorney
CM	County Manager
F	Finance
GIS	Geographic Information System
HHS	Health and Human Services
HR	Human Resources
IT	Information Technology
GM	Growth Management
PL	Planning
PRO	Procurement and Purchasing
PS	Public Safety (Sherrif, Fire Dept.)
PW	Public Works
U	Utilities

Capital Item. Whether the activity will impact the County's capital budget.

Budgetary Impact. The relative cost of the activity in relation to budget cycle. The estimated budgetary impact rating can be equated to the following:

Rating	Estimated Impact
Low	Time and expense, likely less than $50,000
Medium	Can be financed within one year of being budgeted
High	Requires multi-year financing

GOALS, POLICIES AND STRATEGIES

Goal 1: Continue the development of the Countywide Strategic Plan

Policy 1.1: County government structure and operations will be coordinated and efficient.

Policy 1.2: Develop County's strategic planning process

Strategy 1.2.1: Ensure Strategic Plan is updated annually.

Policy 1.3: County government should be a leader in sustainability for its internal operations and comprehensive sustainability planning.

Strategy 1.3.1: Continue energy audits to reduce energy use by County departments.

Policy 1.4: Encourage ways to use more sustainable, local and energy efficient materials for County operations and facilities. Establish sustainable practices and programs as part of County operations and facilities.

Strategy 1.4.1: Enhance County recycling program for County Departments.

Strategy 1.4.2: Identify and reduce redundant vehicular trips for County field operations.

Policy 1.5: Research potential to use more sustainable equipment for County operations and facilities.

Policy 1.6: Reduce resource consumption in County operations and facilities.

Strategy 1.6.1: Establish practices such as teleconferencing meetings; double-siding printing; .

Policy 1.7: Enhance and maintain a Countywide GIS database of existing data.

Strategy 1.7.1: ***Coordinate with NMBGMR and the USGS to develop a fault line map.***

Strategy 1.7.2: ***Coordinate with the Northern Arizona University Center for Environmental Sciences and Education to extend fire risk mapping for the southern portion of the County.***

Strategy 1.7.3: ***Coordinate with the Open Space and Trails department to maintain trail lines and attributes and with the GIS department to maintain geospatial models.***

Strategy 1.7.4: ***Develop new maps, such as a comprehensive potential wind energy map utilizing data from NWS; a Countywide aquifer sensitivity (susceptibility) map/layer; a map of Acequia lands (Adjudicated Areas); and a conservation easements map.***

Strategy 1.7.5: ***Identify the following areas: polluted and hazardous waste areas; scenic dirt roads; lands proximal to areas of importance to Native American groups (traditional cultural properties); areas prone to flash flooding or flooding external of the 100-year floodplain; active ranch lands (work with the Assessor); threatened and endangered species habitat areas (work with US Fish and Wildlife Service); and gather more recent information pertaining to irrigated crop lands.***

Strategy 1.7.6: ***Change data practices to conform to the following: save a new zoning feature class (shapefile or geodatabase) for each zoning change to create a zoning history/versioning; maintain Countywide zoning file in one feature class such as a geodatabase or shapefile; quality control the well data; maintain an inventory of conservation easement land; add springs and seeps to the dataset once field verified; and incorporate the 2010 Census into models.***

Strategy 1.7.7: Coordinate GIS data sharing with State and Federal agencies to develop a regular exchange of GIS information and datasets.Establish a process for enhanced coordination between the Land Use and Assessor Departments, including zoning and building permit approvals and updating parcel data in a timely manner.

APPENDIX A: PARTICIPATION AND ACKNOWLEDGEMENTS

Participating Organizations

ACE (Arts, Culture and Entertainment) Task Force

Acequia Association of Santa Cruz

Acequia de la Cienega y los Pinos

Acequia del Medio Tesuque

Acequia Madre de Tesuque

Adventure Trails Ranch

Agriculture Revitalization Initiative

Agua Fria Elementary School

Agua Fria Village Association

Agua Fria Water Association

American Institute of Architects

American Water Company

Arroyo Seco Association

Belicia Estates Homeowners Association

Beneficial Farm

Bureau of Land Management

Candlelight Neighborhood Association

Cerrillos Hills Park Coalition

Cerro Pelon Ranch

Chimayo Acequia Parciantes

Chimayo Cultural Preservation Assoc

Chimayo Mutual Domestic Water Association

Cielo Colorado Subdivision

City of Espanola Mayor and Planners

City of Santa Fe Representatives

Climate Change Conservation Corps

Concerned Citizens of Cerrillos

Creative Santa Fe

Cuatro Villas Mutual Domestic Water Users Association

Cundiyo Acequia Commission and Parciantes

Cundiyo Land Grant

Dos Griegos Homeowners Association

Earth Care International

Earth Works Institute

East Mountain Regional Trails Council

El Cojon Grande Acequia, Tesuque

El Guicu Acequia

Eldorado Area Water and Sanitation District

Entranosa Water and Wastewater Association

Environment Education Resource Center

Espanola Basin Regional Issues Forum

Estancia Basin

Estancia Valley Economic Development Association

Farm to Table

Galisteo Archaeological Sites Protection Committee

Galisteo Planning Committee

Galisteo Water Association

Galisteo Watershed Planning Partnership

Gallegos Ranch

Glorieta Conference Center

Glorieta Estates Mutual Domestic Water Consumers Association

Greater Espanola Economic Development

Habitat for Humanity

Homewise

Jacona Land Grant

King Brothers Ranch

La Bajada Community Ditch, Inc.

La Bajada Village

La Capilla Acequia

La Cienega Valley Association

La Cienega Water Association

La Puebla Association

Lamy Community Association

Lamy Water Association

Las Candelas de Los Cerrillos

Las Nubes Subdivision

Las Tres Villas Association

Los Vaqueros Subdivision

League of Women Voters

Madrid Cultural Projects

Madrid Landowners Association

Madrid Merchants Association

Madrid Water Cooperative

Moriarty-Edgewood School District

National Park Service

Neighborhood Housing Services

New Mexico Cattle Growers Association

New Mexico Economic Development Department

New Mexico Workforce Development

New Mexico Acequia Association

New Mexico Acequia Commission

New Mexico Department of Public Health

New Mexico Department of Tourism

New Mexico Department of Transportation

New Mexico Environment Department

New Mexico Land Conservancy

New Mexico State Land Office

New Mexico State Parks and Recreation

New Mexico Wilderness Alliance

North Central New Mexico Economic Development District

North Central Regional Transit District

Northern New Mexico Stockman's Association

Northern New Mexico College

Northern Rio Grande National Heritage Area

Office of the New Mexico State Engineer

Old Roads Ranch Subdivision

Old Santa Fe Trail Association

Oshara Village

Pinon Hills Subdivision

Pojoaque Basin Water Alliance

Pojoaque Soil and Water Conservation District

Pojoaque Valley Irrigation District

Pojoaque Valley Planning Committee

Pojoaque Valley Public School District

Presbyterian Medical Services

Quivira Coalition

Rancho Alegre Subdivision

Rancho de Bosque Subdivision

Rancho Viejo

Rancho Viejo South Homeowners Association

Regional Development Corporation

Regional Planning Authority

Rio Arriba County

Riverbank Ranch

Rural Conservation Alliance

San Marcos Association

San Marcos Planning Committee

San Pedro Neighborhood Association

San Sebastian Ranch

Santa Cruz Irrigation District

Santa Cruz Land Grant

Santa Fe Association of Realtors

Santa Fe Community College

Santa Fe Community College - Small Business Center

Santa Fe Conservation Trust

Santa Fe Food Policy Council

Santa Fe Hispanic Chamber of Commerce

Santa Fe Homebuilders Association

Santa Fe Housing Trust

Santa Fe New Mexican

Santa Fe Watershed Association

Santa Fe Farmer's Market Institute

Santa Fe Metropolitan Planning Organization

Santa Fe MPO Bike /Pedestrian Study Committee

Santa Fe Southern Railway

Santa Fe Transit Advisory Board

Sonrisa Homeowners Association

Southwest Bellamah Neighborhood Association

Synergia Ranch

Tesuque Mutual Domestic Water Association

Tuesday Car Table

The Independent

The Ridges Homeowners Association

Thornburg Enterprises

Thunder Mountain Water

Tierra de Casta Subdivision

Town of Edgewood Mayor, Councilors and Administrator

Turquoise Trail Association

Turquoise Trail National Scenic Byway

Turquoise Trail Preservation Trust

United Communities of Santa Fe County

United States Forest Service

United States Highway 285 South Coalition

Valley Unity Group

Vista Grande Public Library

Vista Ocasa Neighborhood Association

Vista Redonda Mutual Domestic Water Consumers Association

Warehouse 21

West Santa Fe Association

Wildlife Habitat of New Mexico

Youth Works

Public Meetings

CDRC Kick-Off Meeting; December 8, 2008

El Norte Charrette; February 2-4, 2009

El Centro Charrette; February 9-11, 2009

Galisteo Charrette; February 23-25, 2009

Estancia Charrette; March 2-4, 2009

Charrette Report Public Input Meeting; El Centro – April 14, 2009

Charrette Report Public Input Meeting; El Norte – April 14, 2009

Charrette Report Public Input Meeting; Estancia – April 15, 2009

Charrette Report Public Input Meeting; Galisteo – April 15, 2009

CDRC Rollout; October 1, 2009

Public Input Study Session; Pablo Roybal Multi-Purpose Facility - October 13, 2009

Public Input Study Session; Santa Fe Community College - October 14, 2009

Public Input Study Session; Edgewood Senior Center - October 19, 2009

Public Input Study Session; Galisteo Community Center - October 20, 2009

CDRC Public Hearing; November 12, 2009

CDRC Public Hearing; November 19, 2009

CDRC Public Hearing; December 3, 2009

CDRC Presentation; February 4th, 2010

CDRC Public Hearing; February 25th, 2010

SLDP Workshop Series; February 10th- April 1st, 2010

CDRC Public Hearing- April 22nd, 2010

CDRC Public Hearing-April 29th, 2010

CDRC Public Hearing-May 13th, 2010

Community Meeting for Southern Santa Fe Area; Stanley Community Center- June 3rd, 2010

Community Meeting for Southern Santa Fe Area; Stanley Community Center-June 21st, 2010

CDRC Public Hearing Stanley- Scheduled for July 1st

CDRC Public Hearing Scheduled for July 8th