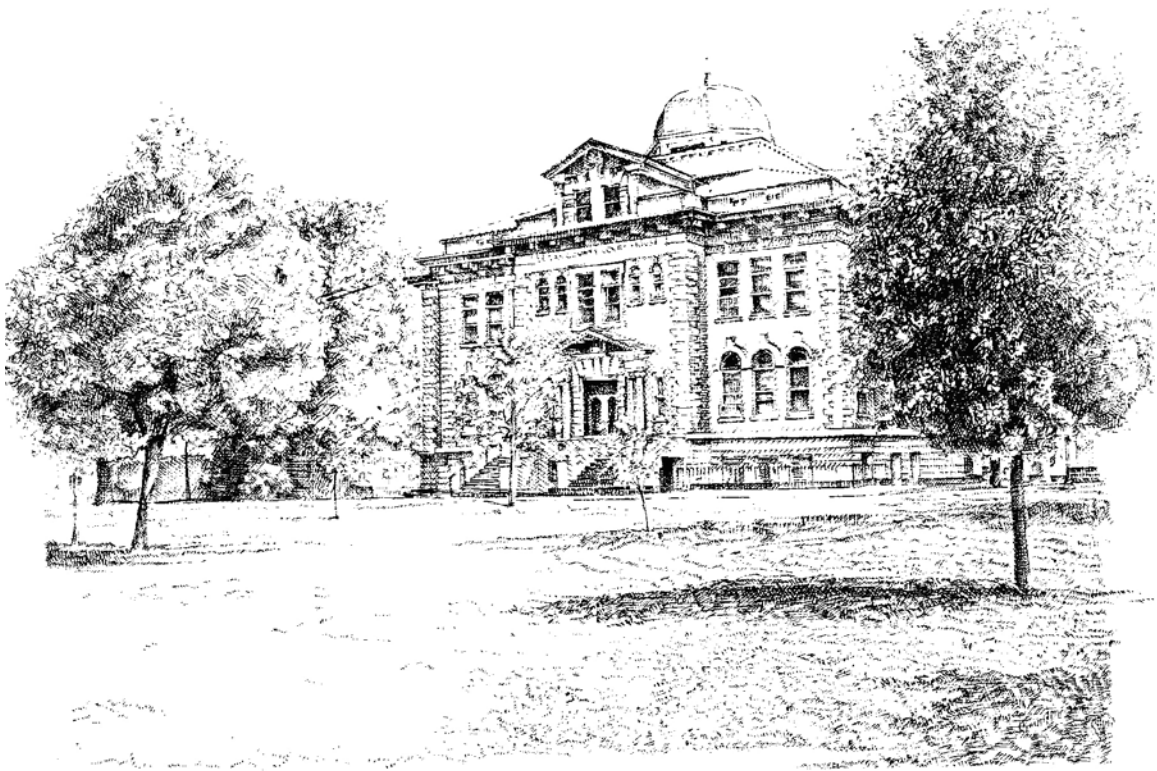


A VISION FOR LOGAN COUNTY, COLORADO



LOGAN COUNTY MASTER PLAN

2008 - 2018

I. Introduction

Purpose
Content and Organization
Effect

I. INTRODUCTION

A. PURPOSE

This Master Plan is a guide for decision-makers. It is a statement of community values, ideals and aspirations about the best management of the natural and built environments. In addition to defining the County's view of its future, the Master Plan describes actions to take to achieve the desired future. The Plan uses text and diagrams to establish policies and programs to address the many issues facing the County. The Plan is thus a tool for managing community change to achieve the desired quality of life.

B. CONTENT AND ORGANIZATION

The Master Plan includes ten major sections. They introduce the Plan; define the County's vision for its future; summarize past, existing and anticipated conditions affecting the County; describe the process used to prepare this Plan; establish goals, policies and implementation measures for six functional plan elements; establish policies for preparing Overlay Area Plans; describe key implementation tools; and provide background information.

The first four sections of the Master Plan provide useful background for the reader of this document. This section introduces the Plan, describing its purpose and organization. Section II defines the County's vision of what it should be in the year 2018. Section III provides an overview of the process used to prepare this plan, one with the involvement of citizens, boards, and the Area Planning Commission.

Sections IV, V, and VI are the backbone of the Plan. They contain six functional Plan Elements establishing goals, policies and implementation measures that will guide County actions relating to:

Natural Resources
Land Use
Housing
Economic Development
Public Infrastructure and
Public Facilities
Recreation and Tourism

Each Plan Element begins with a statement summarizing the most important information gleaned from research, workshops and other sources. Next, the key planning issues relating to the topic are described. These issues have been identified based on input from citizens, boards and staff input; the overlay zones developed for this Plan also influence them. These two sections give the reader an understanding of the basis for goals and policies. Following the statement of issues, the County's goals, policies and implementation measures are listed. The goals and policies are the most important part of the Master Plan. They state the policies the County will use in making decisions on development approvals, public infrastructure financing and other issues. The implementation measures are suggested strategies for achieving the County's adopted goals and policies.

Section VII lists goals and policies for the adoption of Overlay Area Plans, plans that focus on the special needs of various sub-areas of the County.

Section VIII provides a brief overview of the key tools that Logan County can use to implement this plan. This section is intended to give citizens and officials a single reference source for information about the tools available to the County in carrying out its Plan.

Section IX is the Master Plan appendix. It includes a glossary of the key terms used throughout the Plan and an annotated list of support documents generated during the planning process.

C. EFFECT

Planning is not a single event -- the adoption of a particular document. Rather, it is an ongoing process involving the actions by the County, the private sector, other public and quasi-public agencies, and the community-at-large. As conditions change, the County's Plan should be amended to take advantage of new opportunities and respond to new needs. Periodic review and amendment of the Plan will be required to meet statutory requirements and to assure it addresses the needs of County business and residents.

Standard definitions of goals, policies and implementation measures are used in all elements of the Master Plan. Goals describe a desired state of affairs in the future.

They are the broad public purposes toward which policies and programs are directed. They need not be fixed in time or quantity. Since goals are general statements, more than one set of actions could be taken to achieve each goal. In this Master Plan, goals are phrased to express the desired results of the Plan; they complete the sentence "Our goal is..."

Policies are statements of government intent which individual actions and decisions are evaluated. Policies are phrased as sentences, with the agency responsible for implementing the policy clearly identified. The wording of policies conveys the intended level of commitment to action. Policies which use the word **shall** are mandatory directives, while those using the word **should** are statements to be followed unless there are compelling reasons to do otherwise.

Implementation measures are actions recommended to carry out the policies. They aren't the only possible actions, which would achieve these goals. They are intended to set an initial agenda for implementation of the Plan.

The County will select measures for implementation in the next few months and years by considering the cost, urgency and benefit of each suggested measure. As a result, some projects may begin shortly after Plan adoption, while others may not begin for five or more years. Including a program or project on the list of implementation measures does not automatically create that program. The County will need to adopt budgets, consider new regulations and provide staff resources before new programs begin. Each of these implementation decisions will require public input and specific Board of County Commission action.

II. Vision for the Future

II. VISION FOR THE FUTURE

The Master Plan envisions a future with economic growth and development that contributes to a high quality of life for all residents in Logan County, Colorado. It is a future in which Logan County retains the integrity of its environment and capitalizes on its wealth of natural, built and human resources. Collectively, the following major planning concepts define this vision for the future -- a future on which the goals of the Plan's elements are based. This vision, created through the Logan County Planning Commission will be reflected in the draft Master Plan. The authority for such a Master Plan is found in C.R.S. 30-28-106. Each County in Colorado shall adopt a Master Plan within two (2) years after January 8, 2002 that meets the guidelines as established in C.R.S. 30-28-106.

- **Promote Beneficial Economic Growth, Development and Renewal.** Logan County should strive to create a supportive climate for business in its governmental operations and reach its full economic potential without sacrificing the character of its community and resources that attract this growth.
- **Ensure Sound and Integrated Planning County-wide with Consistency of Implementing Resolution, Regulation and Development Approvals.** Regardless of how well each plans independently, neither the County, its incorporated city and towns, unincorporated communities, federal and state agencies, nor the myriad of other regional and quasi-public agencies will effectively shape the future until each entity receives the cooperation of the others and all move toward common goals. The County's Master Plan is a statement of its goals for coordinated planning and action.
- **Promote the Growth of the County's Urban Areas.** Logan County will continue to focus its efforts toward making urban areas more attractive for growth, not only to protect and maintain the enormous investment in public services that has already been made in these areas, but also to help relieve the pressures of growth on environmental and fiscal resources in suburban and rural areas.
- **Provide Adequate Public Services at a Reasonable Cost.** Logan County should time and sequence the provisions of public services with growth so that the levels of service for roads, streets, rural water systems and sewage systems and other facilities are maintained as the County continues to grow.
- **Promote Adequate Housing at a Reasonable Cost.** Logan County needs to focus on real housing costs, which include not only principal and interest on the mortgage, but also future commuting costs, taxes, utility rates, insurance premiums, environmental costs, and other "hidden" costs of housing.
- **Protect the Environment.** Logan County must recognize the enormous economic value of its environment - the unspoiled beauty of the County that maintains its agricultural identity and attracts new growth while sustaining the communities. The County should encourage the growth of the City of Sterling, the Towns of Crook, Fleming, Iliff, Merino and Peetz and the

smaller outlying unincorporated communities that maintain the health of its citizens and integrity of its valuable environmental features.

- **Conserve the County's Natural Resources.** Logan County should protect wetlands, floodplain areas, washes, aquifer recharge areas, steep slopes, areas of unique flora and fauna, and areas with scenic, historic, cultural and recreational value, and capitalize on these resources for the long-term benefit of all residents.
- **Preserve and Enhance Historic, Cultural, Open Space and Recreational Lands and Structures.** Logan County should ensure that the built environment incorporates natural and historic treasures, recreation and tourism into the everyday lives of residents.
- **Assist the Local Businesses Economic Development Efforts.** Logan County should assist the business/industry in their promotion of economic development within their areas of expertise through the Logan County Economic Development Corporation. As part of this effort, the County should support joint public-private development proposals and the creation of other economic development incentives.

III. Context for Planning

Introduction
Community History
Logan County Today
Development Trends
Projections for Growth

III. CONTEXT FOR PLANNING

A. INTRODUCTION

This Master Plan defines what Logan County hopes to be in the year 2018. The Plan also describes policies and actions needed to build on the existing high quality of life and fully realize the community's vision for the future. The recommendations in this Plan result from both this vision for the future and the County's existing condition -- the natural environment; the characteristics of the County's population, facilities and services; historical and recent development trends; and its anticipated population growth.

This section of the Master Plan summarizes the background information that helped shape the Plan's goals, policies and implementation measures. It highlights the history of modern settlements that shape the character of the County. Recent trends in the number of people, the characteristics of those people, and the local economy are identified. Finally, this section includes projections for the anticipated growth in Logan County's population between the present and the year 2018. Overviews of natural resources and public facilities information are provided in Sections V and VII of this Master Plan.

B. COMMUNITY HISTORY

LOGAN COUNTY, COLORADO

Sterling, Colorado was incorporated in 1884 and became the County Seat of Logan County in 1887. Logan County was formed by an act of the Colorado General Assembly on February 25, 1887 when it was separated from Weld County. The County is an almost square block on the Great Plains of the West. Its dimensions of approximately 38 miles by 48 miles contain 1,183,360 acres of level to gently rolling land with some high buttes and canyons in the northern part and the South Platte River crossing it from southwest to northeast.

European immigrants who settled the area cannot take credit for being the first to live on the land that was to become Logan County. The grassland of this area was inhabited by Cheyenne, Arapahoe and Pawnee as well as other nomadic Indian tribes whose travels were dictated by seasons and other conditions. Huge herds of buffalo, the source of food, clothing, weapons and other supplies for the Indian tribes roamed the short grass prairie. There was a profusion of antelope, deer and other wild game available for the taking. An example of a popular campsite is the Summit Springs historic site south and east of Atwood, Colorado. In the expanse of time from 600 A.D. to 1869 it was often used by various Indian tribes traveling through the area.

Spanish explorers came to Colorado in the early 1700s but did not come far beyond the Arkansas and Rio Grande river valleys. French fur trappers are generally believed to be the first Caucasians in northern Colorado. They made early trails west into the mountains in pursuit of furbearing animals. The first white men known to have been in Logan County were the Mallet brothers. They, with six other trappers from a French settlement in Illinois, followed the river from near Julesburg to its westerly bend near Brush, then continued south to cross the Arkansas

River, and then on to Santa Fe, New Mexico. They named the river they had followed “Platte”, meaning “shallow”. This area was included in the territorial claims of one or both empires from the time of Spain’s conquest of Mexico in 1518 until the Louisiana Purchase transferred the territory from France to the United States in 1803.

Stephen Long, for whom Long’s Peak is named, led an expedition through here in 1819 and John C. Fremont led two expeditions, between 1842 and 1853, which passed this way. Stephen Long reported this area as wasteland, not worth settling.

Then came the discovery of gold. Before that there was almost no development in the west, although some trading posts and forts sprang up along the trails. The gold rush of 1858 in Colorado brought the long wagon trains of people across the prairies in search of quick wealth. Miners crossed the plains without settling, but in their wake came railroads, cattlemen and farmers. Although, some would be miners, discouraged by their long treks from the east, did stop and settle on the prairie. The South Platte Trail which followed the Platte River to Denver and the mountains is reputed to have seen thousands of people travel along it each day.

Until the Union Pacific Railroad was completed between Julesburg and Denver in 1884 these two towns were connected by the Overland Stage line which followed the river with stage stations every 10 or 15 miles. There were nine stations in the fifty miles between Julesburg, which was then a wild town of tents and shanties, and Valley Station near the present site of Sterling. The Union Pacific Railroad reached Julesburg in 1867 and Cheyenne, Wyoming in 1869. Locations of several of these stage stations have been determined and monuments marking where they stood are in place.

The stage stations as well as farms and settlements were attacked periodically by Indians. The last major battle on the plains between Indians and the Cavalry occurred at Summit Springs, southeast of Atwood in May 1869. The Washington Rancho, the Wisconsin Rancho and the American Rancho, among others along the South Platte Trail, catered to travelers. These ranches were also targets of attack by Indians. Holon Godfrey, who had a ranch near present day Merino, fought for three days against the Indians with such bravery that his place was one of only two on the trail to survive intact. The attacking Indians, impressed, dubbed him “Old Wicked” and his ranch was thereafter known as “Ft. Wicked.” The word “rancho” spelled with an “e” designated them as places of shelter and refuge rather than as working cattle ranches such as the Iliff Ranch which stretched along the Wyoming and Colorado border from Nebraska to near Greeley and Ft. Collins.

Billy Hadfield, an Englishman, came in 1865 to work for Bruce Johnson, who became Governor of Colorado in 1885, In 1871 Hadfield herded cattle downriver and stayed for the remainder of his life, establishing a ranch near present-day Atwood with headquarters on an island in the South Platte river he called Sardina. He was the first permanent citizen of Logan County.

The first cattle on the plains were those that pulled the covered wagons. These cattle were fattened and sold for beef. For some, raising cattle became more profitable than prospecting for gold, especially with free grazing provided in the vast, open grasslands. Some of the best forage was found on government land along the South Platte River of Eastern Colorado. J.L. Brush,

whose first headquarters was near present-day Brush, and John W. Iliff, whose headquarters was just south of the present site of Iliff, drove cattle by the thousands from Texas to this area. Here they grazed and were sold for beef to trading posts, mining camps, army posts, as well as for people in Denver and other settlements. With the coming of the railroads it became profitable to ship livestock to eastern markets. Iliff owned nine ranches, controlling every water hole between Greeley and Julesburg. When he died in 1878, he left holdings of 2,240,000 acres embracing 3,500 square miles and 54,000 cattle.

After the Civil War, families from the east and south came west searching for farm land. By 1875 they had established 12 homesteads about five miles northeast of the present City of Sterling. In 1881, M. C. King, who had acquired 400 acres in the Sterling area, offered 80 acres at the present site to the Union Pacific Railroad in return for their building a depot, a roundhouse and a hotel. When the railroad officials accepted, the present town was platted. By 1883 all of the original settlers had moved to the new location and Sterling was incorporated in 1884.

The farmer's house was of sod, cut from the soil in blocks and stacked. It was small with very thick walls. Because barbed wire had not yet arrived, the farmer's fences did not always keep out cattle or buffalo and gardens and crops were pounded into the ground by hailstorms, sometimes within days or even hours of harvest time. Added to other weather hazards were grasshoppers, drought and flood, wind and blizzards and the problems of unpredictable variation in a normally low average precipitation area.

Average rainfall in Sterling is 13.42 inches; the range is from less than 6 inches to more than 20 inches. It soon became evident that irrigation, new to the settlers in northern Colorado in the 1870s was a necessary concept. In these areas of scant rainfall, where agriculture depends on irrigation and stream flow is highly variable; (high during spring run-off and low the rest of the year), acquisition of stream water must be regulated for the use and benefit of more people.

The first territorial legislature in Colorado, in 1861, recognizing the need to make the most beneficial use of limited water, enacted legislation allowing non-riparian land owners to appropriate waters of a stream for beneficial use. The "riparian doctrine" an English Common Law concept, limits use of streams to those whose lands border the stream. This legislation recognized rights of users as "senior" and "junior" with senior rights to be satisfied ahead of later appropriators. The doctrine of prior appropriation was adopted as a constitutional provision when Colorado became a state in 1876.

Irrigation on a large scale started after the gold rush. It was the Union Colony ditch companies (Greeley) of the early 1870s and their development of a system of administration of streams and exchange of water that contributed most to the rapid growth of irrigation for commercial farming in the state. In Logan County the earliest priority dates for ditches, in order of priority, are 1873 for the Schneider, Sterling No. 1 and Buffalo (Merino) ditches. More ditches were constructed to reach the higher bench lands in the 1880s and 1890s. The North Sterling Reservoir was completed in 1912 with a capacity of 70,000 acre feet of water and has a 60 mile long intake ditch and an additional 60 miles of canals included in the system.

A stable agricultural economy on the plains depends on flexibility; the ability to shift among various crops and livestock or their combinations. A great influx of homesteaders from 1886 to 1888 and two winters of bad blizzards, in which thousands of cattle were lost, put an end to the open range. The drought and depression of the 1890's caused many homesteaders to leave. Dust storms ravaged farms and there was severe cold in the winter. Those who stayed discovered they could raise feed crops to supplement the range pasture, thus providing the basis for small cattle farms. This soon grew into cattle fattening operations on a large scale, the first of which was that of W. C. Harris in 1902.

The County's main community in 1900 was the City of Sterling, population of 1,000, which experienced rapid growth after the opening of the sugar beet factory. Because of unsettled political conditions in Russia, Germans who had moved to Russia during the reign of Catherine the Great immigrated to the United States in large numbers. The abundance of sugar beet crops in northeastern Colorado, northwestern Kansas and western Nebraska attracted these settlers because they had worked beets in Russia and were familiar with this crop. In 1904 the Sterling sugar beet factory was built with the first beets being processed in 1905. It was one of 15 factories that had been built in Colorado in the six years since processing had been brought to the State. Sugar was processed in Logan County for more than 50 years until the closing of the sugar beet factory.

Other irrigated crops included corn, alfalfa, beans, barley, oats and other small grains. Dry land crops included wheat, milo, millet, grasses and varieties of cane-type feeds. These crops are still grown today.

Sterling and Logan County's economy diversifies over the years as change and growth occur. In addition to agriculture, other industries have become major contributors over the years.

Northeastern Junior College was established in 1941 as Junior College of Northeastern Colorado. The name was changed in 1945 to Sterling Junior College and became Northeastern Junior College in 1950. It has experienced steady growth over the years and offers programs in occupational areas as well as transfer programs and community education. The College is expanding its programs to cooperate with other colleges and universities in offering degrees beyond that of Associate.

Oil development began in the late '40s and brought an upsurge to the economy that continued into the '60s. Growing out of the oil boom was a large construction industry that flourished for many years.

Other industries that have contributed to the economy over the years have included a meat processing and packing plant, Miller Western Wear, a railroad car repair company and many other agriculture related businesses.

A 21st Century business came to Sterling with the opening of an ethanol plant that employs a number of local residents as well as utilizing locally grown corn. In 2000 the largest Correctional Facility in Colorado was opened east of town and employs many Sterling and Logan County residents. The geographically higher area of Logan County boasts two smaller

and one large wind farm, bringing the County into the era of wind energy and offering employment to a number of people. Other sources of employment locally include the railroads as well as the Sterling Regional Medical Center and the nursing homes, the schools, and many privately owned businesses.

There are churches representing many denominations in Sterling as well as in smaller towns throughout the county. Service clubs such as Lions, Kiwanis and Rotary flourish in Sterling as well as in the smaller towns. The Colorado State University Extension programs and 4-H Clubs are visible in the county, especially at Fair time. Sterling Arts Council sponsors a number of varied concerts and other programs during the year. Sugar Beet days is a popular celebration each fall showcasing many craft booths as well as local talent.

The July 4th Heritage Festival is a popular way to celebrate Independence Day. The City of Sterling Recreation Center, now boasting an indoor and an outdoor pool as well as exercise equipment, volleyball and tennis courts, etc. is a popular diversion for people of all ages in the County. The beautiful parks in Sterling encourage people to spend leisure time walking the paths and trails and picnicking while little ones play on the playground equipment

Tourism has become an important part of the economy. Although Logan County geography includes no mountains, the establishment of North Sterling Reservoir State Park in 1992 as an attractive destination for boaters and campers from all around the state has boosted tourism in the area. The Overland Trail Museum, with its addition of the Dave Hamil building and enlarging of the village attracts museum goers from near and far. Bradford Rhea's wood carvings, several of which have been redone in bronze, are a popular attraction to bring sightseers into Sterling. The previously mentioned wind farms now known as the second largest, size wise, in the country are becoming more popular as a tourist attraction. The Visitor's Center at the rest area east of town gives out information on all of Colorado, but specializes in pointing out things for visitors to our area to see and do. Several locally produced brochures tell stories of our area from different perspectives and encourage people to stay long enough to visit the described attractions.

Smaller towns in Logan County offer their own charm and personalities as well as their own contributions to the history of the area. These include:

Atwood: The big city that almost was. When Logan County was established in 1887 the town hoped to become the county seat and laid a foundation for a courthouse. When Sterling was chosen instead, the foundation was used to build the Atwood School and there is now a house situated on it. At its height in 1928 Atwood had two doctors, a grain elevator, garage, beet dump, two mercantile stores, two pool halls, a post office, telephone exchange, train depot, two churches and a hotel.

Crook: Named for Major General George Crook, civil war veteran and Indian fighter who subdued the Apaches, Crook began in 1881 along the south side of the tracks with a store and post office. Later there were more buildings north of the tracks where the park is now, but these burned in an early fire. The present town site was platted in 1907 and burned again in 1924. Rebuilt again, by 1928 it had a population of over 300, five filling stations, eight

churches, four general stores, two elevators, lumber yard, barn, drug store and hotel among other buildings.

Fleming: The area was first settled in the 1880s by homesteaders living in sod houses or dugouts but was abandoned in the depression of the 1890s. It was resurrected in 1904 when the railroad arrived and J. N. Sanders opened a store and a bank. It was incorporated in 1917. In 1928 Fleming had over 300 residents. Buildings included two lumber yards, a telephone exchange, three elevators, two mercantile stores, hotel and a post office.

Iloff: The town was platted in 1887 and named for John C. Iloff, a pioneer cattleman of the 1860s and 1870s. Iloff's ranch headquarters was 2 1/2 miles northeast of Iloff at the intersection of roads 46 and 57. The town water pump, dating from 1890 remains in the center of town. In 1928 there were two garages, two pool halls, the post office, a grocery, a mercantile, the Iloff Independent newspaper, livery stable, theater and elevator among other buildings.

Merino: Some of the earliest settlers were members of the Holon Godfrey family who ran a stage stop in the 1860's. When the railroad arrived in 1881 the original name of Buffalo was changed to Merino and the town grew up northwest of the tracks. It was incorporated in 1917. Some of the buildings were a lumber yard, with the town library on the second floor, a cheese factory, the post office, grocery store and telephone exchange. The east side of the tracks is now home to Wisdom Manufacturing, a maker of carnival rides purchased by carnivals worldwide, and the building, housing sculptor Bradford Rhea's studio, is on Colorado Avenue.

Padroni: The town was platted in 1910 with a post office, store, lumber yard and section house at the railroad siding serving the construction of the North Sterling Reservoir. The old lumber yard can still be seen across the road from the tracks. To the south was the pickle receiving station and to the north the Chautauqua grounds. On the south side of Main Street the St. Clare Hotel still stands. The old school on the north side of town was built in 1919 and was famous for its community buffalo suppers in the 1950's.

Peetz: Originally named Mercer as a water stop on the railroad, the town was incorporated in 1917, changing its name to Peetz in honor of pioneer homesteader Peter Peetz. In its busiest years it had over 50 businesses and 450 residents. The road through Peetz was called the "Black Hills Highway" until it was moved to its present location east of the tracks. Early buildings included a bank, the Peetz Gazette, an old filling station with the old pump foundations along the street still visible, and a cement block building that was built as a rooming house by the railroad complete with an unusual block outhouse in the back.

Over the centuries there were many other small towns that began with high hopes, only to fade away with the advent of the automobile, or moving of a highway or train track. Some of these are LeRoy, Kelly, St. Petersburg, Winston, Armstrong, and Westplains. Other communities never became towns but were a gathering of 40 or 80 acre homesteads, each with a family, home and barn. These areas shared a school and sometimes a church but many did not have a name. Then, there were mystery settlements such as "Sod Town" between Peetz and Padroni. Nothing

remains but foundations of a number of houses, and no one seems to know a history of the area. Was it originally Winston; moved when the railroad came by east of there?? Or is there another story not yet discovered?

Sterling and Logan County face an interesting future, with the advent of wind, solar and ethanol as alternative energy, the continuing need for farming to grow food entangled with the conflict with front range areas wanting the water from Logan County. The need for a diversified economy depending on more than agriculture related businesses is being addressed, as well as the need for more retail establishments to help make Sterling the recognized center of commerce, education and medical facilities in Northeastern Colorado that it has the potential to be.

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C. LOGAN COUNTY TODAY

The characteristics of Logan County's population will have significant impacts on the County's needs and priorities. The rate of change, age and household characteristics of the population throughout the County will affect the type, location and timing of service needs.

Logan County has maintained a steady and even growth over the past two decades. During the last decade the County saw a 9.8% growth rate. Almost one-fifth of that growth (20%) manifested itself by Net Migration. Examining the percent of change in population for the years 2000-07, Logan County experienced a steady growth of .94%.

One of the telling factors when determining projections for growth lie in the development trends which indicate the timing and location of future demands for facilities and services. The average

household size in Logan County appears to be a definable constant of 2.48 persons per household (2007 Census Update).

Exhibit III.1: Population Growth by Area

Area	Population		Percent Change
	2000	2007	
County of Logan County	20,597	21,879	6.2%
County of Logan County	2008 22,429	2018 27,332	21.8%

Source: Colorado Division of Local Government, State Demography Office - Nov 07

D. DEVELOPMENT TRENDS

Development trends indicate the timing and location of future demands for facilities and services. Subdivision and building permit activity provide useful measures of long-term and short-term development trends. Subdivision activity reflects developer expectations of future demands for residential or non-residential lots. Building permits activity reflects expectations of short-term demands for specific types of structures on lots.

The subdivision of land into lots and streets is one of the first stages of the development process. The subdivision plat indicates anticipated development patterns, designating areas for buildings, utilities, drainage and roads. Development patterns established through the subdivision process generally do not change much during the later phases of the development process, thus they directly impact long-term demands and design alternatives for public facilities.

The 2000 Census of Housing found a total of 8,454 occupied housing units in Logan County. For the County 62.7 percent (5,301) were owner-occupied units, while 27.8 percent (2,350 units) were rental housing with a 9.5% vacancy. The median property value of an owner-occupied home in 2007 was \$125,802 and the median rent was \$475 per month.

E. PROJECTIONS FOR GROWTH

As indicated Logan County registered a 6.2 % increase in population over the census period from 2000 - 2007. The Colorado Division of Local Government, State Demography Office outlined a steady growth trend for Logan County from 2008 to 2030. Their projections are based upon birth, and mortality rates, migration patterns and demographic assumptions which show Logan County with a population of 22,429 people in 2008, expanding to 32,477 by 2030. Logan County continues to expand its economic base. Energy in the form of Wind Power, Natural Gas

storage and transmission, Ethanol production and our primary Agricultural and value added Ag-business base are the main drivers of our economy. Logan County is the center of retail trade and medical facilities for NE Colorado as well as having a strong educational presence. Value added enhancements to those bases will from time to time increase our population projections. Water and its availability is the key to this continued success in the region.

IV. The Planning Process

Introduction
Initial Public Input and Research
Baseline Analysis
Valuation of Plan Alternatives
Preparation of the General Plan
Plan Adoption

IV. THE PLANNING PROCESS

A. INTRODUCTION

Logan County's Master Plan is the product of an extensive planning process. This project began through the efforts of the Board of County Commissioners to anticipate growth and coordinate the public facility construction and other public actions needed to support growth. The planning process, described below, included research and analysis as well as input by citizens and community groups, the County's elected and appointed officials and representatives of other public entities in Logan County.

Adoption of the Master Plan is not the end of the planning process. The Master Plan is a guide for future County actions to achieve the goals of the County and its citizens. Plan implementation is the next stage of the process. Over time, the County will continue its responsive planning efforts by considering updates and revisions to the Plan. In this way, the Master Plan will remain a current statement of County policies and directions and an effective guide to public actions to achieve County goals.

B. INITIAL PUBLIC INPUT AND RESEARCH

Creation of a Countywide Master Plan was identified as an important component of this program. The Growth Coordination Program also includes efforts to propose new development regulations; and pursuit of joint planning efforts with Logan County and the incorporated communities.

The first product of the program was compiled information from interviews with County citizens. Initial public input meetings were held in January of 2008 with meetings held throughout the spring. Speaking engagements at local civic groups held by the Planning Commission Members and staff was interspersed with these meetings. All of these meetings gave the Planners a solid cross section of information from hundreds of County citizens and the data was reduced to combine repeated ideas, thus formulating a direction for the foundation of the Plan.

Once this information portion was complete the Planning Commission conducted meetings with key community leaders, sharing the thoughts generated by the general citizenry. This process took over two and a half months. The community leadership was amazed with the depth of the citizen input and offered some added thoughts. By and large they supported the thinking of the citizenry.

The Planners then met with County Elected Officials to report their progress and identify the citizens and community leader thoughts. Following meetings with the Board of County Commission members, the Planners met with County Staff. These meetings are always helpful in beginning the process of formulating cost analysis for future programs. It also brings the staff on board prior to the Public Hearing Process.

C. BASELINE ANALYSIS

Based on these interviews and research on development trends, the Logan County Master Plan flyer was developed. This flyer provides a brief overview of key issues and opportunities, and recommends goals and strategies to address these key issues identified by those citizens who gave input. This summary set forth below forms the basis for other aspects of the growth coordination program.

- The need to retain water rights in Logan County and investigate reuse of water.
- Use of Plants and other forms of vegetation and landscaping that require less water in our suburban density subdivisions.
- Work to improve drinking water quality.
- Mitigate FEMA floodplain designations where they are incorrect and digitally map them.
- Energy conservation should be encouraged through the use of more efficient design, materials and building practices. A weatherization/insulation program is needed to assure cost effective upgrades of weatherization and insulation in our existing housing stock.
- Suggestions for improving agency response to development.
- Support for a County plan for growth, instead of case-by-case response to proposals.
- Recommendations for revised street design requirements and easement policies.
- Recommend creation of Minor Subdivision process and revising Subdivision Exemption process.
- Protect infringement of residential areas in the agricultural areas of the County.
- Develop Overlay Areas around incorporated communities with specific development codes.
- Address rail and other traffic conflicts.
- Quality of life issues.
- Public transportation from incorporated communities to Sterling for medical care and shopping needs.
- Address childcare availability.
- Conservation.
- Planning criteria for recreational areas should be established.
- Encourage expansion & diversification of business and industry.

The flyer will be delivered through the news media to citizens in Logan County. A questionnaire is also included within the flyer to encourage citizen's input. One of the key questions being asked by the Planners to the citizenry is: *What is your vision of who we should be as a community 10 years from now?* This question was generated from the discussions between the Logan County Planning Commission Members and the community leadership. It is the desire of the Planners to encourage its citizens to choose, or provide guidance in this important area as the Master Plan is developed.

To describe the opportunities and constraints facing future development in the County and to suggest a desired vision of the County's future, the following plan language is presented by our citizenry and then expanded upon throughout the Master Plan:

- The County's assets include its green spaces, small town character, recreational opportunities, shopping and entertainment centers and the distinct character of the community.
- Economic development efforts are needed to provide more diverse job opportunities for residents. We need to capitalize on our strengths, agricultural and energy, by adding value added expansions as well as move forward in sustaining and expanding our foundation as the retail, medical and educational center for the region.
- Concerns about maintaining groundwater quality and existing water rights were noted as a significant aspect of the County's natural resources.
- Residents are concerned about managing growth, planning and constructing water and sewer facilities, and providing adequate roads. Overlay zones adjacent to area towns and the City of Sterling were encouraged to plan for future growth of the communities.
- The County should work to retain the small town character of their community, rather than allowing a big County mentality to become our thinking.
- The need for an industrial park in the Sterling area was encouraged.
- Access points to our communities and multiple way-finder signs to direct visitors to our retail, educational facilities and the medical facilities were identified as both an opportunity and constraint.

D. ENVIRONMENTAL ASSESSMENT

In addition to the issues initially identified by the public, many of the Plan's assumptions are based on a Master review of physical environment and trends. An Environmental Assessment of the County's natural features, hazardous conditions, and infrastructure usage and capacities was undertaken. In addition to examining existing conditions and trends, the analysis reviews numerous projections of population growth.

The Environmental Assessment - includes five key sections. The Natural Resources section explores conditions and issues relating to Logan County's geographical features: (1) air quality, (2) water resources, (3) cultural resources, (4) energy and (5) potential natural hazards. The Population and Employment section discusses trends and issues relating to population growth, population characteristics, housing, employment and the relationship between jobs and housing. The Development Activity section reviews available subdivision and building permit data. Based on population and development trends, the Population Projections section examines various projections for growth to the year 2018. The Environmental Assessment concludes with an overview of existing public facilities and services, including: parks, public safety, fire protection, water, wastewater, transportation, electricity, natural gas, emergency medical services, solid waste and hazardous materials, libraries and schools. Much of the information in the analysis has been updated and summarized in this Master Plan.

E. PREPARATION OF THE MASTER PLAN

Through meetings and discussion of policy issues and options, the direction, level of emphasis and amount of detail appropriate for Logan County's goals and policies were determined. The product of this cooperative effort was a draft Master Plan Executive summary for initial public

discussion. The public review process and County adoption of the Master Plan are described below.

F. PLAN ADOPTION

STATUTORY AUTHORITY

The authority for County Planning is generally authorized by Colorado State Enabling Legislation: C.R.S. 30-28-101, et seq. This Master Plan is specifically authorized by: C.R.S. 30-28-106. This legislation requires County Planning Commissions to prepare and adopt a Master Plan for the physical development of the unincorporated territory in the County. This document constitutes the official growth guide for Logan County, Colorado. This document constitutes the official growth guide for the County until amended by the County Planning Commission and approved by the Board of County Commissioners.

APPROVAL

This is to certify that the Master Plan and associated Land Use Maps referred to in this Master Plan Document was duly approved and certified by the Logan County Planning Commission on this 9th day of December 2008.

Dave Whitney, Chairman

Jim Neblett, Secretary

[This section won't be completed until after Board of County Commission adoption of the Master Plan; it will report on the public review of the discussion draft, the deliberations and recommendations of the Planning Commission, and the actions of the County of Logan County Board of County Commission's adoption of the County's Master Plan.]

V. Resource Conservation

V. RESOURCE CONSERVATION

A. NATURAL RESOURCES ELEMENT

The Natural Resources element addresses issues relating to Logan County's environment. The element includes sections on air quality, the quantity and quality of surface and ground water, natural resources, energy and scenic resources. Each section includes:

- a brief overview of existing conditions and trends;
- a list of key issues that the County should address;
- goals and policies that should guide the County's approach to resolving the key issues; and,
- implementation measures, which are suggested actions that will help the County achieve these goals and policies.

1. AIR QUALITY

Clear, clean air attracts tourists and new residents to the County, but these new residents and tourists lead to increased traffic, construction, power generation and other human activities that can reduce air quality. It would appear that the air quality meets acceptable state and federal standards.

Airborne particulate is the primary cause of reduced visibility in Logan County. The particulate of concern is small breathable matter that can be suspended in the atmosphere. Construction activities, motor vehicles, industry, agricultural activities and wind blown dust can generate these. Once airborne, particulate can be carried great distances before they are washed or settle out of the air. At high concentrations these particulates may possibly pose health problems. Even at acceptable levels, they reduce the quality of life.

Key Air Quality Issues

Monitoring. To evaluate changes in air quality, the County must have access to air quality data from locations throughout its boundaries. An ongoing monitoring program would help the County to decide whether air quality measures are needed.

Maintaining Air Quality. Agriculture, mining and construction activities all produce dust and particulate. As a result, these activities may contribute airborne particulates that reduce visibility in the County. By encouraging techniques to reduce dust from these operations, the County may lessen the effect of such activities on air quality.

Air Quality Goals and Policies

GOAL 1: To increase County efforts to maintain or improve existing air quality.

- Policy 1.1** Logan County should encourage extension services to utilize techniques that minimize the amount of air-born dust resulting from agricultural and mining activities.

Policy 1.2 Logan County should encourage agricultural/manufacturing operations to research all available resources to decrease the odor and pursue options to reduce it.

GOAL 2: To establish construction and development standards that maintain or improve existing air quality.

Policy 2.1 Logan County should adopt policies for dust management at construction sites.

Policy 2.2 Logan County should adopt urban and suburban road construction and surfacing standards that will, to the maximum feasible extent, minimize traffic-related dust generation within growth overlay zones.

Policy 2.3 Logan County shall require a current copy of the required environmental permits for major projects with the potential for significant air pollutant discharges, including but not limited to manufacturing or other industrial developments.

Implementation Measures - Air Quality (AQ)

AQ1: Work with the local agricultural extension service to help farmers implement cost-effective reduction of dust from agricultural operations within the County.

AQ2: Require a current copy of the required environmental permits for major projects with the potential for significant air pollutant discharges, including but not limited to agricultural/manufacturing or other industrial developments.

AQ3: Adopt dust management policy in the County Development Policy for construction sites with particular emphasis on projects with high potential for dust generation.

AQ4: Adopt construction and surfacing standards for public roads to minimize traffic-related dust generation within growth overlay zones.

2. Water Quantity and Quality

This section addresses the water resources in and around Logan County: groundwater and surface water. Additional information about water use, supplies and distribution systems is provided in the Public Infrastructure Element.

The quantity and quality of surface water and groundwater have a significant impact on the growth potential and quality of life in Logan County. In addition to their valuable recreational and aesthetic contributions, water resources are essential for domestic use and irrigation. These resources must be protected to maintain the environmental and economic health of Logan County.

Surface water in Logan County is limited primarily to the South Platte River and its tributaries, with storage in the North Sterling, Jumbo and Prewitt Reservoirs. The alluvium of the South Platte River is and will continue to be the County's main source of water for urban use. Portions of Logan County have access to the Ogallala Aquifer. The Republican River basin tributaries are also a limited source of surface water.

Logan County has a vital interest in the quality of the South Platte River water because the river is an important source of water. The length of the river, the upstream use of its water and the geology along the river contribute to the river's high mineralization content and increasing sulfates. This sediment loading will directly affect total water quality and will increase *costs for treatment for water drawn directly from the river alluvium*. Logan County should support efforts to maintain and enhance South Platte River water quality to protect its drinking water supply and recognize the important role in our local economy that water plays.

The quantity, quality and sensitivity of groundwater vary throughout the Logan County. Near the South Platte River, groundwater is plentiful, relatively close to the surface, and is subject to the water availability with a priority water system in place with requirement for augmentation. However, its quality is sensitive to contaminants in river water and in the alluvial soils above it. Septic systems, fertilizers, pesticides and urban development are potential sources of contamination. The aquifers are recharged primarily through precipitation and irrigation practices and are sensitive to natural and introduced soil contaminants where most of the precipitation occurs.

Primarily the South Platte River drains Logan County. The South Platte is the most important source of surface water in the County. The ditch service areas, providing irrigation water directly from the river reduce the flow and return flows from irrigation. There are fourteen (14) major ditch service areas in Logan County that service land in the County which provide approximately 105,000 irrigated acres (165 square miles) in Logan County.

In 2007 the total diversions from the South Platte River through the headgate, which includes recharge, and reservoir diversions and returns back to the river came to 232,095.42 acre feet. The total water diverted for irrigation was 115,396.6 acre feet and the total irrigated acres was 81,138. This does not include the water used for private domestic and stock watering use, most of which is also supplied by groundwater.

Groundwater sources in Logan County include the unconsolidated deposits of the South Platte River alluvium. The Ogallala Formation – Northern High Plains aquifer underlies a portion of Logan County, [see attached map] while the South Platte River alluvium is restricted to a strip approximately six (6) miles wide along the South Platte River. The aquifer characteristics and thickness vary within the county resulting in a range of water quantities available and hydrologic conditions (water table and semi-confined conditions).

The alluvium along the South Platte River is an important source of water for the communities located along the River. In the lower South Platte River basin, east of the hogback and extending across the eastern plains, the alluvial deposits thicken and form a continuous aquifer network that is a major ground-water resource. Grain size tends to decrease whereas sorting and grain

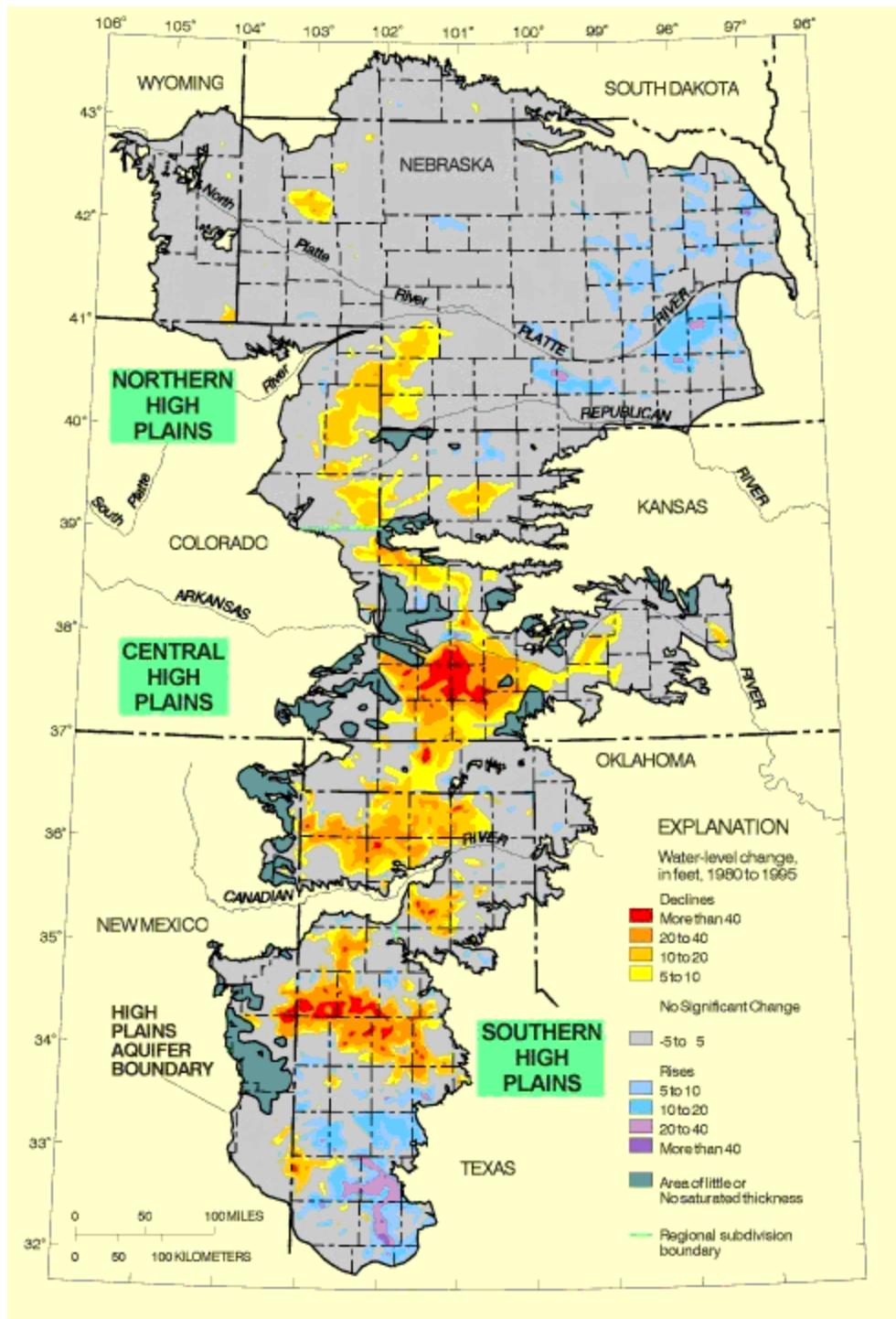
rounding increase away from the mountains. Beds of gravel and cobbles, typically found near the base of the alluvium, are less common downstream. The saturated thickness of the alluvium is close to 20 feet near Denver and increases to over 200 feet downstream near Julesburg, the state line. Eolian sand and silt cover much of the land surface outside of the stream valleys and overlap the alluvial deposits. Well depths in the lower South Platte River basin alluvium average about 75 feet below ground surface. The South Platte River is hydraulically connected to the groundwater in the alluvium, with groundwater naturally moving towards the river and generally northeastward. Seasonal pumpage can cause water level declines along the valley and the flow pattern changed, with augmentation mitigating those depletions.

Groundwater quality in Logan County has generally been excellent for most uses. However, poorer quality water is generally obtained from the South Platte River alluvium. Mineralization measured as total dissolved solids, including sulfates, is greater in the alluvium and adjacent areas. There is some concern over localized problems from nitrates, organic compounds and other pollutants especially in these areas. The river valley, and associated alluvial aquifer and shallow tributary deposits are susceptible to contamination from surface activities including agricultural chemical, urban runoff, and disposal of wastes. Sandy soils in other parts of the County do not filter contaminants, or remove them through other natural processes very well, suggesting eventual problems in other parts of the county even though groundwater may be deeper. This is substantiated by the existing site-specific changes in groundwater quality already documented in some locations.

Groundwater quality testing indicated total dissolved solids (TDS) range in recent testing was 722 to 926mg/L in samples tested in the county.

Nitrate as nitrogen was between <.01 and 68.0 mg/L. Nitrate as nitrogen exceeded the standard of 10mg/L in the samples which were mostly from irrigation wells. However, testing indicates nitrate and/or bacterial contamination in the majority of private water wells.

Sulfates were between <1.0 and 166. The recommended standard is not to exceed 250mg/L.



The Ogallala aquifer underlies portions of eight states. This image documents the decline in the level of water in many areas for the period 1980-1995. Source: USGS

The **Ogallala Aquifer**, also known as the **High Plains Aquifer**, is a vast yet shallow underground [water table aquifer](#) located beneath the [Great Plains](#) in the [United States](#). One of the world's largest aquifers, it lies under about 174,000 mi² (450,000 km²) in portions of the eight [states](#) of [South Dakota](#), [Nebraska](#), [Wyoming](#), [Colorado](#), [Kansas](#), [Oklahoma](#), [New Mexico](#), and [Texas](#). It was named in 1899 by [N.H. Darton](#) from its [type locality](#) near the town of [Ogallala, Nebraska](#). About 27 percent of the irrigated land in the United States overlies this aquifer system, which yields about 30 percent of the nation's ground water used for irrigation. In addition, the aquifer system provides drinking water to 82 percent of the people who live within the aquifer boundary

Is my water safe to drink?

The answer to this question is simple. Yes and maybe. All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

Potential Problems

Northeast Colorado Health and the Environmental Health Division has identified underground storage tanks (UST), abandoned wells, septic systems, and oil field activities as the immediate concerns in the County. Septic systems represent a threat to groundwater quality and human health when acceptable treatment is not provided before waste can enter groundwater or come in direct contact with animals or people. Present technology utilizing proper design, construction and maintenance can eliminate many of the problems.

Abandoned wells are of concern to the county because of their ability to act as a conduit for contaminants. Unplugged or improperly abandoned holes or wells have been recognized as a significant threat to groundwater quality in the South Platte River Basin Non-Point Source Strategy. The migration of contaminants to groundwater is possible through any hold or conduit from the surface to the groundwater. Surface drainage containing contaminants, leachates intercepting and moving down the well casing, or the illegal disposal of substances into these wells can be detrimental to the future use of this water source. In addition, unplugged wells allow the mixing of groundwater between aquifers, allowing any contamination to degrade more than one aquifer. Throughout Logan County there are abandoned wells from the oil and gas industry, irrigation, old domestic wells and stock water wells that have been abandoned due to water table declines. These unplugged wells threatened groundwater in the South Platte River alluvium.

Underground storage tanks (UST's) represent a significant threat to groundwater when these tanks leak or spillage occurs when tanks are filled. Substances stored in these tanks are generally capable of rendering large quantities of water unusable. When located over shallow groundwater, UST leaks may reach the water table quickly, with the capacity of retention by overlying soils and dependent on many variables. Once reaching the water table petroleum based contaminant will travel laterally with the groundwater to contaminate an increasing area and reach wells. The UST concern in the County is for those tanks exempted from state regulation. This includes tanks used to store heating oil, and those with a capacity of 110 gallons or less used for storing fuel for non-commercial purposes.

Oilfield activities are of concern especially the salt-water injection wells and the surface lagoons. It is recognized that water quality in Logan County can be directly affected by oil/gas field practices past and present. Surface ponds or lagoons used in drilling activities are potential threats to the environment if not constructed, located and managed properly. Underground injection wells are used for disposal of oil field brines into unusable aquifers. The underground injection wells represent a threat to groundwater quality of usable aquifers if not properly operated, constructed or maintained, Any leakage in the casing, especially inadequate casing through overlying water-bearing formations, can result in a contaminant entering any or all overlying formations.

Other areas of concern in the county include landfills, feedlots, lagoons (sewage), land application of wastes, illegal dumps, open burning, drainage wells, old brine/drilling mud pits, light industry, hazardous waste, leaks and spills, urban runoff, cross connections/back siphoning, deicing chemical storage and use, agricultural chemical dealers, applicators, aerial sprayers, irrigation practices, and chemical action.

Key Water Issues

South Platte River Water. The quality of water in the South Platte River alluvium must be maintained to continue supplying quality water for urban and agricultural uses. While many other jurisdictions have an impact on the River, Logan County's economy and water supplies are so directly linked to the alluviums, and our hydrologically connected deeper aquifers that the County has a vital interest in preventing their contamination.

Groundwater Quality. To ensure the viability of its continued use, the quality of area groundwater should be monitored regularly. Key recharge areas should be protected from development activities that degrade water quality. The effects of urban runoff and septic systems effluent on groundwater quality should be minimized.

Water Availability. Information on the use and availability of water should be monitored. While there appears to be enough water to meet anticipated demands in the short-term growth of the County, long term water planning will require better information than is currently available. Development of a countywide water plan that identifies water supplies and demands for identified groundwater basin sub-areas will enable the County to use its water resources most efficiently.

3. Water Quality Goals and Policies

GOAL 3: To preserve the quantity and quality of water resources throughout Logan County.

Policy 3.1 Logan County should cooperate with Northeast Colorado Health Department, local water supplies, and other agencies to maintain the quantity and quality of Logan County's water resources, encourage

identification how those resources are being used, and retain awareness on commitments for future water use.

Policy 3.2 Logan County should support programs to monitor groundwater quality and well levels.

Policy 3.3 Logan County should encourage the efficient use of water resources through educational efforts.

GOAL 3A: To promote the efficient use of water supplies through water conservation efforts.

Policy 3A.1 Logan County shall encourage water conservation programs aimed at reducing demands from new and existing development.

Policy 3A.2 Logan County should encourage the conservation of water through public education efforts and through requirements for water conserving fixtures for new or remodeled buildings.

Policy 3A.3 Logan County should encourage changes in landscape that reduce water consumptions.

Implementation Measures - Water Quality (WQ)

WQ1: Support efforts by utility providers, the Northeast Colorado Health Department, the U.S. Geological Survey and the Colorado Division of Water Resources to maintain a water use oversight for Logan County and for individual drainage basins within Logan County, providing information on groundwater yields, contracts, demands and changes in groundwater level. To the greatest extent practical these organizations should provide:

- a) Quantify the firm yields of the County's groundwater basins;
- b) Quantify and monitor water contracts;
- c) Quantify and monitor groundwater demands based on location and land use; and
- d) Evaluate changes in the quality and levels of groundwater.

WQ2: Develop guidelines relating to more drought tolerant plants to reduce the amount of water consumption at all new construction sites. This should include existing sites, which through renovation are required to meet the landscape requirements.

WQ3: Development of educational guidelines encouraging water conservation landscape efforts thus reducing demands for water consumption and subsequent increased waste disposal costs generated by clippings and trimmings from high water use plants.

4. Natural Resources

Logan County's private infill lands are rich in natural resources that contribute to the County's environmental health, economic welfare and less tangible elements of the quality of life.

Natural Resource Goals and Policies

GOAL 4: To manage hillside development densities, locations and project designs to minimize impacts on the County's natural resources and aesthetic character.

Policy 4.1 The County shall use its zoning regulations to limit the densities of development located on moderate and steep slopes.

Policy 4.2 The County shall:

- Limit Maximum development densities to 8,500 square feet on moderate (15-30 percent) and 10,000 square feet on steep (greater than 30 percent) slopes.
- Require drainage plans be reviewed and approved by the County for all slope development. This will occur at the Site Plan stage. The County shall review previous approvals adjacent to the proposed development in rendering their decision of approval.
- Encourage the use of clustering and other design alternatives that minimize the environmental, public safety and aesthetic impacts of proposed steep hillside developments.

Policy 4.3 The County should establish standards for areas with moderate to steep slopes (over 15%) to minimize the need for grading in the construction of buildings, roads and utilities; and minimize the impacts on erosion, slope stability and views of hillsides.

Policy 4.4 Development proposals for hillside properties (those with an average slope of 15% or greater) shall be reviewed to: a) locate buildings and other major structures on slopes less than 15%, where reasonably possible, b) retain hillsides and other natural resource areas in natural open space, c) minimize the need for grading in the construction of building sites, roadways and facilities, d) limit the angle of cut-and-fill slopes required for construction, e) minimize the impacts of grading on erosion, slope stability and views of the hillside area, f) support the use of native or naturalized vegetation, g) minimize visual and environmental impacts and h) reduce wildfire hazards.

Implementation Measures - Natural Resources (NR)

NR1: Compile available maps that identify wetlands, sensitive habitats and other natural resources meriting special protection. These maps should be used

in reviews of Master Plan amendments, subdivision proposals, zoning requests and other development proposals to ensure that Logan County's natural resources are protected.

NR2: Adopt development regulations and guidelines for development in hillside areas that:

- (a) Specify maximum densities for urban development on moderate (15-30 percent and steep (greater than 30 percent) slopes.
- (b) Encourage the use of clustering and other design alternative that will minimize the need for grading, environmental impacts, public safety risks and aesthetic impacts of hillside development.

NR3: Adopt design regulations and guidelines for development on moderate and steep slopes that:

- (a) Specify maximum grade changes, maximum side slopes and slope stabilization requirements for construction of buildings, roads and utilities;
- (b) Minimize the impacts of development on the natural drainage system, and;
- (c) Minimize visual impacts.

5. Energy

Adequate and affordable energy is critical to the overall quality of life and economic growth of Logan County. Energy grid supplied power and direct consumer use of propane and natural gas supplement the energy used for transportation, lighting, space heating and cooling, and the operation of machinery and appliances. Wind power generating facilities are a growing factor that supplies power to the electrical grid. Energy policies relate to energy supply, as well as the amount and type of energy that County residents and businesses consume. The County's ability to directly affect the energy supply is limited, but energy consumption can be modified effectively through land use planning that minimizes the length of automobile trips, and through establishment of energy efficient construction requirements. The County can also encourage the use of clean, alternative energy sources such as the expansion of individual Solar and Wind Energy Generation and the use of geothermal mass to reduce the amount of energy needed to heat and cool our places of business and homes.

Key Energy Issues

Efficient Use of Energy. Continued growth in energy demand creates need for additional power generation and distribution capacity; air pollution and utility rates also may increase. Managing energy consumption and ensuring the availability of economically and environmentally sound energy supplies will require cooperation between the County, its residents and utility companies.

Use of Alternative Energy Sources. The sun and wind provides renewable non-polluting energy sources with great potential in Logan County. Logan County has encouraged

the development of wind energy and will continue to do so to diversify our energy needs in Colorado. Initial cost and public awareness are two of the greatest obstacles to more widespread use of this largely untapped solar resource. The County can promote the use of solar energy by protecting solar access in the suburban and urban subdivisions, providing information on passive and active solar energy use and encouraging incentives for the use of solar energy through our energy providers.

Energy Goals and Policies

GOAL 5: To encourage the efficient use of alternative energy sources by residential and non-residential users.

- Policy 5.1** Logan County should support the voluntary use of solar energy through its subdivision, zoning and building regulations.
- Policy 5.2** Logan County should support the use of individual solar and wind generated energy through educational efforts.
- Policy 5.3** Logan County should work with local utilities to explore opportunities for programs, such as incentives, to encourage the use of individual solar and wind generated energy.
- Policy 5.4** Logan County shall support the use of wind generated energy opportunities through its rural/agricultural/large lot zoning and building regulations.

GOAL 5A: To encourage energy conservation through more efficient design, materials, equipment and practices.

- Policy 5A.1** Logan County should encourage the use of energy conserving materials (e.g. composite lumbers, concrete board siding and PEX plumbing), equipment (tankless water heaters, high efficiency heating and cooling equipment) and design in new construction and rehabilitation projects.
- Policy 5A.2** Logan County should encourage efforts to educate residents and businesses about energy conservation techniques.
- Policy 5A.3** Logan County should encourage design in new construction to utilize an “energy conservation insulation envelope” to assure maximum strength of structure to aesthetics and conservation of energy to cool and heat the structure considering the general County standards adopted for minimum heat gains and losses.
- Policy 5A.4** The County should encourage efforts to educate residents and businesses about energy conservation techniques.

Policy 5A.5 Logan County should encourage use of “geo-thermal” energy efficient heating and cooling systems through its code practices.

Implementation Measures - Energy (E)

- E1:** Logan County should encourage developers and public utilities to take advantage of solar energy opportunities in designing projects.
- E2:** Logan County should help distribute information on cost effective ways for businesses and residents to reduce energy consumption.
- E3:** Logan County should amend its local building codes to allow “energy conservation insulation envelope” designs in accordance with ICC Codes to encourage stronger structures that will allow aesthetics in design.
- E4:** Logan County should amend its local building codes to allow new approved plumbing techniques and materials to take advantage of “geo-thermal” technology in the cooling and heating of commercial and residential structures as well as other high energy efficient heating and cooling units in conjunction with “green-building” construction techniques.
- E5:** Logan County should encourage the use of energy insulation programs to reduce the ancillary cost of heating and cooling for County citizenry that own their own homes in the unincorporated areas.
- E6:** Logan County shall amend its zoning regulation to assure accommodation of wind and solar energy development in Logan County.

6. Noise

Noises can play a significant role in shaping the quality of life in an area. Noise is an unavoidable aspect of suburban areas and less densely populated areas in the County, but its negative impacts can be reduced. Coordinated land use planning and project design standards are two key elements of noise mitigation.

Noise Goals and Policies

GOAL 6: To minimize noise levels throughout Logan County and, wherever possible, mitigate the effects of noise to provide a safe and healthy environment.

Policy 6.1 Logan County should establish standards for noise and land use compatibility.

Policy 6.2 Logan County should use this Master Plan and implementation regulations to separate noise sensitive land uses from existing and planned future noise generators.

Implementation Measures - Noise (N)

N1: Logan County should review for potential adoption standards for maximum permissible noise levels by land use category.

N2: Logan County should establish barriers separating noise producing generators adjacent to non-compatible land uses.

7. Conservation Resources

The old saying, “you don’t know what you’ve got until it’s gone” certainly applies to conservation areas. Future development should be designed to enhance these conservation resources rather than detract from them.

Conservation Resources Goals and Policies

GOAL 7: To preserve, protect and enhance conservation areas that characterize the rural beauty of Logan County.

Policy 7.1 Logan County should develop criteria for designating conservation and historic areas and encourage their preservation.

Policy 7.2 Logan County should use its Master Plan and implementation regulations to develop “conservation areas” within the County and to mitigate inappropriate land uses in such areas.

Policy 7.3 Logan County should coordinate with the Colorado Department of Transportation (CDOT) to provide aesthetically appealing corridors entering Logan County.

Implementation Measures - Conservation Resources (CR)

CR1: Logan County should work with civic groups, individuals/corporations and the State to develop criteria for the preservation of areas of historic and conservation importance and corridors controlled by CDOT at the entry points to the County.

CR2: Logan County should use zoning and other development regulations to protect valuable areas of historic value and conservation areas from inappropriate land uses.

CR3: Logan County should develop “Overlay Zones” at the entry points to the County where specific guidelines can establish sound corridor development.

VI. Community Development

Land Use Element
Housing Element
Economic Development Element

VI. COMMUNITY DEVELOPMENT

The Community Development section of the Logan County Master Plan contains the County's policies that describe the desired location and character of development within incorporated parts of this community. It includes three topical elements - Land Use, Housing and Economic Development. Each of these elements emphasizes an important aspect of the County. These goals and policies explain the approach Logan County will take in planning, development review and service provision. They are intended to support and encourage growth in places where it can be served and where it will create or enhance the types of community desired by Logan County residents.

A. LAND USE ELEMENT

The Land Use Element includes three chapters. The first, Land Use, describes the County's approach to planning land uses and coordinating development with service provision. This chapter includes goals, policies and diagrams that depict areas planned for future urban residential, commercial and industrial development and address design issues for these areas. It includes policies that coordinate capital improvements planning with the planned land uses. It also describes the relationships between the Master Plan and the County's zoning and development approvals.

The second chapter within the Land Use Element focuses on the County's historic, conservation and cultural resources. These present uses help create the unique character of the County today. Their preservation should enhance the quality of life for future Logan County residents by providing the link to the communities' heritage and history. The historic preservation goals and policies emphasize efforts to identify these resources and encourage private action to retain them.

The third Land Use chapter addresses Hazards Management. The County's natural features create some potential hazards to future development. The County's goals emphasize development design to minimize risk from flooding and wildfires. Hazardous materials and hazardous wastes are also addressed in this chapter of the Land Use Element.

1. LAND USE.

The pattern of land uses -- their location, mix and density -- is a critical component of any community's character. Past development patterns contribute to the attractiveness of an area. Future development patterns can support or retain the community's desired character or can change that character dramatically.

In addition to its effects on community character, the location of development also has a significant impact on the demands for public facilities and services, the costs of infrastructure construction and the cost-effectiveness of public service provision. A sprawling, low-density development pattern is more costly to serve than is a compact pattern. Development within areas that are already adequately served reduces the need for expensive extensions of facilities to new areas. For these reasons, the land use plan for a community has important implications for the quality and cost of public services available to its residents.

The property's private owners determine the actual development of a residential subdivision, a commercial center or an industrial park or area. Although the public sector does not construct these projects, land use planning plays an important role in establishing a pattern for their future location. However, these developments affect the community's desired character and its ability to address public health and welfare concerns. The County's Master Plan is intended to give everyone - current and future residents, property owners and developers, elected officials and staff -- a clear understanding of the development patterns the community has found to be most appropriate. As such, it sets forth the policies that will guide the County's review of individual development proposals. It establishes a consistent basis for review and action, and relates these development decisions to other public actions to provide community services, extend water or sewer lines, or attract economic development.

The Land Use Element of the Master Plan is the central statement of these policies regarding the pattern of development desired by Logan County. The set of Land Use Diagrams depict the types and locations planned for development. Its goals and policies interpret this diagram, and provide additional explanation of the County's desired development patterns.

The Land Use Element lists the basic goals and policies Logan County will use to review individual development proposals, plan capital facilities and services and establish design standards. It includes both written goal and policy statements and a graphic depiction of the type, intensity and location of planned land uses. This graphic depiction is called a "Land Use Diagram," to indicate that it shows the proposed general distribution of land uses, but is not a precisely surveyed map of development or a zoning district map.

Background Information

As part of the background analysis for this Master Plan, existing development trends, ownership patterns, environmental constraints and infrastructure availability were analyzed. The availability of adequate public facilities (particularly water and sewer) is a primary constraint to future growth. This Land Use Element reflects the constraints and opportunities identified through this background analysis.

Approved Master Plan Alternative

Major land use concepts included in this adopted alternative are:

- The identification of areas appropriate for urban, suburban and rural development; and
- The assignment of typical residential densities for urban residential, commercial and industrial development areas.

Urban development is planned for areas that have already experienced or have been planned for intensive development. The use of New Urban Features in Urban development areas is encouraged and such areas include land adjacent to incorporated communities as identified through Overlay Areas. The areas appropriate for commercial development primarily are located on the major arterial corridors. They may also be addressed as nodes or pods at intersections where the overall community design would benefit from their location. The industrial areas are

located to best utilize the transportation and infrastructure necessary for heavy traffic involved in the transportation of goods and the flow of employees to and from their place of employment.

This Master Plan has been developed by refining the adopted Plan Alternative and preparing goals, policies and implementation measures that will achieve the pattern of future development represented by this alternative. It addresses the key land use issues facing the County.

Key Land Use Issues

Accommodation of Expected Future Growth. The Land Use Element establishes a planned pattern for development for the next ten (10) years, and beyond. It reflects the County's historical development patterns and the new development occurring today. It plans land for more residential development than would be needed to accommodate population growth projected through the year 2018; it also provides significant areas for future commercial and industrial development. In this way, the County is anticipating continued growth and is planning development areas, public services and facilities to support it.

Distinctive Community Character. The goals and policies of the Master Plan creates a long-range vision of the types of future development which may enrich the lives of Logan County's citizens, and recognizes that future residents will want to choose between distinctive community lifestyles and different types of residences. This plan provides areas for urban residential, commercial and industrial development so future residents can select the living and working environment they prefer. It provides for growth and flexibility while retaining the small County character of much of Logan County. The Plan focuses most of the County's growth in suburban residential, commercial and industrial development areas by outlining the newer development patterns in County's growth areas, addressing infill areas where it is most cost effective and preserving the character of our historic development areas. Utilization of New Urban features will over the longer term reduce automobile dependency and use, providing consumer cost savings and reductions in automobile travel that provide social benefits (such as reduced traffic congestion, parking costs, accident risk, pollution and urban sprawl).

The Land Use Element also supports the efficient use of public and private resources by promoting growth in areas where infrastructure is already in place or in close proximity. Infill development -- the development of vacant or under-developed parcels in existing developed areas -- reduces overall capital expenditures by reducing the need for new facilities. The Plan also encourages the efficient use of public and private resources by designating growth areas that are in close proximity to existing or planned infrastructure.

Land Use Compatibility. The pattern of development described by the Land Use Diagram reduces the potential for locating incompatible land uses adjacent to one another. The goals, policies and implementation measures of the plan provide additional guidance for ensuring compatibility between dissimilar land uses.

Development Guidance and Flexibility. The Land Use Element serves as a guide for informed decision-making in development matters. It provides direction for developing individual properties according to the County's vision for its future. As a result these individual developments should fit into the overall development pattern described in this Plan.

At the same time, this Master Plan is designed to provide flexibility in the application of its policies. Performance standards, particularly those related to the availability of public services, give the property owner(s) flexibility in designing development proposals that meet the County's goals.

Cost-effective Provision of Adequate Infrastructure. Adequate infrastructure must be in place to support the development patterns described in the Land Use Diagram. The goals and policies in this and other elements describe how the County can achieve its goals in a logical, incremental and efficient manner. They provide a basis for implementation programs to stage and time the construction of public facilities needed to adequately serve new and existing residents.

Facilities and services should be extended in an orderly manner to make the most efficient use of public resources. Both the timing and location of new infrastructure directly impact construction and maintenance costs. Generally, compact development patterns that build on existing infrastructure are more cost-effective than scattered development. Sound fiscal management relies on the establishment of rational policies for the extension of facilities and services.

Logan County and the development community must know when and where development will occur to make sound investment decisions. Timing new development to match demand and the availability of adequate public facilities and services can improve private sector returns on investments and public sector efficiency.

Growth Monitoring. Logan County's planning and investment decisions should be based on current growth trends. Monitoring development activity (subdivisions and building permits) and demographic trends, as well as the fiscal and economic trends that drive growth, will enhance the County's ability to anticipate where, when and how much growth will occur.

As conditions change, the County intends to evaluate its policies and modify them to respond to new opportunities. The Land Use Element describes the process for modifying planned land uses, and the factors the County will consider in responding to proposals for change.

Planning Terms

This Master Plan is designed to provide the direction for future development in a County with 1,848 square miles of territory, different natural characteristics, one (1) incorporated city, five (5)

incorporated towns, and five (5) unincorporated communities with generalized development patterns, and a steady growth in population. It must address all of these factors in a way that is consistent complete and understandable as a statement of County policy. In order to create a plan that achieves these objectives, a number of special planning terms are used in this Master Plan. They allow the citizens and officials of the County and its communities to use a common set of terms to describe parts of the County, groups of land uses, and areas where certain policies apply. These terms are described in this part of the Land Use Element; they are then used throughout the goals and policies that follow.

- **Planning Areas.** As noted, Logan County has a variety of existing communities and development patterns. This Master Plan groups these distinctive geographic parts of the County into seven (7) broad planning area types. This allows similar policies and programs to be used in similar areas, while distinguishing different areas and using special policies to address their growth. Exhibit VI.1 lists the locations where each of these area types is used. Exhibit VI.2 lists these planning area types and summarizes the intent for each of these areas. It describes the density of residential development expected in each of these areas, whether rural, suburban or urban. It also indicates the types of non-residential development expected in each area and the services required for development.
- **Agricultural Development Area (ADA).** This is an area where residents, farms and ranches presently enjoy a rural lifestyle, wide-open spaces, environmental protection areas and few neighbors. Most of the land in Logan County is included in this area type. Properties in these areas are generally at least five (5) acres in size [Agricultural Zoning minimum lot size], and many are much larger than this. Minimum lot sizes are established at thirty-five (35) acres [does not constitute a subdivision by definition] [minimum lot size for Environmental Protection District without public water/sewer], with existing smaller ones being considered non-conforming or created through the Subdivision Exemption process. Specific authority will be developed to allow owners of a Farmstead to breakout up to three (3) lots on contiguous pieces of ground, sized between two and one-half (2½) acres and thirty-five (35) acres and the owner will be required to utilize the administrative subdivision exemption process. The owner(s) will be required to prepare and record, after approval, a Subdivision Exemption Plat [a minor subdivision Plat] of the division.
- **Suburban Development Area (SDA).** This is an area intended for development of lower density residential neighborhoods with some of the amenities of urban areas. Suburban lot sizes range from two and one-half (2½) to five (5) acres in size with a typical lot size of 2½ acres. Commercial Center and Commercial Highway uses will be permitted at appropriate locations where they are compatible with adjacent uses and infrastructure.
- **Urban Development Area (UDA).** This area is intended to provide for more intense residential and non-residential development near cities and in outlying communities. While residential densities typically will range from two to five

dwelling units per acre, high density development of up to 25 units per acre may be permitted. Urban services and facilities will be required for both residential and non-residential development in this area. New Urban features could mix the commercial/business office and residential features found in the UDA.

- **Commercial Development Area (CDA).** This is an area where commercial development is existing, or encouraged. Residential development is discouraged, as it is inconsistent with use patterns developed for commercial areas. In some instances multiple family residential may be utilized to buffer more intense commercial uses on the periphery of commercial development. The use of commercial nodes and pods in some residential neighborhoods may be desirable to enhance the quality of life. A node is defined as a development located at an intersection used as a major or minor traffic corridor into residential neighborhoods. It is a smaller incursion usually identified as one (1) lot development at the corner lots of the intersection. A pod is defined as a development located at an intersection used as a major or minor traffic corridor into residential neighborhoods. The pod is a larger incursion that allows for an assemblage of a small number of commercial service units that may directly relate to neighborhood development. It is further identified as having consolidated parking typical of a small shopping district. Pods may also be the location of a place of worship or recreational facilities to include parks, which require parking facilities. New Urban features could mix the commercial/business office and residential features found in the CDA.
- **Industrial Development Area (IDA).** Industrial development requires large, flat or nearly flat sites with soils having good load-bearing qualities and not located in the floodplain areas if possible. It is advisable to have rail service available, and truck access via one or more highways or major arterial streets is mandatory. Necessary energy supply must be available or potentially available. Industrial sites should be isolated from existing and potential residential areas and from other land uses on which they might have an adverse impact. Even a totally nuisance-free plant housed in handsome buildings surrounded by well-maintained landscaping will create substantial automobile and truck traffic, which will be unwelcome in nearby neighborhoods. Traffic noise and safety hazards are inevitable. Industries typically will not select sites where their operations are likely to result in complaints from nearby residential neighborhoods. Some types of commercial development, such as regional shopping centers and office parks, try to avoid locations close to industrial concentrations so that the traffic they generate will not have to compete with industrial traffic using the same routes. Operating efficiencies can be gained and conflicts with neighbors can be avoided when an area is especially planned to accommodate industrial development. Interdependent plants can take advantage of opportunities to cluster in close proximity. Land coverage by large buildings, storage areas, and parking lots creates storm water runoff problems that must be solved. Extension of adequate infrastructure need to be available or easily extended to the site. Flexibility is the key to planning industrial parks, because it is virtually impossible to predetermine the precise site requirements of individual plants.

- Recreation Development Area. (RDA)** The preparation of the park, recreation, and open space elements of our community is addressed in the Master plan. The location and effectiveness of open space and leisure opportunities can have a significant impact on the form and function of our County. As such, the Master plan will have a primary role in the location, preservation, and design of open space and the development of recreational facilities. The Master plan will demonstrate a blend of environmental design, social science, and public administration intended to provide leisure opportunities as part of a human service and environmental management system. Both public and private spaces and services are included in a system of opportunities that is integrated on scales ranging from neighborhood to the regional area.
- Outlying Community Area. (OCA)** The varied character of Logan County’s unincorporated outlying communities requires special consideration. Development within designated communities may be urban, suburban or rural in character. This Plan permits the continuation of the existing development patterns, including both residential and non-residential development. Depending on the character of the community and proposed development, urban, suburban or rural standards may apply. To accomplish this, the outlying community must request an Overlay Zone Area that will identify the boundaries of the outlying community, and then create a specific Area Plan that will meet the needs of the community to refine the policies and Land Use Diagram of the Master Plan to tailor the plan to specific community needs.

Exhibit VI.1: Planning Area Locations in Unincorporated Logan County, Colorado

Area Type	Locations
Agricultural Development Area (ADA)	Base Land Use for Logan County. Includes Environmental Protection Areas. Right to Farm Act In Effect. Non-conforming land uses may apply.
Commercial Development Area (CDA)	All areas of Logan County designated for commercial development. Non-conforming land uses and New Urban features may apply.
Industrial Development Area (IDA)	All areas of Logan County designated for industrial development. Non-conforming land uses may apply.
Recreational Development Area (RDA)	All areas of Logan County designated for recreational development. Non-conforming land uses may apply.
Urban Development Area (UDA)	Areas of Logan County identified by UDA designations that are planned for future annexation. Non-conforming land uses and New Urban features may apply.
Suburban Development Area (SDA)	Areas of Logan County identified by SDA designations that may or may not utilize urban service connection and be subject to annexation. Non-conforming land uses and New Urban features may apply.
Outlying Community Area (OCA)	Unincorporated Communities Non-conforming land uses and New Urban features may apply.

Exhibit: VI.2: Planning Area Types for Unincorporated Logan County, Colorado

Area Type	Intent	Development Densities	Other Land Uses	Service Provision
Agricultural Development Area (ADA)	Provides protection for prime agricultural, ranch, or environmental land utilization.	Low Density as developed.	Agri-business, Energy, Utility, Mining, Public, & Conservation.	Public access. On-site water/sewer services.
Commercial Development Area (CDA)	Maintain the opportunity for commercial development.	Dictated by off-street parking & loading requirements, adequate circulation, & site utilization.	Small neighborhood commercial uses serve local needs. Node or Pod development. MFR development may act as buffer.	Neighborhood collector, collector or arterial street. Full urban services.
Industrial Development Area (IDA)	Maintain the opportunity for industrial development.	Dictated by off-street parking & loading requirements, adequate circulation & site utilization.	As defined in the zoning regulation by district with limitation of structures & uses as permitted.	Truck access via one or more highways or arterial streets is mandatory. Full urban services required.
Recreation Development Area (RDA)	Park, recreation, and open space elements.	Dictated by type and space requirements.	May be public or private.	Public access. Services dependent upon location.
Urban Development Area (UDA)	Provide for urban residential and non-residential development.	Two – Twenty-five Dwelling Units to the Acre. *	May be public or private. Non-conforming land uses may apply. New Urban features may apply.	Public access. Full urban services.
Suburban Development Area (SDA)	Provide for suburban residential and non-residential development	2½ to 5 acre lot sizes with some mixture of higher Density with Urban Utilities Furnished. *	May be public or private Non-conforming land uses may apply. New Urban features may apply.	Public access. May require full urban Services if developed in Overlay District with higher develop-standards.
Outlying Community Area (OCA)	Identify five (5) unincorporated community boundaries.	Development within designated communities may be urban, suburban or rural in character.	As defined in the zoning regulation by district with limitation of structures & uses as may apply. New Urban features may apply.	Public access. Utility services may be on-site or required urban modified services dependent upon time of development.

* For non-residential development, will be dictated by off-street parking & loading requirements, adequate circulation & site utilization.

Land Use Diagram

The Land Use Diagram, found in Exhibit VI.5 shows the planned land uses for all areas of the County. The Diagram also identifies the boundaries of agricultural, commercial, industrial, recreational and urban & suburban residential development areas and outlying unincorporated communities. The Land Use Diagram is intended to designate the preferred land uses within Logan County and adjacent designated overlay areas that are planned for future annexation.

Policies that refer to a "Land Use Diagram" apply to all of the diagrams adopted by the County. Logan County’s official copy of the Land Use Diagram is available at the Logan County

Planning & Zoning Department or the County Clerk and Recorder office. It is a set of displays showing each area planned land uses. It provides the definitive reference for use in determining the intended boundaries of each land use area. The Land Use Diagram, together with the goals and policies contained in the Master Plan text, establishes the County's policy direction and acts as a guide for decisions affecting the County's future development.

The Land Use Diagram is not the County's zoning map. It is a guide to future land use patterns. Zoning and overlay plan area designations may be more restrictive than the designated land use categories of the Land Use Diagram.

Land Use Categories

A consistent set of land use categories is used in all Land Use Diagrams to describe the type and intensity of use anticipated. Exhibit VI.3 shows the relationship between planning area types and land use categories. Exhibit VI.2 list these categories and briefly summarizes their policy intent. Each category is described in more detail in the following section of this Element. In each case, the exhibit gives a name and abbreviation for the land use category.

For residential uses, the exhibit shows the range of densities consistent with each category. Density is expressed as the number of Dwelling Units per Acre (DU/A)¹. For example, the category "Medium Density Residential" includes development at densities ranging from five to twelve dwelling units per acre. The method for calculating a development project's density is described in Exhibit VI.4. The goals and policies of the Land Use Element define this method and other factors to be considered in evaluating a project's consistency with the Land Use Diagram.

1. See Exhibit VI.4

Exhibit VI.3: Land Use Categories in Planning Areas

1. For planning purposes, these densities are expressed in terms of gross land area.

Land Use Categories	ADA	CDA	IDA	RDA	UDA	SDA	OCA
Agricultural Uses							
Agricultural (A)	Y	N	M	M	N	M	M
Residential Uses							
Suburban Estates (SE)	N	M	N	M	Y	M	M
Suburban Residential (SR)	N	M	N	M	M	Y	M
Low Density Residential (LR)	Y	M	N	M	N	N	M
Medium Density Residential (MR)	N	M	N	M	Y	M	M
High Density Residential (HR)	N	M	N	M	Y	M	M
Non-Residential Uses							
Neighborhood Commercial (NC)	M	M	N	M	M	M	M
General Commercial (GC)	M	M	N	M	M	M	M
Commercial Recreation (CR)	Y	M	N	M	M	M	M
Light Industrial (LI)	M	N	Y	N	N	N	M
Medium Industrial (MI)	Y	N	Y	N	N	N	N
Heavy Industrial (HI)	Y	N	Y	N	N	N	N
Airport Industrial (AI)	Y	N	Y	N	N	N	N
Public Lands							
Public Facilities & Institutions (PF)	Y	Y	Y	Y	M	M	M
Public Parks (PP)	Y	M	M	Y	Y	Y	M
Public Lands (PL)	Y	M	M	Y	Y	M	M

Y = Land use category is consistent with this planning area.

M - Land use category may be consistent with this planning area, depending on the location, natural features and surrounding uses.

N - Land use category is not typically consistent with this planning area.

Exhibit VI.4 Calculation of Residential Development Density

Residential Density Measured as Dwelling
Units per Acre (DU/A):

$$\text{DU/A} = \frac{\text{Number of Dwelling Units}}{\text{Number of Gross Acres in Site}}$$

For example:

$$100 \text{ Dwelling Units} = 2 \text{ DU/A}$$

$$\text{DU/A} = 50 \text{ Gross Acres}$$

The Land Use Diagram uses sixteen categories to describe the future land uses in Logan County. Land use categories are meant to be more general than zoning districts - there may be several zoning districts that could be consistent with a particular land use category. In some cases, the land uses found in an Overlay Zone area are also more specific than these land use categories. These categories, which are listed in Exhibit VI.3 are described in more detail below. Included in the following general descriptions of each category is a statement of whether land uses within the category are intended to be agricultural, commercial, industrial, recreational, urban/suburban or outlying unincorporated community in character.

Agricultural Land Uses

The purpose of this land use category is to provide for a full range of agricultural activities on land used for agricultural purposes, including processing and sale of agricultural products raised on the premises; and at the same time offer protection to land used for agricultural purposes from the depreciating effect of objectionable, hazardous, incompatible and unsightly uses. This land use category is also intended to protect watersheds and water supplies; to protect forest and scenic areas; to conserve fish and wildlife habitat; to promote forestry; and to prevent and/or discourage untimely scattering of denser urban/suburban development.

According to the 2004 Colorado Agricultural Statistics Service and the Logan County Extension Service there are 1,183,360-acres within Logan County of which 1,111,135-acres are devoted to farming. On September 21, 1999 Logan County (the County) adopted a Right to Farm and Ranch Policy (RFRP). The RFRP clearly states that it is the policy of Logan County to preserve, protect and encourage the development and improvement of agricultural land for food production and other agricultural products. It is the purpose of the RFRP to reduce the loss of agricultural resources by limiting the circumstances under which

agricultural operations may be deemed to constitute a nuisance. This Policy can be found in Book 925 on Page 430 within the Logan County Clerk and Records Office.

In view of the historic significant economic presence of farming and ranching in the County, any proposed development outside of identified Overlay Zones affecting agriculture land and water usage will require a thoughtful, respectful, responsible, and cooperative course of action by the Logan County Planning Commission, Planning Department, Board of County Commissioners, and all other concerned persons and entities.

In this regard, all lands used for agricultural purposes, as described here, shall be exempt from many restrictions or limitations. However, commercial hog operations, commercial chicken operations, dairy farm operations, commercial feedlot operations, wind and solar energy facilities, and other energy producing/production facilities shall be required through implementing regulations to provide public notice of their intent to create the same and be afforded a permit from the Board of County Commissioners with such stipulations and/or restrictions as the Board may deem appropriate. No administrative interpretation shall be made that results in any restriction or stipulation on land used for agricultural purposes other than as further defined by implementation regulations. However, consistent with state law, new agricultural buildings/structures will be required through implementing regulation to meet setback requirements on that part of agricultural lands fronting on designated major roads and highways.

Any proposal for change of land designated for agricultural land use potential to nonagricultural land uses shall be subject to the requirement of notification and hearing to amend the Master Land Use Plan as approved.

Residential Land Uses

Residential land use categories are used to identify places where the principal planned land use is for residential purposes.⁹ There are five residential land use categories.

9. Zoning district regulations determine what additional uses may be allowed within a primarily residential area.

Suburban Estates (SE). Single family lots ranging from 10,000 to 22,000 square feet characterize this suburban land use. The utilization of rooms or mini-suites for extended family with use of separate culinary accommodation is authorized as is home occupations per code. Non-residential land uses may be authorized in a Suburban Estate area. There may be an identified need to provide Neighborhood Commercial services on the periphery of this type of development.

Suburban (SR). Single family lots ranging from 7,000 square feet characterize this suburban land use with public water and sewer provided. While Suburban Residential areas will be mostly single-family, the utilization of rooms or mini-suites for extended family with use of separate culinary accommodation is authorized and home occupations may be permitted. There may be an identified need to provide Neighborhood Commercial services on the periphery of this type of development or through the use of New Urban features.

Low Density (LR). Single family lots ranging from 6,000 to 7,500 square feet characterize this urban land use. This category is primarily used only in Urban Development Areas (UDA's) with public water and sewer. The utilization of rooms or mini-suites for extended family with use of separate culinary accommodation is authorized and home occupations may be permitted.

Medium Density Residential (MR). This urban land use category is used to show areas with seven (7) or more dwelling units per acre, but less than seventeen (17) dwellings per acre. This category is primarily used only in Urban Development Areas (UDA's) with public water and sewer. Typical residential uses in these areas are patio and zero lot line homes, manufactured home subdivisions, duplexes, some multi-family projects, and, where specifically approved as part of a planned development, neighborhood commercial development. This category may authorize home occupations or the use of New Urban features.

High Density Residential (HR). This urban residential category is used to show the highest density planned in Logan County. Development could range from twelve (12) to a maximum of twenty-five (25) dwelling units per acre. This category is primarily used only in Urban Development Areas (UDA's) with public water and sewer. Higher density areas provide opportunities to develop uses such as townhouse, apartments or condominiums. Mixed-use developments incorporating office and retail space may be approved in HR areas through the planned development process or through the use of New Urban features. Such projects help to provide residents with a choice of more affordable housing styles and the potential for shopping and/or working closer to home. High Density Residential uses can serve as an effective buffer between non-residential development and lower density residential neighborhoods.

Non-Residential Land Uses

Non-residential land use categories are used to identify places where the principal uses are for non-residential purposes, such as office, retail, resorts, manufacturing, and others. There are seven (7) non-residential land use categories. Some may be permitted within urban areas. The categories are listed in Exhibits VI.1 and VI.3 and are described in more detail. Exhibit VI.3 describes the typical uses expected in each of these categories. The uses shown here are intended to describe the general character of development. Zoning districts, consistent with these general categories, will establish the specific uses and development standards for a particular non-residential property.

Neighborhood Commercial (NC). Neighborhood commercial uses are those that meet the needs of residents in the adjacent neighborhood. Drive through uses, particularly those employing speakers, should be discouraged in neighborhood commercial areas. Small-scale retail and service establishments, as well as small office buildings may be permitted in this land use category or through the use of New Urban features.

General Commercial (GC). This land use category is used to indicate locations for retail service and office uses that serve an entire community or region. Major retail centers,

fast food restaurants, service stations, multi-story office buildings and other intensive commercial uses should be located in areas designated for general commercial uses.

Commercial Recreation (CR). This land use category encompasses a broad range of privately or publicly owned or leased facilities for active recreation, where the primary activity occurs outside of buildings. Uses include golf courses, equestrian centers, small and large-scale amusement parks, shooting ranges, motorcycle/ATV tracks as well as recreational vehicle parks and campgrounds providing sites for temporary habitation.

Light Industrial (LI). This land use category is intended for a variety of lighter industrial uses. These uses typically involve fewer impacts on the surrounding areas, in terms of noise, fumes, nuisances and hazards, than do the uses described under Medium or Heavy Industrial. This category includes such uses as warehousing, wholesale sales and distribution, and light manufacturing. Some related office uses also occur in this category. Most activities associated with uses in this category take place within buildings. An on-site security employee living quarters is an authorized use.

Medium Industrial (MI). This land use category is established to provide areas in the County where medium industrial manufacturing and other firms can engage in processing, manufacturing, and related activities protected from the encroachment of commercial and residential uses. This category may create moderate obnoxious sounds, glare, dust and odor. Some related office uses also occur in this category. Most activities associated with uses in this category take place within buildings or behind solid fenced storage areas. An on-site security employee living quarters is an authorized use.

Heavy Industrial (HI). This land use category allows for a relatively wide range of industrial uses, including heavy manufacturing, construction yards and support retail/wholesale commercial. These uses may have safety, nuisance or environmental effects, which make them undesirable neighbors to residential areas. They should be located near or adjacent to major transportation facilities (such as rail lines, airports or freeways). Design standards focus on minimizing the effects of these uses on surrounding development. An on-site security employee living quarters is an authorized use.

Airport Industrial (AI). This land use category is intended for industrial development that is compatible with adjacent airport use and development that benefits from proximity to airport facilities. Such uses include certain manufactures, transport service providers, wholesalers and warehouse facilities. On-site security employee living quarters may be an authorized use through the issuance of a Special Use Permit.

Public Land Uses

Public land use categories are used to identify land that is owned by the Federal, State or local government. Public land may be used for facilities ranging from libraries to wastewater treatment plants, for parks and open space, or for other public purposes. In some cases, public

lands will be developed for other, private uses in the future. All publicly owned lands fall into one of the three broad categories

Public Facilities (PF). This category includes such public and quasi-public institutional uses as schools, colleges, fire stations, libraries, government buildings and hospitals.

Public Park (PP). Local, State and National parks that are publicly owned and managed for the benefit of the general public are included in this category.

Public Lands/State Trust Lands (PL). This category is used to indicate land that is owned by a public agency, but is not primarily devoted to parks and recreational use. Lands owned and managed by the Colorado State Lands Department or that are held in trust for conservation by a public agency are included in this category. The Land Use Element contains special policies for the County's involvement in more intense development of these properties.

Development Potential

The Land Use Diagram provides more than enough land for anticipated development. Using conservative estimates of development potential, the Land Use Diagram allocates enough land for 33,000 people. Based on certain general assumptions about future development, incorporated and urban development areas can accommodate nearly 33,000 people or the development potential of Logan County by the year 2035.

These estimates are derived from a series of conservative assumptions about people per household, vacancy rates and future residential densities.

Urban Development Overlay Areas and incorporated areas are assumed to have an average residential density of four dwelling units per acre. Residential land will comprise 75 percent of these areas. The remaining 25 percent are allocated for agricultural, public land, public facilities, and vacant tracts, commercial and industrial establishments.

These assumptions do not place caps on development potential; they are used simply to assess possible development potential. Even with the conservative assumptions described above, the Land Use Diagram provides ample capacity and market choice for future population and employment growth.

Countywide Land Use Goals and Policies

Community Balance

GOAL 8: To retain the beauty, the natural setting and resources, and the “small town” character of Logan County while providing opportunities for coordinated growth and development.

- Policy 8.1** Logan County shall establish and maintain its land use plans to provide areas for different types of future land uses and intensities, and shall plan for public services and facilities appropriate to the planned land uses.
- Policy 8.2** Logan County shall identify sufficient locations for residential and non-residential development to accommodate growth anticipated through the year 2018, with provision of additional land use capacity for market choice and flexibility.
- Policy 8.3** Locations for commercial and industrial uses should be identified to support Logan County’s economic development objectives, including diversification of the economic base.
- Policy 8.4** Logan County shall use its planning and development regulations to protect residential neighborhoods from encroachment of incompatible activities or land uses which may have a negative impact on the residential living environment.
- Policy 8.5** Proposed non-residential structures adjacent to residential neighborhoods shall be designed and located to protect the privacy of residences.
- Policy 8.6** Development adjacent to a park or public open space should be designed to facilitate public access to, and use of, the park while minimizing potential conflicts between park users and residents of the development.
- Policy 8.7** In reviewing development proposals, Logan County should consider issues of community character, compatibility of use, environmental impact, resident security and safety, and efficient service provision.
- Policy 8.8** Logan County shall require phased commercial and industrial projects to be designed so a project is able to function effectively as each phase is completed.
- Policy 8.9** Logan County shall encourage future patterns of development and land use that reduce infrastructure construction costs and make efficient use of existing and planned public facilities.
- Policy 8.10** In planning for expansion of its growth areas, Logan County should give first priority to development of vacant or under-utilized land within these growth areas (“Infill”) and second priority to development that expands the community. Logan County’s policies and investments regarding public service provision should support these priorities.
- Policy 8.11** Logan County shall encourage future use patterns for the public schools in the categories of:
- Joint Operations

- Playgrounds
- Baseball, Soccer, Tennis

Designation of Planning and Land Use Areas Goals and Policies

GOAL 9: To use the Master Plan Land Use Diagram to graphically depict Logan County’s desired community form and character.

- Policy 9.1** The Logan County Master Plan Land Use Diagrams depict planned land use in the unincorporated areas of Logan County. These diagrams should establish the general pattern of future land use appropriate to achieve Logan County’s goals.
- Policy 9.2** The official copies of the Land Use Diagrams are on file at Logan County Planning Department. The boundaries of land use categories, as depicted on these official diagrams, should be used to determine the appropriate land use category for areas that are not clearly delineated on the Land Use Diagrams contained in the Master Plan document. Due to their size, the Land Use Diagrams reproduced in the Master Plan document may not completely reflect the official copy.
- Policy 9.3** Exhibit VI.1 shall list the general planning area types used in planning for future development in Logan County. Logan County shall use these planning area types to describe the general policies appropriate to particular parts of the incorporated County.
- Policy 9.4** Exhibit VI.5 will be Logan Countywide Land Use Diagram. Exhibit VI.5 shall show the location of areas planned for agricultural, commercial, industrial, recreational and urban/suburban residential development. Logan County should use the Land Use Diagram and the policies in this Land Use Element to establish the general pattern of development in Logan County’s unincorporated areas. Zoning of individual parcels may continue to be more restrictive than the land use categories shown on the Land Use Diagram. Existing conditions, such as environmental or facility constraints, may prevent the realization of the maximum development potential permitted in the designated land use category.
- Policy 9.5** Exhibit VI.2 shall provide the general description of the land use categories used in Logan County’s Detailed Land Use Diagram. The exhibit, along with the descriptions of these categories found in the Land Use Element text, shall explain the purpose and intent of the land use categories shown on the Detailed Land Use Diagram.
- Policy 9.6** Logan County shall approve requests for rezoning, conditional permits, special permits, the division of land, other new development proposals or

public projects that are consistent with these Land Use Diagrams, the policies contained in this Land Use Element and the other Elements of this Master Plan, as further set forth in Logan County's Development Regulations. Amendments to specific area plans or the general plan may accommodate other requests.

Policy 9.7 A residential proposal's density shall be considered consistent with the applicable Land Use Diagram if the average gross density of the entire project is within the range of the land use category for the property. Logan County may approve projects at any density within this range, if consistent with zoning regulations; the category does not ensure approval at the maximum density. The actual density approved will take into consideration the policies found in the other elements of the Master Plan. Land within a floodway should be excluded from density calculations. Floodway fringe lands may be included in the calculation if development can be appropriately engineered.

Policy 9.8 Within a residential land use category's density range, the following factors should be considered in reviewing and approving individual development proposals:

- a) presence of moderate slopes, steep slopes or floodplains;
- b) retention of the site's natural topography and vegetation;
- c) location in a high fire hazard area;
- d) the need to provide setbacks, access and traffic circulation according to established standards;
- e) outstanding project design;
- f) inclusion of amenities or designs that enhance the communities desired character;
- g) design supportive of alternative energy use;
- h) design supportive of New Urban features;
- i) effect on Logan County's ability to achieve other Master Plan goals and policies; and
- j) ability to meet established levels of service and follow facility design requirements, as further defined in the Development Code.

These factors should be incorporated and applied through Logan County's Development Regulations.

Policy 9.9 Non-residential development proposals should be evaluated according to the number of uses proposed, their suitability to the site's natural conditions, their compatibility with surrounding uses, and the ability of existing or planned infrastructure to provide adequate service to the uses. These factors should be incorporated and applied through Logan County's Development Regulations. Non-residential development proposals should be considered consistent with the Master Plan's land use categories if the uses are comparable to those described in this Land Use Element for such categories.

- Policy 9.10** Proposals to allow alternative uses should be considered by Logan County through the Master Plan amendment process.
- Policy 9.11** In instances where land uses or densities have been established or approved under prior development regulations, but which would not be consistent with the land use category shown on the Land Use Diagram for the site, the Master Plan shall not be interpreted to prevent development or continuation of such uses, except as may be authorized under rules established in Logan County’s development regulations.
- Policy 9.12** The creation of a “Sign Overlay Zone” adjacent to major intersections where high speed highways would allow the placement of taller signage due to the density of development in urban and suburban areas. Exhibit VI.6 shall be - “Sign Overlay Zone” depicting the areas within Logan County where signs will be granted a maximum sign height of thirty (30’) feet within five-hundred (500’) feet of the intersection public right-of-way. The placement of signage shall meet all other requirements of applicable Regulations, State and Federal Law.

Development of Public Lands Goals and Policies

GOAL 10: To provide procedures and policies for County consideration of changes in the use of land in public ownership.

- Policy 10.1** Logan County should cooperate with those public agencies charged with managing properties in the public ownership, to include conservation areas in order to achieve the goals of Logan County and these other agencies.
- Policy 10.2** If publicly-owned properties are anticipated to be considered for urban or suburban levels of development, Logan County shall depict these areas on the Master Land Use Diagrams according to the appropriate planning area type. Logan County should use the appropriate land use categories to depict appropriate future uses on Detailed Land Use Diagrams.
- Policy 10.3** Logan County shall consider proposals for alternative use of public lands through Logan County’s Master Plan Review process. Logan County shall consider the same factors in evaluating a public proposal for a change in land use as it would for comparable private proposals.

GOAL 11: To identify particular areas in Logan County for commercial and industrial development, consistent with Logan County’s economic development goals.

- Policy 11.1** Logan County shall encourage the design of new commercial developments as integrated centers utilizing Node & Pod development or

New Urban features, or compatible infill, rather than as small individual strip development projects.

- Policy 11.2** Logan County shall use design standards and guidelines to ensure that neighborhood commercial centers, which are located adjacent to residential land, include appropriate setbacks, parking and loading facilities, screening and landscaping to minimize impacts on the surrounding neighborhood, as set forth in the Development Regulations.
- Policy 11.3** Logan County shall use design standards and guidelines to ensure that commercial centers, located adjacent to residential land, take access from collectors, arterials or county roads, not local residential streets, as set forth in the Development Regulations.
- Policy 11.4** Logan County should encourage design of commercial and industrial projects that incorporate natural features of the site, that use native vegetation and design themes, and that support use of alternative energy sources, as set forth in the Development Regulations.
- Policy 11.5** Logan County shall establish design standards and guidelines for development in areas planned for Neighborhood Commercial, General Commercial and Light Industrial uses, to ensure that these areas develop with high quality, compatible design. Standards and guidelines should address elements including, but not limited to, minimum lot sizes, building scale, setbacks, lighting, landscaping, screening and fencing, signage, internal circulation and building materials, as set forth in the Development Regulations.
- Policy 11.6** Logan County should use design standards and guidelines for development areas planned for Heavy Industrial use, to ensure compatibility with surrounding uses and to provide effective circulation and service provision within industrial areas, as set forth in the Development Regulations.
- Policy 11.7** Logan County should protect industrially-designated areas from encroachment by incompatible uses and from the effects of incompatible uses in adjacent areas. Logan County should use site plan requirements and performance standards to ensure compatibility.
- Policy 11.8** In areas with Master Plan designations of Light Industrial, or Heavy Industrial, Logan County shall consider the particular uses, site design, and performance standards of a development proposal through a process including public review and notice.
- Policy 11.9** Logan County should encourage joint public-private development of public facilities such as airports, arterial roadway intersections and

substation locations. Such joint development projects should be designed to promote economic development of these locations, while returning revenue to Logan County and other entities responsible for developing these major facilities and providing other supportive infrastructure and services.

Policy 11.10 Logan County shall discourage strip commercial development and shall encourage a pattern of alternating land uses along major arterials with “nodes” of commercial development separated by other uses such as agricultural, parks, residential, institutional, or office.

Policy 11.11 Logan County should promote increased industrial development in the vicinity of the airport in Logan County.

Transition from Agricultural to other planning development

GOAL 12: To provide a process to consider changes in the County’s plans for Agricultural Development Areas (ADA’s).

Policy 12.1 In areas identified as ADA’S, proposals for other planning development land uses shall be considered through the Master Plan Review process. Logan County should consider the following factors in evaluating these proposals for change in land uses:

- a) effect on the character of the community or neighborhoods surrounding the proposal site;
- b) compatibility with adjacent land uses, existing and planned;
- c) capacity of planned services and facilities to accommodate the proposed use in addition to previously-planned development; and
- d) consistency with other goals and policies of the Master Plan.

Policy 12.2 Rezoning or other development approvals for other land uses, except prior established or approved uses, shall not be considered until the Master Plan has been amended to provide for such land uses.

Policy 12.3 The Development Plan amendment process is described in Goal 20 of this Land Use Element. The procedures for this review shall be established in the County’s development regulations.

Suburban Development Goals and Policies

Suburban Development Areas

GOAL 13: To establish Suburban Development Areas (SDA’s) in Logan County for suburban development with appropriate land uses and services.

- Policy 13.1** Logan County shall designate certain areas of the County as Suburban Development Areas (SDA's). The policies listed here apply to all SDA'S.
- Policy 13.2** Suburban Development Areas are those where development of a suburban character exists or is developing. New development in these areas may be approved by Logan County if it is consistent with the land uses shown on the Land Use Diagram, if services are available at the appropriate suburban levels and if other policies of the Area Plan and Master Plan have been met as further defined in the Development Regulations.
- Policy 13.3** Suburban development for the purposes of this Master Plan should include the residential land use categories of "Suburban Estates" and "Suburban Residential." These are residential categories with lot sizes from 22,000 down to 7,000 square feet. Suburban development may also include commercial, industrial, public and recreational uses, in accordance with the Master Plan policies and development regulations. Exhibit VI.1 indicates the land use designations that may be considered in an SDA; Exhibit VI.3 describes the individual land use categories.
- Policy 13.4** Logan County should consider neighborhood commercial developments in SDA's through the rezoning and design review processes. Neighborhood commercial development may be appropriate in SDA's if:
- a) the proposed uses are intended to serve local residents from the surrounding rural area;
 - b) the site is located at the intersection of major arterial or collector streets;
 - c) adequate facilities and services are available or will be provided as part of the development; and
 - d) the proposed development will be compatible with surrounding land use.
- Policy 13.5** Logan County shall review the design of all non-residential projects to provide future residents of SDA's with a safe and functional living environment, while protecting compatibility with surrounding uses, existing and planned. The design review process should address issues including, but not limited to, site design, circulation and access, landscaping, energy conservation, grading and lighting, as may be set forth in the Development Regulations.
- Policy 13.6** Logan County should plan and provide for services and facilities to SDA's at established adequate service levels. For most SDA's, suburban services will be required. In some SDA'S, urban service levels may be required because of site conditions or availability of centralized facilities. Appropriate service levels are defined in the Public Infrastructure and Facilities Elements of this Master Plan, in adopted Area Plans for particular suburban areas, and in the County's development regulations.

Suburban Area Plans

GOAL 14: To recognize the distinct character of individual suburban communities and encourage land uses consistent with the community's own objectives.

- Policy 14.1** Logan County shall use Area Plans to establish the special goals and policies necessary to reflect and enhance the character of specific areas. Area Plans may be prepared for all or portions of selected SDA'S. These Area Plans shall be part of the Logan County Master Plan.
- Policy 14.2** The policies in approved Area Plans shall apply in addition to the policies contained in other sections of the Master Plan. The more specific policies should apply.
- Policy 14.3** The Master Land Use Diagram contained in the Master Plan shall establish the range of land use categories appropriate within a suburban Area Plan. The Detailed Land Use Diagram contained in the Area Plan should be consistent with this General Land Use Diagram, and should be interpreted according to the policies set forth in this Land Use Element.
- Policy 14.4** Logan County shall adopt or modify a suburban Area Plan with the participation of the residents and property owners of the affected area and with the involvement of other community organizations or interest groups the County finds to be affected by the Area Plan.

Suburban Facility Provision

GOAL 15: To provide for organized planning, funding, construction and maintenance of suburban infrastructure, at locations consistent with planned suburban land uses and with capacities that are adequate to meet the needs of these planned land uses.

- Policy 15.1** Logan County should require that adequate levels of service are provided to serve planned suburban development. These service levels are defined in the Public Infrastructure and Facilities Elements of this Master Plan, in adopted Area Plans, and in the County's development regulations.
- Policy 15.2** Logan County should coordinate with utility providers when amending Master Plan Land Use Diagrams, when updating its CIP, and when reviewing development proposals.
- Policy 15.3** Logan County should give first priority to extending facilities to areas adjacent to existing suburban development.

Transition to Urban Development

GOAL 16: To provide a process to consider changes in the County's plans for Suburban Development Areas.

- Policy 16.1** In areas identified as SDA's, proposals for urban land uses shall be considered through the Master Plan Review process. Logan County should consider the following factors in evaluating these proposals for change to urban land uses:
- a) effect on the character of the community or neighborhoods surrounding the proposal site;
 - b) compatibility with adjacent land uses, existing and planned;
 - c) capacity of planned services and facilities to accommodate the proposed use in addition to previously-planned development;
 - d) the ability of urban infrastructure to be extended to serve the area;
 - e) the need for additional areas of urban development to meet the needs of anticipated Countywide growth; and
 - f) consistency with other goals and policies of the Master Plan.
- Policy 16.2** Rezoning or other development approvals for urban land uses, except prior established or approved uses, shall not be considered until the Master Plan has been amended to provide for such land uses.
- Policy 16.3** The Development Plan Review process is described in Goal 20 of this Land Use Element. The procedures for this review shall be established in the County's development regulations.

Urban Development Goals and Policies

Urban Development Areas

GOAL 17: To establish particular locations in Logan County for development as distinct urban areas, with appropriate land uses and public facilities and services.

- Policy 17.1** Logan County shall designate certain areas of the County as Urban Development Areas (UDA's). The policies listed here apply to all UDA'S.
- Policy 17.2** Urban Development Areas are those where development of an urban character exists or is developing. New development in these areas may be approved by Logan County if it is consistent with the land uses shown on the Land Use Diagram, if services are available at the appropriate urban levels and if other policies of the Area Plan and Master Plan have been met, as further defined in the County's development regulations.

- Policy 17.3** Urban Development, for the purposes of this Master Plan, should include the residential land use categories of “Low Density Residential,” “Medium Density Residential” and “High Density Residential.” These are residential categories with lot sizes less than six-thousand square feet per dwelling unit. Urban development also includes commercial, industrial public and recreational uses, in accordance with the Master Plan policies and development regulations. Exhibit VI.3 indicate the land use designations that may be considered in an UDA.
- Policy 17.4** Logan County shall plan urban communities to provide a balance of land uses, including sufficient commercial area to meet the needs of community residents for neighborhood commercial uses.
- Policy 17.5** Within Urban Development Areas, Logan County shall plan locations for High Density Residential uses along major collector or arterial streets, adjacent to non-residential uses, and adjacent to other residential areas where site configuration and project design can provide compatibility between such uses.
- Policy 17.6** Logan County shall review the design of all multi-family residential projects to provide future residents with a safe and functional living environment, while maximizing project compatibility with surrounding uses, existing and planned. The design review process should address issues including, but not limited to, site design, circulation and access, landscaping, energy conservation, grading and lighting, as incorporated in the Development Regulations.
- Policy 17.7** Logan County shall provide for the use of flexible design techniques within Urban Development Areas. Techniques such as planned developments and clustering should be considered when site design or neighborhood compatibility concerns can best be addressed by a project with a mix of uses or densities.
- Policy 17.8** Logan County should plan and provide for services to UDA’s at established urban service levels. These service levels are defined in the Public Infrastructure and Facilities Elements of this General Plan, in the adopted Area Plan for a particular urban community, and in the County’s development regulations.

Overlay Area Plans Goals and Policies

GOAL 18: To recognize the distinct character of individual communities and encourage land uses consistent with a community’s own objectives.

- Policy 18.1** Logan County shall use Overlay Zone Areas to establish the special goals and policies necessary to reflect and enhance the character of specific

areas. Overlay Zone Areas may be prepared for identified Suburban/Urban Development Areas, or portions of identified SDA/UDA's. These Overlay Zones shall be part of the Logan County Master Plan.

Policy 18.2 The policies in approved Overlay Zones shall apply in addition to the policies contained in other sections of the Master Plan. The more specific policies should apply.

Policy 18.3 The Master Land Use Diagram contained in the Master Plan establishes the range of land use categories appropriate within urban Overlay Zone Areas. The Detailed Land Use Diagrams contained in the Overlay Zone Areas should be consistent with this Logan County Wide Land Use Diagram, Exhibit VI.5, and should be interpreted according to the policies set forth in this Land Use Element.

Policy 18.4 Logan County shall adopt or modify an urban Overlay Zone Area with the participation of the residents and property owners of the affected area and with the involvement of the city/town or other community organizations or interest groups Logan County finds to be affected by the Overlay Zone Area.

Growth Coordination Goals and Policies

Development Review

GOAL 19: To provide a development review process that is open to the public, consistent, and predictable and designed to achieve the goals of the Master Plan.

Policy 19.1 Logan County shall periodically evaluate its development review and approval processes and revise as needed to ensure:

- adequate opportunity for public input at appropriate development phases;
- that consistency and predictability are maximized for all parties involved in the processes; and
- that these processes help to achieve the goals and implement the policies of the Master Plan.

Policy 19.2 Logan County shall ensure that adequate public notice is provided at appropriate phases of the development process and those hearings provide the public with the opportunity for meaningful input on public decisions.

Policy 19.3 Logan County shall endeavor to maintain policies and regulations that promote consistency and predictability in the development process. *[Note.- this policy is not intended to diminish Logan County's ability to modify its policies or regulations to meet changing conditions.]*

Growth Monitoring

GOAL 20: To regularly monitor the type and location of development occurring in Logan County.

- Policy 20.1** Logan County should keep accurate records of the types and locations of development approvals that it grants.
- Policy 20.2** Logan County should monitor all subdivision activity, and record the types and locations of lots approved by Logan County.
- Policy 20.3** Logan County should monitor all building and development permits and record the types and locations of development projects.
- Policy 20.4** Logan County should regularly review development activity and identify growth trends.
- Policy 20.5** Logan County will, in theory, support permissive statute language allowing a neighborhood revitalization plan within Colorado. A revitalization plan is intended to promote the revitalization and development of the community by stimulating new construction and the rehabilitation, conservation or redevelopment of the proposed revitalization areas(s) in order to protect the public health, safety or welfare of the residents of the identified community by offering certain incentives, which include tax rebates. (added by Resolution 2011-30)

GOAL 21: To monitor and evaluate changes in Logan County's quality of life, including its natural resources, economy, public services, fiscal condition and community character.

- Policy 21.1** Logan County should monitor reports and other information regarding changes, trends and projections affecting the quality of life in Logan County and the region.
- Policy 21.2** Logan County should survey residents periodically to assess public perceptions of changes in the quality of life.
- Policy 21.3** Logan County should monitor and evaluate trends in labor force characteristics, property values, sales and other fiscal factors. This information should be evaluated to assess the need to modify projections, regulations, plans or policies.
- Policy 21.4** Logan County should monitor public services and facilities and assess changes in the levels of public services.

Policy 21.5 Logan County should put an emphasis on improving the quality of life of its citizens by whatever means necessary in order to make Logan County an attractive place to live and work.

Land Use Element Amendments

GOAL 22: To use determined public processes to consider proposals to change the Master Plan's land use, development and designations.

Policy 22.1 Logan County should consider the following factors in acting on a proposal to change from one urban land use category to another within an identified Urban Development Area:

- a) effect on the character and identity of adjacent neighborhoods;
- b) compatibility with surrounding land uses, existing and planned;
- c) capacity of planned urban services and facilities to accommodate the proposed use in addition to previously-planned development;
- d) effect on the overall character and balance of the urban community;
- e) consistency with other goals and policies of any applicable Overlay Zone Area; and
- f) consistency with the goals and policies of the Master Plan.

Policy 22.2 Logan County should consider the following factors in acting on a proposal to change from one suburban land use category to another within an identified Suburban Development Area:

- a) effect on the character and identity of adjacent neighborhoods;
- b) compatibility with surrounding land uses, existing and planned;
- c) capacity of planned rural services and facilities to accommodate the proposed use in addition to previously-planned development;
- d) effect on the overall character of the outlying community;
- e) consistency with other goals and policies of any applicable Area Plans; and,
- f) consistency with the goals and policies of the Master Plan.

Policy 22.3 Logan County shall consider the policies established under Goals 15 and 19 of this Land Use Element in acting on a proposal to expand an identified Urban or Suburban Development Area.

Policy 22.4 Logan County should consider interpretations in the boundaries between land use categories as part of Planning Commission and Board actions on proposed rezoning and subdivisions. Such adjustments may be found consistent with the Plan if:

- a) they affect no more than one acre of land;
- b) they involve change to the next higher or lower residential category or change between non-residential uses with comparable effects on the community;

- c) they do not affect the overall character or balance of uses planned for the community; and
- d) the adjustment does not change the land use or development expected on adjacent property.

Policy 22.5 Logan County should only approve Master Plan amendments that meet the established standards for services and facilities, as described in the Public Infrastructure and Facilities Elements of the Master Plan, adopted Overlay Zone Areas, and Logan County’s development regulations.

Policy 22.6 The creation or amendment of an Overlay Zone Area shall be considered a minor amendment, and subject to the Master Plan amendment process for minor amendments specified in Logan County’s development regulations.

Policy 22.7 Amendments to the boundaries of Urban/Suburban Development Areas shall be considered major amendments, and subject to the Master Plan amendment process for major amendments specified in Logan County’s development regulations.

Implementation Measures – Land Use (LU)

LU1: Logan County shall use its planning and development regulations to protect residential neighborhoods from encroachment of incompatible activities or land uses which may have a negative impact on the residential living environment.

LU2: Logan County shall encourage future patterns of development and land use that reduce infrastructure construction costs and make efficient use of existing and planned public facilities.

LU3: In planning for expansion of its growth areas, Logan County should give first priority to development of vacant or under-utilized land within these growth areas (“Infill”) and second priority to development that expands the community. Logan County’s policies and investments regarding public service provision should support these priorities.

LU4: Logan County shall approve requests for rezoning, conditional permits, special permits, the division of land, other new development proposals or public projects that are consistent with these Land Use Diagrams, the policies contained in this Land Use Element and the other Elements of this Master Plan, as further set forth in Logan County’s Development Regulations. Amendments to specific area plans or the general plan may accommodate other requests.

LU5: Proposals to allow alternative uses should be considered by Logan County through the Master Plan amendment process.

- LU6:** Logan County shall encourage the design of new commercial developments as integrated centers utilizing Node & Pod development or New Urban features, or compatible infill, rather than as small individual strip development projects.
- LU7:** Logan County shall establish design standards and guidelines for development in areas planned for Neighborhood Commercial, General Commercial and Light Industrial uses, to ensure that these areas develop with high quality, compatible design. Standards and guidelines should address elements including, but not limited to, minimum lot sizes, building scale, setbacks, lighting, landscaping, screening and fencing, signage, internal circulation and building materials, as set forth in the Development Regulations.
- LU8:** In areas identified as ADA'S, proposals for other planning development land uses shall be considered through the Master Plan Review process. Logan County should consider the following factors in evaluating these proposals for change in land uses:
- a) effect on the character of the community or neighborhoods surrounding the proposal site;
 - b) compatibility with adjacent land uses, existing and planned;
 - c) capacity of planned services and facilities to accommodate the proposed use in addition to previously-planned development; and
 - d) consistency with other goals and policies of the Master Plan.
- LU9:** Rezoning or other development approvals for other land uses, except prior established or approved uses, shall not be considered until the Master Plan has been amended to provide for such land uses.
- LU10** Logan County shall use Area Plans to establish the special goals and policies necessary to reflect and enhance the character of specific areas. Area Plans may be prepared for all or portions of selected SDA'S. These Area Plans shall be part of the Logan County Master Plan.
- LU11** Logan County should require that adequate levels of service are provided to serve planned suburban development. These service levels are defined in the Public Infrastructure and Facilities Elements of this Master Plan, in adopted Area Plans, and in the County's development regulations.
- LU12** Logan County shall provide for the use of flexible design techniques within Urban Development Areas. Techniques such as planned developments and clustering should be considered when site design or neighborhood compatibility concerns can best be addressed by a project with a mix of uses or densities.
- LU13** Logan County should only approve Master Plan amendments that meet the established standards for services and facilities, as described in the Public Infrastructure and Facilities Elements of the Master Plan, adopted Overlay Zone Areas, and Logan County's development regulations.

2. HISTORIC PRESERVATION

Logan County's cultural heritage includes both historical and archaeological resources. Historic sites, structures and natural features throughout the County can enhance its charm and character and, help shape the County's identity.

Through acknowledgment and preservation of Logan County's rich cultural heritage, an important element of its character can be retained. The County can use these preservation efforts to enhance its understanding of its earlier residents and economy.

As Logan County celebrates the twenty-first century, with thriving cattle, hog and other value added agriculture industries, and new founded wind energy industry it becomes the reality of its founder's visions of a 100+ years ago.

Key Historic Preservation Issues.

Preservation of Cultural Heritage. Historic and archaeologically significant buildings, sites and natural features should be recognized for their important contributions to the character of the County, and they should be protected. Through appropriate preservation efforts, Logan County has the opportunity to capitalize on its past.

Protecting Natural Resources of Historic Value. Preserving natural historic resources will also help the County retain its character. Identification, protection and maintenance of these resources are necessary to ensure that they are not lost to neglect, oversight or abuse.

Historic Preservation Goals and Policies

GOAL 23: To preserve Logan County's historic resources as physical reminders of Logan County's past and as unique focal points to shape its identity, now and in the future.

Policy 23.1 Logan County should promote the preservation of sufficient historic resources, in number and type, to evoke the distinctive character of Logan County at significant stages in its history.

Policy 23.2 Logan County should work with other public and private groups to identify and perpetuate buildings and sites of historical, cultural archaeological and aesthetic value.

Policy 23.3 Logan County shall encourage preparation of informational materials to educate County residents and visitors about historic, cultural and archaeological resources.

Policy 23.4 Logan County should participate in efforts to secure State, Federal or other funding directed toward revitalizing historic areas or maintaining historic buildings and sites.

Policy 23.5 Development and redevelopment proposals in historic areas should further the preservation of these distinctive areas.

Implementation Measures – Historic Preservation (HP)

- HP1:** Meet with groups interested in historic preservation to determine how the County can support the efforts of these groups to preserve and promote the County's historic resources.

3. HAZARDS MANAGEMENT

This section of the Land Use Element focuses on minimizing the impacts from natural and man-made hazards, to Logan County's residents and their property. The County's primary natural hazards are from floods and wildfires. Hazardous wastes and materials pose an increasing threat to the country's population and are likely to stir future debates among the County's decision-makers.

The arid climate of northeast Colorado is the very real threat to life and property posed by floods. Periodic downpours in the County transform normally dry streambeds and low areas into torrents rushing to the river and water retention areas of the County. This causes ponding in low areas, whether they are streets or private property. Flash run-offs near the South Platte River cause concern. Inappropriate development in or near the floodplains is at risk of being inundated by sediment loaded floodwaters or undercut by the strong erosive forces of these flows on the predominantly alluvial soils. The Federal Emergency Management Agency (FEMA) has mapped floodplains throughout the County. This places a burden on the County to carefully review all requests for floodplain development to ensure that it does not pose an inappropriate risk to life or property.

While much of the County is typified by sparse vegetation, there are areas subject to threats from wildfires. Wildfire risks extend throughout the vegetated plain areas of the County and along its waterways. If allowed to accumulate close to a building, dry brush and low vegetation can pose a serious fire hazard.

Hazardous materials, including wastes, are potential threats to human health by definition. These materials can affect the public health through direct contact with the source, or through indirect means, such as groundwater contamination. While EPA regulations govern many aspects of handling hazardous materials, the Agency is not as sensitive to locational issues as local governments can be. Often, local governments can better determine the most appropriate locations for transporting, storing and disposing of hazardous materials. By virtue of their involvement in the development process, local governments also can provide valuable assistance to State and Federal regulatory agencies.

11. FEMA has designated 100-year floodplains, which are areas subject to inundation from a storm event that has a one-percent chance of occurring in any given year. A floodway consists of the channel and other areas in the floodplain that must be reserved to discharge the 100-year flood without increasing the water surface elevation by more than one foot. FEMA and the County permit development within floodplains under certain conditions but not within floodways. The current FEMA maps are retained in the County of Logan County, Planning & Zoning Department at the County Courthouse Center.

Key Hazards Management Issues

Informing Residents About Natural Hazards. One cost-effective means of enhancing public safety is to keep the public informed of risks to their property and personal safety due to hazards, as well as means of reducing those risks. The County can disseminate information directly or work with other agencies such as school districts, utility companies or other governmental agencies to promote public awareness of risks and risk reduction techniques.

Improving Available Information. The County needs good information to effectively identify high-risk areas, high risk practices and appropriate abatement techniques. FEMA has identified floodplains; their information should be refined for site specific analysis and should periodically be updated to reflect changes in storm water characteristics resulting from development and natural forces. To effectively manage the transportation, storage and disposal of hazardous materials, the County must be aware of activities occurring in the County. Improving the quality of information about these and other hazards will improve the quality of the County's decision-making.

Hazards Management Goals and Policies

GOAL 24: To reduce the effect on County residents of natural hazards due to flooding.

- Policy 24.1** Logan County should use the Federal Emergency Management Agency's (FEMA) FIRM maps to determine the locations of floodplains and floodways in Logan County. Logan County should review and revise its land use plans and maps following receipt of FEMA updates of floodplain areas or other valid drainage studies to assure consistency.
- Policy 24.2** Logan County should not permit construction in identified floodways unless the Logan County determines that such construction is necessary and desirable and the U.S. Corps of Engineers permits said construction.
- Policy 24.3** Logan County shall not permit the storage or production of hazardous wastes in identified 100-year floodplains.
- Policy 24.4** Logan County shall not permit the subdivision of land [applicable definitions apply as to location] for any development purpose without an engineering study illustrating that:
- a. proposed structures would not be subject to damage from the 100 year storm event as determined under the basin's fully developed condition;
 - b. proposed development will not increase the elevation of the 100 year floodplain upstream or downstream from the property to be subdivided; and,

- c. proposed development will not increase the volume or velocity of storm water through downstream properties under design storm conditions.

This policy should be implemented through Logan County’s development regulations and other applicable regulations.

Policy 24.5 Logan County should use its planning and zoning authority to establish appropriate uses and intensity of development in floodplains.

Policy 24.6 Logan County should provide the opportunity to cluster development so the owner of property which includes floodplains may use its development potential while locating residential structures outside floodplain areas, as set forth in the development regulations.

Policy 24.7 Logan County shall support the removal of FEMA flood plain designations that have not historically demonstrated a potential for flooding and encourage private property owners to submit LOMA amendments to such areas for removal.

Policy 24.8 Logan County should digitize the FEMA Flood plain maps and integrate them into the Logan County GIS Mapping System.

GOAL 25: To reduce the effect on County residents of wild land fire hazards.

Policy 25.1 Logan County should support efforts to educate County residents about wildfire hazards, and to promote actions by residents to minimize such risk.

GOAL 26: To reduce the risk to County residents due to hazardous materials and hazardous wastes.

Policy 26.1. Logan County shall review the use, storage, transport and disposal of hazardous materials and hazardous wastes in reviewing development proposals, which involve the use of hazardous materials.

Policy 26.2 In reviewing hazardous material facilities, Logan County shall consider the site’s natural features and environmental constraints, the project’s compatibility with surrounding land uses, the availability of adequate services and infrastructure and other impacts on area residents, businesses and the environment.

Implementation Measures – Hazards Management (HM)

HM1: Monitor floodplain mapping throughout the unincorporated area of Logan County and the adjacent Urban Development Areas which is looked at as land

to be annexed to the community based on FEMA reports and other reliable studies.

- HM2:** Regulate floodplain and floodway development in a manner consistent with FEMA guidelines and Master Plan policies. Use Master Plan land use designations and zoning to establish appropriate densities for floodplain development.
- HM3:** Coordinate with the Area Fire Departments and other local fire districts to identify areas having moderate and high potential for wildfires. Work with this and other agencies to educate residents of these areas about the risk to life and property, as well as risk management techniques.
- HM4:** Establish standards for reviewing facilities using, storing, transporting or disposing of hazardous materials.
- HM5** Logan County should move quickly to map the FEMA Floodplain areas of the County and digitize them into the Logan County GIS mapping system to assist in the citizen's determination of best use of their properties.

B. HOUSING ELEMENT

Housing is an essential part of any community; the availability of housing that is safe, decent and affordable is critical to each resident's quality of life. In Logan County, planning for the future means planning additional housing for a growing population. In addition to planning enough housing for future residents, the County must also consider the need for a diverse housing mix with a variety of housing types and styles, as well as the creation of housing affordable to residents in all income groups.

The County continues to have housing units in substandard condition. Rehabilitation or replacement of substandard units is a major concern at this time, monitoring of housing condition will be important to ensure that residents continue to have quality housing available over time.

Are there enough residential units to meet the County's demands? A 5 percent vacancy rate in rental units and a 2 percent vacancy rate in units for sale are considered to be the minimum vacancy rates needed to ensure that an adequate supply of housing is available.

One market segment is housing priced in the range of \$75,000 to \$100,000. Households most likely to be attracted are those with incomes from \$25,000 to \$50,000. Based on broad-based community input during the public meetings for the Master plan, a major concern is the lack of housing available in this price range. This target market segment consists of 1,863 or 29.4% of the total households within Logan County. 72.4% of the housing units are single-family detached with 2.3% single-family attached; 14.3% is identified as multi-family and 10.9% is HUD housing.

Since income determines the location, size and quality of the housing unit a resident can consider, affordability should be measured in terms of one's income. A typical mortgage lender's "rule of thumb" indicates that one can afford a home that costs 2.8 times the annual income. An annual household income of \$18,220 would be required to afford the median priced home in Logan County. Housing costs for renters should not exceed 30% of gross income. An annual household income of \$16,000 is needed to afford the median rent in Logan County.

Can County residents afford housing? The Buxton Report by Claritas, Inc., Prizm NE; infoUSA, Inc., National Research Bureau; Mediamark Research, Inc., and Geographic Data Technology, Inc. all from 2006 reports that the median household income for Logan County was \$37,494. Thus, most households can afford rental property; County's households can afford the median priced home. Low-income households (those earning less than \$24,800 per year) can afford rental property, but are unable to afford to purchase the median priced home. Very low-income households (those earning less than \$15,500 per year) can not afford to purchase or rent median priced housing.

To ensure that an adequate supply of affordable housing is available, the County must monitor changes in the supply and cost of housing, as well as the resources that its residents can devote to housing.

The County can help to ensure that adequate housing is available to all of its residents through a variety of approaches that have proven to be effective in communities throughout the United States. To minimize land costs, the County can promote infill development, higher densities, and planned developments that incorporate more efficient land planning guidelines. Studies have shown that New Urban features reduce the effective cost of housing. Each of these techniques takes advantage of opportunities to reduce the costs of land and infrastructure necessary to serve new development. Mixed-use developments can further reduce housing costs by minimizing the distances between work, home and retail establishments. The County can assist single parents and the elderly through its support of alternative living arrangements such as housing types with shared facilities, such as kitchens, bathrooms or living areas. The County also can serve as a facilitator, providing information and assistance for public and private sector housing groups and individuals.

Key Housing Issues

Housing Types and Densities. A mix of residential densities and housing types is important to give residents choice in their selection of housing types. The Master Plan provides locations for various types and densities of residential development in order to create opportunities for varied housing types while retaining the desired character of each neighborhood. Higher densities are planned where public facilities and services will be able to meet the needs of a larger population. Overlay Zone Areas are planned for new growth areas for housing which assures the availability of future growth. For the most part the Master Plan maintains or increases the residential densities that exist today.

The Master Plan provides flexibility in the type of housing built, particularly in the urban residential areas of the County. Within a planned residential density range, several types of housing can be developed. For example, an area planned for residential uses between 5 and 12 units per acre might be developed with single family detached homes, attached units, zero lot line homes, apartments or condominiums. In this way, a property owner/developer can choose to develop a particular housing type and different housing types may be made available to County residents.

Affordable Housing. Affordability is a key housing issue in Logan County and nationwide. As noted previously, most County households can afford to pay the median rent and can afford the median, priced home, however, there are a number of households that cannot afford to enter the “new” home market due to a lack of affordable entry level housing available on the market in the \$43-50,000 range. The Master Plan supports continued provision of affordable housing by identifying locations for the housing types and densities that are most affordable. The Plan also identifies techniques available to the County to encourage affordability.

While the median household may be able to rent the median-priced rental unit, there are still other households in the County for whom affordability is a significant concern. Households with very low or low incomes are extremely limited in housing choices within this County. Housing for single working parents and lower income workers is a concern for businesses that rely on this segment of the labor force. In addition, seniors and others on fixed incomes are affected by increasing housing costs. Housing for very low and low income households is supported through Master Plan policies for higher density residential development and through other actions designed to create incentives for private provision of affordable housing.

Housing for Persons with Special Needs. For many residents, the choice of a particular housing type or location is based on personal preference. Residents with special needs, however, may be limited to units with particular design features or locations. Seniors with limited mobility, the physically disabled and others with special needs may require housing units designed for easy access and safety. On the other hand, persons with special needs may place fewer demands on some public facilities. Senior households, for example, typically generate fewer automobile trips than other households of a similar size do. The Master Plan addresses these special housing needs through policies, which provide appropriate housing densities in locations with necessary services; incentives can also be used to support private development of housing for these special residents.

Housing Goals and Policies

GOAL 27: To meet the housing needs of Logan County’s projected 2018 population through retention of existing dwellings and construction of new housing units.

- Policy 27.1** The Master Plan’s Land Use Element and Overlay Zone Areas should designate sufficient land for residential uses to meet the needs of approximately 27,300 residents in the year 2018.
- Policy 27.2** The Master Plan should designate sufficient land for residential use, in areas where adequate services are available, to meet the needs of population growth projected for at least the next fifteen (15) years. The availability of sufficient serviced land should be reviewed as part of the Master Plan Review and service areas should be re-evaluated as necessary to provide opportunities for short-term residential development needs.
- Policy 27.3** Logan County should identify substandard housing and promote the revitalization and rehabilitation of these structures as a first priority.
- Policy 27.4** Logan County should develop and implement an insulation and weatherization program to assist citizens living in the unincorporated areas access to low cost programs to mitigate the ancillary cost of living by lowering heating & cooling cost through our energy providers.

GOAL 28: To provide locations for a wide variety of housing types

- Policy 28.1** Logan County should encourage a diversified mix of housing types, including conventional single family homes, modular homes, townhouse, manufactured housing and apartments, to provide a range of housing alternatives.
- Policy 28.2** Logan County should provide for factory built homes in identified areas as an affordable form of housing, and should encourage site designs that help maintain the value of these homes and nearby properties. Factory built homes include panel homes, modular housing and HUD approved manufactured homes.
- Policy 28.3** Logan County’s zoning regulations shall include zoning districts appropriate to implement the residential density classifications identified in the Land Use Element and to permit the housing types consistent with these densities.
- Policy 28.4** Logan County’s development regulations should provide mechanisms such as clustering to permit flexibility and innovation in residential project design, to promote land use efficiency and environmental protection.
- Policy 28.5** Logan County should recognize the unique characteristics of senior households and should encourage provision of housing desired to meet their special needs.

- Policy 28.6** Logan County should allow the creation of second units on a single lot in urban areas to accommodate persons with special medical needs, where such units can be developed within the planned residential densities and where these units are compatible with the existing neighborhood's character.
- Policy 28.7** Logan County should promote compatibility between adjacent residential areas developed at different residential densities or with different unit types, and should encourage the use of design techniques to minimize the impacts between these areas.
- Policy 28.8** Logan County should identify standard developer incentives to encourage development of low and moderate income housing units adequately dispersed in the community.
- Policy 28.9** Logan County should promote programs such as Habitat for Humanity and encourage direct connection of utilities to individual properties without charge.
- Policy 28.10** Logan County should encourage its citizens to build front porches by reducing the front yard easement by ten (10) feet.

GOAL 29: To provide for housing affordable to persons of all income levels.

- Policy 29.1** Logan County shall encourage the development of low and moderate income housing to meet the needs of current and future residents in proportion to employment growth in the local economy.
- Policy 29.2** Logan County should support efforts to provide very low, low and moderate income households with housing in a variety of locations, housing types and price ranges.
- Policy 29.3** Logan County should support the use of quality manufactured housing, in manufactured home parks, consistent with County Code to include tornado shelters, as a means to provide affordable housing and safety during storms to very low, low and moderate income households.
- Policy 29.4** Logan County should promote mixed-use developments as a means of reducing housing costs. Mixed-use developments should provide retail and employment opportunities, thereby reducing transportation costs for residents. The inclusion of higher density residential units in mixed-use developments will enable developers to pass through savings on land and infrastructure, thus reducing housing costs. The County should also encourage dispersal of public telecommunications.

Policy 29.5 Logan County should allow new alternative building methods and materials, certified by national code standards that do not compromise the health, safety and welfare of its citizens.

Policy 29.6 Logan County should facilitate communication between developers and ethnic groups relating to design features that meet specific needs of the citizenry.

GOAL 30: To reduce the risk to County residents due to flying debris during high winds or tornadoes in densely populated residential areas

Policy 30.1 Logan County shall review all current multifamily and MHP - MHS projects to determine adequacy of shelter that would protect occupants during high winds or tornadoes.

Policy 30.2 Logan County shall use its planning and zoning authority to require appropriate shelter structures for all new projects that involve residential multifamily and MHP - MHS projects.

Policy 30.3 Logan County should use its planning and zoning authority to require appropriate shelter structures for all existing projects that involve MHP - MHS development. Manufactured Home Parks should be required to construct required shelters when 20% or more of the MHP units that are in place or are changed with another unit and/or the park is enlarged by more than five (5) MHP units.

Policy 30.4 Non-conforming MHP's are those in place at the time of the adoption of the zoning regulations. However, it should be noted that the use of the non-conforming MHP is also important. If at the adoption of zoning regulations the park was filled with only 75 units of the 100 set out in the park plan, then the 75 units shall be the measure of the number of mobile homes authorized. Policy 32.3 grants the park owner an additional five (5) MHP units before the 20% rule is invoked.

Implementation Measures - Housing (H)

H1: Monitor the construction of residential units, by housing type, and residential density. Review the mix of housing units constructed as part of the Annual Master Plan Review and modify policies or programs as necessary to achieve a full range of housing types.

H2: Monitor the housing prices for housing throughout the County. As part of the Annual Master Plan Review, evaluate affordable housing policies and implementation measures, and consider modifications of the number of households unable to afford the median-priced home if the prices have increased.

- H3:** Periodically review and revise County code provisions addressing manufactured housing on individual lots and in manufactured home parks and subdivisions to minimize impacts on surrounding uses.
- H4:** Periodically review and revise County codes to ensure that they continue to provide for reasonable design flexibility through planned developments. Guidelines and performance criteria should be adjusted periodically to accommodate design innovations that will further the goals and policies of the Master Plan.
- H5:** Periodically review and revise County codes to ensure that project design guidelines and site plan standards promote design compatibility between higher density residential projects and neighboring lower density areas in a cost effective manner.
- H6:** Encourage a sense of community by authorizing under the code a reduced front yard setback for covered porches. Such porch shall not reduce the front yard setback to less than fifteen (15') feet (to include the structure overhang) from the property line. The porches may not be enclosed to the weather within this adjusted setback (does not prohibit screening) area.
- H7:** Provide for development of second units on residential lots for persons with special medical needs. Establish appropriate provisions for such housing to be built in areas where such units are consistent with the planned residential densities. Establish performance criteria for the design of these units to meet the needs of this group and to be compatible with surrounding units.
- H8:** Logan County should identify standard developer incentives to encourage development of housing for citizens that have low to moderate-income and they should be adequately dispersed throughout the community.
- H9:** Consider incentives (such as density bonuses) for development projects that include housing for seniors; housing affordable to very low or low income households; or housing for persons with special needs. When considering the affordability of units eligible for incentives, the County should consider energy efficiency, access to transit services and proximity to jobs and services.
- H10:** Use Master Plan land use designations and zoning regulations to establish appropriate regulation to require storm shelters for *all existing* MHP developments.

B. ECONOMIC DEVELOPMENT ELEMENT

This element describes a cost-effective approach through which the County can promote the expansion and diversification of local businesses. This growth and diversification should meet residents' needs for employment opportunities that provide adequate income and security.

Logan County is a net importer of labor. In May 2008, there were 11,919 persons in the labor force in the Sterling Micropolitan Statistical Area (MSA) which includes portions of Logan County. There were 11,509 persons employed, thus the unemployment rate was 3.4%. The Buxton Company data from October, 2007 shows a workplace population in the Secondary Trade Area (about 60 minute drive-times around Sterling, Colorado) of 33,032 which includes portions of surrounding counties. This latter figure is the "labor force potential" as further described by the 2008 Labor Force study conducted by Colorado State University in 2008.

While the agricultural industry will continue to provide employment for Logan County residents and service and retail jobs will continue as a strong job market, increasing the number and diversity of job opportunities in the County will improve the stability and health of the County's economy. Economic growth and diversification in this County will require increasing competition with other areas as communities seek to attract or retain businesses. Public and private sector efforts will be important in attracting new jobs to Logan County in the future.

County involvement in economic development activities can have a significant impact. By actively working with the business community, the County can build confidence among local and visiting business leaders. This confidence often translates into business investments and growth in the number of jobs to meet the needs of local residents. In addition, improved communication between the County and other participants in economic development will help ensure that the County experiences the most appropriate type of economic growth in the most appropriate locations.

Key Economic Development Issues

Progressive Economic Growth. The County supports efforts to attract new jobs and expand local employment opportunities. This Master Plan supports strong economic growth that is compatible with Logan County's goals for environmental protection and planned, timed urban development where appropriate services are available. It establishes a general goal of enough jobs, located in Logan County by the year 2018, to meet the needs of the County's anticipated population. It also recognizes the County's role in supporting and assisting the economic development efforts underway in the private sector. The Land Use Element reflects these goals in its planned land uses.

Along with economic growth, economic diversification is a key concern for Logan County. A more diverse economy is desirable for several reasons. First, a diverse economy is generally more stable and better able to weather recessions or economic downturns that affect a single industry. Diversification means that some segments of the community's economic base would be stable or growing even though others may be declining.

Expanding the number of production (including value added agricultural) and distribution center (enhanced transportation), medical and education jobs will increase the diversity of employment opportunities for County residents. It is the goal of Logan County to support the Logan County Economic Development Corporation (LCEDC) in their efforts in economic development to increase the number of “primary jobs” within the County. Those are jobs created by stable, growing employers that are above-average in pay rates and benefits, and produce goods and services which are sold outside our market area. Primary jobs bring increased income and capital investment into the County area and by diversifying the economy, the County can enjoy a more stable economic base. Secondary firms (those providing goods or services to larger firms) can provide goods and services that benefit residents as well as businesses. New businesses and their customers will increase the cash flow in the County’s economy and enhance the health of businesses and residents.

Logan County can build on its current strengths in tourism by adding new types of attractions or marketing new packages of activities. The natural resources of the area and its small town character support other types of tourism. Active recreational pursuits, such as hiking, bike riding, or winter sports could be expanded. Tourism, emphasizing the historic qualities of the community, the experience of visiting our famous sculptures or the municipal swimming pool complex, recreating at Logan County Lakes, hunting, visiting our scenic areas including our “wind farms” or simply “getting away from it all” can build on traditional strengths of the County while broadening the potential customer base.

Provision of Jobs for the Resident Labor Force. An economic development effort benefits companies seeking locations in Logan County and provides revenues to the public sector. They also directly benefit the County’s residents by providing them a greater number and variety of job opportunities close to home. For this reason, one of the County’s economic development goals is to provide more opportunities for jobs for County residents with a variety of skills.

Economic Development Goals and Policies

GOAL 31: To support environmentally responsible commercial and industrial development which promotes a diverse and stable County economy.

Policy 31.1 Logan County should support the retention and expansion of existing County businesses through cooperative programs with other public, private and quasi-public organizations.

Policy 31.2 Logan County should encourage the establishment and/or relocation of diverse industrial and commercial developments in identified areas of the County consistent with these uses.

- Policy 31.3** Logan County should cooperate with private and quasi-public entities, such as the Logan County Economic Development Corporation (LCEDC), in preparing and conducting marketing and advertising in order to attract new employees to Logan County.
- Policy 31.4** Logan County should participate in economic development efforts aimed at attracting a broad range of tourism activities, including tourism oriented to outdoor recreation and historic sites.
- Policy 31.5** Logan County should support economic growth that keeps pace with population growth and provides opportunities for the County's resident workers to work in the County. As one indication of this balance, the County should plan for non-residential land uses to balance the number of jobs in the County with the number of people in the labor force.
- Policy 31.6** Logan County should give high priority to the processing of nonresidential development projects that may lead to significant long-term increases in County employment.
- Policy 31.7** Logan County should work with LCEDC to assemble an Economic Development Host Committee as the initial welcoming agent of the County for prospective new industries considering location in the County. The Committee should assist industries by providing information, identifying potential sites and serving as an ombudsman to public and private entities.
- Policy 31.8** Logan County should support the location or relocation of businesses in the County through developer agreements that expedite and/or simplify the development review process.
- Policy 31.9** Logan County should cooperate with private and quasi-public entities, such as the LCEDC, the Logan County Chamber of Commerce, to develop and update information on current and projected economic trends, labor force, land availability, development processes or other issues relevant to economic development efforts.
- Policy 31.10** Logan County should participate in efforts to obtain funding for economic development programs from State, Federal and other sources.
- Policy 31.11** Logan County should provide information and assistance to economic development projects interested in participating in State, Federal or other economic development programs.
- Policy 31.12** Logan County should encourage innovative and environmentally friendly businesses to develop within Logan County in order to diversify its economic base.

Policy 31.13 Logan County should encourage innovative programs such as neighborhood revitalization plans to encourage redevelopment in residential, commercial and industrial areas as an economic development strategy. (added by Resolution 2011-30.)

GOAL 32: To encourage economic development at appropriate locations throughout Logan County.

Policy 32.1 The Land Use Element and Area Plans should identify areas designated for future commercial and industrial development. The Overlay Areas may include additional policies defining the appropriate types of non-residential development.

Policy 32.2 Development and redevelopment proposals in historic areas should further the preservation of these distinctive areas.

Policy 32.4 Capital improvement planning and funding by the County should consider economic development benefits as a criteria in reviewing improvement projects and in setting funding priorities.

GOAL 33: To support economic development, which provides employment opportunities for Logan County residents at a variety of skill levels.

Policy 33.1 Logan County should support job-training programs designed to improve employment opportunities for the County residents, including programs provided by private businesses and trade schools.

Policy 33.2 Logan County should cooperate with the school districts to encourage job training and educational programs appropriate to County residents.

Policy 33.3 Logan County should cooperate with private and quasi-public entities, such as the LCEDC to inform potential future employers of the skills and expertise available in the County's labor force.

Policy 33.4 Logan County should cooperate with private and quasi-public entities, such as the LCEDC, to encourage creation of employment opportunities for minorities and disadvantaged persons.

Policy 33.5 Logan County should encourage the development of trade organizations in order to further economic development in technical fields.

Policy 33.6 Public Agencies should set the example and also encourage all local businesses to place their Job Announcements on the Internet.

Implementation Measures- Economic Development (ED)

- ED1:** Establish a regular schedule of meetings between County representatives, the Logan County Economic Development Corporation. Use these meetings for communication and coordination regarding issues such as recent economic trends, cooperative programs, alternative economic development prospects, marketing efforts, and development opportunities.
- ED2:** Together with the private sector, review possible new economic development programs or projects for Logan County and establish an action agenda for cooperative economic development efforts.
- ED3:** Establish regular monitoring programs to evaluate the County's employment growth, by job type and location, and the jobs-to-resident worker ratio for the County and its planning areas. Report this information as part of the Master Plan Review. Consider policy changes based on these trends as part of the Annual Master Plan Review.
- ED4:** Produce a regular informational report for the public containing information on employment growth and development.
- ED5:** Prepare informational materials explaining the County's development review processes and regulations, particularly as they pertain to the location or relocation of businesses in Logan County. Make these informational handouts available at County offices and other public locations.
- ED6:** Develop information on the skills and experience of the County's resident labor force and collect this information in a report available for use in economic development efforts.
- ED7:** Periodically identify ways to evaluate the County's development review procedures to streamline the review of projects with significant economic development benefits while providing for appropriate public review and input.
- ED8:** Public Agencies should set the example and also encourage all local businesses to place their Job Announcements on the Internet.
- ED9:** Together with the private sector, and the LCEDC monitor to identify particular goods or services desired by local residents and businesses, to shape the focus of efforts to attract new firms to the County.
- ED10:** Logan County should assemble an Economic Development Host Committee as the initial welcoming agent of the County for prospective new industries considering location in the County. The Committee should assist industries by providing information, identifying potential sites and serving as an ombudsman to public and private entities.

ED11: Include economic development benefit as one of the criteria in ranking proposed capital improvement projects within a County Capital Improvements Program (CIP).

ED12: Evaluate opportunities to obtain economic development funding from State, Federal or other sources. Pursue funding sources available and appropriate to Logan County.

GROWTH COORDINATION GOALS AND POLICIES

Development Review

GOAL 34: To provide a development review process that is open to the public, consistent, and predictable and designed to achieve the goals of the Master Plan.

Policy 34.1 Logan County shall periodically evaluate its development review and approval processes and revises as needed to ensure:

- adequate opportunity for public input at appropriate development phases;
- that consistency and predictability are maximized for all parties involved in the processes; and
- that these processes help to achieve the goals and implement the policies of the Master Plan.

Policy 34.2 Logan County shall ensure that adequate public notice is provided at appropriate phases of the development process and that hearings provide the public with the opportunity for meaningful input on public decisions.

Policy 34.3 Logan County shall endeavor to maintain policies and regulation that promote consistency and predictability in the development process.
[Note.- this policy is not intended to diminish the County's ability to modify its policies or regulations to meet changing conditions.]

Growth Monitoring

GOAL 35: To regularly monitor the type and location of development occurring in Logan County.

Policy 35.1 Logan County should keep accurate records of the types and locations of development approvals that it grants.

Policy 35.2 Logan County should monitor all subdivision activity, and record the types and locations of lots approved by the County.

Policy 35.3 Logan County should monitor all building and development permits and record the types and locations of development projects.

Policy 35.4 Logan County should regularly review development activity and identify growth trends.

GOAL 36: To monitor and evaluate changes in Logan County's quality of life, including its natural resources, economy, public services, fiscal condition and community character.

Policy 36.1 Logan County should monitor reports and other information regarding changes, trends and projections affecting the quality of life in the County and region.

Policy 36.2 Logan County should survey residents periodically to assess public perceptions of changes in the quality of life.

Policy 36.3 Logan County should monitor and evaluate trends in the labor force characteristics, property values, sales and other fiscal factors. This information should be evaluated to assess the need to modify projections, regulations, plans or policies.

Policy 36.4 Logan County should monitor public services and facilities and assess changes in the levels of public services.

Growth Coordination Implementation Measures (GC)

GC1: Adopt a Master Plan amendment process as a part of the County's development regulations. Prepare a handout for the public describing major and minor amendments and the processes for each type.

GC2: Adopt a design review process in the zoning ordinance and apply this process to all development projects.

GC3: Monitor population growth within the land uses in order to amend the land use boundaries as necessary to accommodate growth and provide additional capacity for market choice and flexibility.

GC4: Include applicable utility providers in the development review process and forward their comments to developers.

GC5: Periodically review the development review process and revise as needed to ensure that:

- a. notification requirements are appropriate, providing sufficient opportunity for public input at appropriate phases of the development process;
- b. the process is consistent and predictable, without any unnecessary delays; and
- c. the process furthers the goals and policies of this Master Plan.

- GC6:** Develop and maintain a growth monitoring program to track the types, locations and timing of development approvals. This program to monitor subdivision activity, building permits and zoning requests should include the production of periodic growth trends reports.
- GC7:** Monitor demands on the County's water, wastewater and transportation systems. Compare these demands to growth trends to assess the impacts of various land uses and to project future facility demands.
- GC8:** Monitor and evaluate changes in Logan County's quality of life, including its natural resources, economy, public services, fiscal condition and community character.
- GC9:** Incorporate compatibility standards within the County's zoning regulations. These standards should address:
- a. a.the relationships between different zoning districts;
 - b. the relationships between residential and non-residential land uses keeping in mind the landscape requirements;
 - c. the relationships between land uses and the environment;
 - d. standards for commercial and industrial uses as it relates to interfacing with other agricultural, suburban and urban uses; and
 - e. standards for access to arterial, collector and local streets.

VII. Public Infrastructure and Services

Public Infrastructure Element
Public Facilities Element

VII. PUBLIC INFRASTRUCTURE AND SERVICES

A. PUBLIC INFRASTRUCTURE ELEMENT

This section addresses concerns related to infrastructure for the County's water, wastewater, flood control/drainage, and street systems. Section A.1 includes goals and policies that are common to all of those systems. Sections A.2 through A.5 list goals and policies that are unique to each system.

1. Public Infrastructure Provision

While Logan County does not directly provide all public infrastructures to its businesses and residents, it has a vital interest in ensuring that public infrastructure needs are met. The quality of life in the County depends on its residents' ability to travel freely, have safe and adequate water supplies [within suburban/urban density subdivisions], be able to safely dispose of wastewater and be protected from floodwaters.

The infrastructure to provide for these needs is operated by numerous public and private sources. The County maintains an extensive street network throughout its unincorporated areas that is linked with the State and Federal highway network. The County's role in planning and regulating land use is a key factor in ensuring the adequacy and affordability of needed infrastructure, no matter who provides it.

Key Public Facilities Issues

Planning for Facilities. Street and utility systems must be planned carefully to make the most efficient use of public resources. Providing adequate capacity to meet demands in the most cost effective manner requires planning and coordination between other utility providers and the County. Logan County can take a leadership role in these efforts through responsible use of its planning and regulatory powers.

Ensuring Adequacy of Facilities. Ensuring the adequacy of the street and drainage systems is a key aspect of Logan County's responsibility to protect the health, safety and welfare of its residents. Adequacy means that sufficient capacities are available to serve demands as those demands occur. Logan County's development regulations should address these issues of timing and capacity to ensure that its residents' needs are met.

Extending Facilities. Policies on the extension of public facilities have a significant impact on public and private infrastructure costs. By encouraging compact growth patterns, annexation wherever possible and carefully reviewing proposals for facility extension, the County can minimize capital and maintenance costs for public facilities and services.

Financing Facilities. Financing public infrastructure requires the County to balance resources, costs and benefits. The County must identify the costs of construction and maintenance and then determine how to equitably finance those costs.

Public Infrastructure Goals and Policies

GOAL 37: To plan for facilities to meet the needs of Logan County’s growing population.

- Policy 37.1** Logan County should encourage regional provision of facilities and infrastructure whenever feasible and should discourage the proliferation of small service districts. The County should encourage logical extensions of existing water and wastewater systems to serve new development.
- Policy 37.2** Logan County should assure proper record keeping of water, wastewater, flood control/drainage and transportation system facility plans for urban and suburban development areas.
- Policy 37.3** Facility Plans shall be consistent with the Master Plan goals and policies for service provision. They may be adopted separately or as part of the Master Plan.
- Policy 37.4** The County should prepare its Capital Improvements Program (CIP) and construct its capital improvement projects to provide adequate public facilities and services to serve the population and employment levels projected through the year 2018, according to the land uses designated in the Land Use Diagram and the service levels adopted in the Public Infrastructure and Facilities Elements. The capacity of public facilities and services should be increased in phases when phasing is more cost-effective.
- Policy 37.5** Logan County shall coordinate with utility providers when amending Master Plan land uses, when updating its Capital Improvements Program (CIP), and when reviewing development proposals.
- Policy 37.6** Logan County should ensure that facilities are designed and constructed to accommodate the demands from planned and future development in the most cost-effective manner.
- Policy 37.7** Logan County should require all infrastructure system improvements to be designed in accordance with the standard specifications established by Logan County, as these may be modified from time to time. This policy shall be implemented through specific provisions of Logan County’s subdivision and zoning regulations.

Policy 37.8 Logan County is not in the urban or suburban infrastructure business. Developments shall provide their own infrastructure to meet the needs of the development without assistance from the at-large general taxpayer.

GOAL 38: To direct new development to locations within or adjacent to urban areas, where public facilities can be provided in a timely manner and a sense of community can be created or enhanced.

Policy 38.1 Logan County should use its zoning regulations to promote growth in or adjacent to existing urban areas where adequate public facilities are available.

Policy 38.2 Logan County shall encourage infill development, annexation of urban and suburban areas where existing public facilities are adequate to meet the demands of such development.

Policy 38.3 The County shall designate areas within Urban Development Areas (UDA's), and Suburban Development Areas (SDA's) that are appropriate for development based on proximity of public services and facilities. These areas should be given first priority for extension of public facilities. New urban or suburban development that is not in one of these designated areas may be approved if the developer provides adequate public facilities.

Policy 38.4 Within Urban and Suburban Development Areas, Logan County shall discourage subdivisions and other development activities that are not served by adequate public facilities, unless such facilities can be provided by the developer at established levels of service.

GOAL 39: To ensure that public facilities are designed and phased to adequately meet the demands from new development.

Policy 39.1 Logan County should use its regulatory powers and its provision of capital improvements to ensure that all necessary public services and facilities for a planned urban area are available by the time development activity creates a demand for these services and facilities.

Policy 39.2 Logan County shall require public facilities in new developments to be designed to accommodate demands resulting from planned land uses. Construction of facilities sized to meet demands at full build-out of planned land uses may be deferred if:

- proposed interim facilities are adequate to serve anticipated growth for at least five years;
- proposed rights-of-way and easements are sufficient to meet demands from planned land uses;
- and, the County finds that incremental provision of facilities is the most efficient use of public resources.

- Policy 39.3** When determining the adequacy of public facilities to serve development, the County shall consider the development potential of adjacent land, particularly those lands under the same ownership as the parcel to be developed.
- Policy 39.4** The County should establish a standard formula for allocating the capacity of facilities built with joint public-private funding. Project specific development agreements, where appropriate, should be used to record these allocations.
- Policy 39.5** Required on-site improvements shall be in place at the time project occupancy creates demands for those improvements.
- Policy 39.6** Required off-site improvements shall be constructed or funded as a condition of development approval.
- Policy 39.7** Required off-site improvements should be installed prior to the creation of demands for those facilities. If off-site improvements are not in place at the time of a development requires then a County approved development phasing plan shall be required to ensure that improvements will be in place at the time of project occupancy.
- Policy 39.8** Where public facilities are not adequate to serve an entire development project, the County should use phasing to ensure that adequate facilities will be available concurrently with demands for those facilities.
- Policy 39.9** Logan County may use development agreements, where appropriate, to phase construction of required improvements concurrent with development creating demand for those improvements.
- Policy 39.10** When development is proposed at a lower residential density or with less intense non-residential uses than would be consistent with the County's Master Plan, the County shall review and condition the initial development approval so more intense development could occur at some time in the future. The County shall consider application of conditions such as the following to the initial development project's approvals:
- a. demonstration that construction of facilities to meet future demands is not prevented by the design of the current project;
 - b. conditions that subsequent parcel maps to those which can be adequately served by existing facilities;
 - c. conditions that limit the timing and scale of future development to that which can be adequately served by existing or planned public facilities;
 - d. conditions that ensure provision of adequate facilities and services as part of any subsequent development approval.

This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

Policy 39.11 Logan County may require the provision of facility capacity in excess of that required by a proposed development in Urban Development Areas, if such over sizing is necessary to serve planned development in the facility's service area. Logan County should develop a process to reimburse developers providing excess facility capacity. Funding for such reimbursements should be based on fees from subsequent developments that benefit from the oversized facilities.

GOAL 40: To establish an equitable system for funding the costs of new public infrastructure.

Policy 40.1 New development shall be required to fund its fair share of the costs for public facilities needed to serve it.

Policy 40.2 The costs of expanding existing facilities and services shall be born by those creating the need for expansion, unless the County determines that a portion of the expansion's cost benefits existing development, in which case costs shall be equitably apportioned between new and existing development.

Policy 40.3 The developer of a tract shall be responsible for installation of all on-site improvements, as well as the provision of on-site and off-site easements and rights-of-way. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

Policy 40.4 Costs for system improvements in Suburban and Rural Development Areas shall be borne by the development creating the need for those improvements. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

Policy 40.5 A portion of the costs of system improvements in UDA's may be borne by the County if the Board of County Commissioner's determines that said improvements further the goals of this Master Plan. Under special circumstances, the County may participate in the costs of system improvements for SDA's.

Policy 40.6 When improvements are a condition of development approval Logan County shall require security for those improvements at the time of approval. Security may include cash escrow, letters of credit, performance bonds, or other alternatives specifically approved by the County. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

Policy 40.7 The County may adopt development fees or require developer contributions through development agreements to finance system improvements in UDA's, and SDA's.

2. Water Systems

Numerous entities provide water to parts of Logan County, but the vast majority of the County does not have centralized water service. Adequate water system infrastructure is a primary development constraint in many parts of the County. Urban and, in many cases, suburban development are limited to areas where organized water service can be provided. Expansion of existing systems or creation of new systems will be needed to accommodate the growth and development provided for in the Land Use Diagram.

Organized water systems are essential to provide for normal use and emergency fire flows for urban development. Organized systems also are needed to adequately serve most suburban development, although wells may provide adequate service to some low intensity suburban areas.

Coordination between the County and other water providers could benefit these providers and County residents. Water system expansions require significant capital investment. These capital costs, as well as operation and maintenance costs, are borne by the users of the systems. The County and water service providers can minimize these costs through cooperative efforts to promote contiguous and compact development patterns through land use and facility extension policies and by coordinating water system planning with County land use and development decisions.

Key Water Systems Issues

Providing for Adequate Water Supplies. The availability of adequate water supplies is essential for growth and development. While all residents and businesses require safe and reliable supplies, the standards for adequacy may vary from one part of the County to another. Urban development demands more water, and a centralized water system to meet the daily needs of residents and businesses and to provide water for fighting fires. The County must define reasonable and affordable standards of adequacy for water supply to serve various types of development.

Using Water Resources Wisely. Much of Logan County is arid land, some with limited water resources. Logan County has a limited amount of groundwater. By using water wisely, the County, its residents and its businesses can minimize expenditures on water and infrastructure, and help ensure that existing water supplies will support long term growth.

Water Service Goals and Policies

GOAL 41: To plan and provide for adequate water supply systems, at levels appropriate to meet the service and emergency needs of urban, suburban and rural areas.

Policy 41.1 The County should ensure provision of water services consistent with the growth planned by the Master Plan.

Policy 41.2 The County shall require developers to provide water facilities to service proposed developments at approved levels of service.

Policy 41.3 Levels of water service shall satisfy the minimum standards of the State of Colorado, Department of Natural Resources, and Division of Water Resources.

Policy 41.4 Water systems should be designed to provide for emergency water needs.

Policy 41.5 The County may participate in the over sizing of water facilities for development projects in UDA's if the projects support Master Plan goals and policies and sufficient funding is available.

Policy 41.6 Connection to an organized water system should be required for all projects in Urban Development Areas. Projects in Suburban Development Areas should be served by an organized water system unless the County finds that an alternative source of water can safely and efficiently provide for the needs of future occupants of the proposed development.

Policy 41.7 Logan County shall require developers to provide water testing, treatment if required by the State Engineer, storage, distribution/transmission and supply acquisition needed to serve proposed development.

GOAL 42: To promote the efficient use of water supplies through water conservation efforts.

Policy 42.1 The County shall encourage water conservation programs aimed at reducing demands from new and existing development.

Policy 42.2 Logan County should encourage the conservation of water through public education efforts and through requirements for water conserving fixtures for new or remodeled buildings.

GOAL 43: To provide coordination by the County for the planning and operation of public water systems.

Policy 43.2 Logan County should meet with water providers on a regular basis to identify and implement programs that will improve communication and coordination between the County and the service providers.

3. Wastewater Systems

The increasingly urban and suburban character of development in the unincorporated areas of Logan County is increasing the County's involvement in the provision of organized wastewater systems. While County residents and businesses traditionally have used septic tanks or other on-site disposal systems, these systems are not viable in urban and suburban areas. Regional systems in urban and some suburban areas can offer significant long-term cost savings on a per-unit basis, but require high initial costs, careful planning and ongoing coordination to ensure that new development and facilities are compatible with the design of the regional system.

- Any entity providing regional wastewater management should be required to provide septic disposal, as well as long-term sludge handling.
- Major interceptors should be financed through sanitary districts and minor interceptors can be economically constructed by developers as a condition of subdivision approval.

Key Wastewater Systems Issues

Providing for Adequate Wastewater Facilities. The availability of organized wastewater systems is essential for urban and suburban growth and development. While rural residents and businesses may be able to safely treat and dispose of wastewater on-site, urban and suburban development is typically too intense to permit the use of septic tanks or other on-site solutions. To protect the environment from pollution and residents from potential health hazards, Logan County must ensure that wastewater treatment and disposal methods are adequate to serve proposed development.

Coordinating Wastewater Planning. Centralized wastewater service is provided by a variety of utilities. Through the use of its planning and regulatory powers, the County can ensure that service is adequate to meet the needs of future growth and development. By coordinating wastewater service and land use decisions, the County can assist providers in meeting future demands.

By coordinating the design of wastewater systems at the regional level the County can help minimize long term wastewater service costs. While small systems may be more cost effective on an interim basis, the long-term maintenance and operation costs of these facilities are high. By promoting regional wastewater systems, the County will have the flexibility to assure wastewater service in the most cost effective manner.

Wastewater Goals and Policies

GOAL 44: To plan and provide for adequate wastewater treatment and disposal systems, at levels appropriate to meet the needs of urban, suburban and rural communities.

Policy 44.1 The County should ensure provision of adequate wastewater services consistent with the growth planned by the Master Plan.

- Policy 44.2** The County should prioritize, phase, and schedule wastewater treatment services in accordance with Master Plan policies.
- Policy 44.3** Connection to a centralized wastewater system should be required for all projects in Urban Development Areas. If the project is contiguous to municipal/town limits it should be a condition of approval that the project be annexed to the municipality/town or at a minimum have a pre-annexation agreement in place at the development stage. If the project is near [within 400 feet] an existing sewer district it shall be a condition of approval to hook into the sewer district. Projects in Suburban Development Areas should be served by a centralized wastewater system unless the County finds that a proposed alternative can safely and efficiently provide for the wastewater treatment and disposal needs of future occupants of the proposed development. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.
- Policy 44.4** Rural developments of two and one-half (2½) acres or more shall be served by on-site wastewater treatment systems approved by the County and NE Colorado Environmental Health (NCHD). If a water source does not exist on site, a water well or water tap permit shall be obtained before applying for an individual wastewater treatment system through NCHD.
- Policy 44.5** Logan County shall require developers to provide wastewater collection and treatment capacity needed to serve development.
- Policy 44.6** Temporary use of private wastewater treatment facilities may be approved by NCHD or treatment systems other than those discharging through soil absorption, such as systems which will discharge effluent directly to the atmosphere, the ground surface or below ground, or which employ aerobic principles of sewage treatment or a dispersal system, may be permitted only if designed by a Registered Professional Engineer and approved by the Board of Health. These systems shall comply with Section IX of the State Guidelines.
- Policy 44.7** The County should support efforts to reuse effluent for irrigation, wetlands production, or other activities consistent with public health and water quality goals and policies. Use of these systems must comply with NCHD regulations for grey water systems, incineration toilets, cesspools and effluent discharging to State Waters.

GOAL 45: To provide coordination by the County for the planning and operation of public wastewater treatment and disposal systems.

Policy 45.1 Logan County should meet with wastewater treatment providers on a regular basis to identify and implement programs that will improve communication and coordination between the County and the service providers.

4. Flood Control/Drainage

Despite its arid climate, Logan County has significant flood control and drainage issues. Storm water running off of the relatively flat topography into the alluvial plains has produced considerable property damage in the past. The County ensures that new development complies with FEMA's regulations for floodplain development.

Logan County can help prevent future drainage problems through its regulation of new development. As new buildings, streets, parking lots, driveways and sidewalks are built, the amount of surface area available to soak up water is reduced. The increase in impervious surface tends to increase the volume and velocity of storm water runoff. Through careful design of new developments and their drainage systems, the County can minimize the impact on downstream drainage ways and land uses.

Key Flood Control/Drainage Issues

Providing Adequate Flood Control/Drainage Facilities. The County enforces FEMA regulations in designated floodplains in unincorporated areas. To effectively protect life and property from flood damages, the County must monitor changes in floodplains caused by natural events or human activities, and ensure that development is consistent with anticipated changes in the floodplains.

Coordinating Drainage System Planning. Planning a flood control/drainage system is a multi-jurisdictional endeavor because floodwaters ignore jurisdictional boundaries. Water flows from development in Logan County through unincorporated areas of the County and from unincorporated areas of the County through the City of Sterling and incorporated Towns of Crook, Fleming, Iliff, Merino and Peetz. The fact that development and drainage improvements in one jurisdiction directly affect the flood control/drainage system in other jurisdictions increases the importance of coordinating drainage planning, improvements, and regulatory efforts.

Flood Control/Drainage Goals and Policies

GOAL 46: To coordinate flood control/drainage system improvements with planned land uses throughout the County.

Policy 46.1 Drainage studies shall be required for all proposed development projects. This policy shall be implemented through specific provisions of Logan County’s subdivision and zoning regulations.

Policy 46.2 Developments should not increase runoff from the site. Developers shall be required to manage projected increases in runoff through approved methods, designed in accordance with acceptable engineering standards. This policy shall be implemented through specific provisions of Logan County’s subdivision and zoning regulations.

GOAL 47: To establish and maintain a system of natural and manmade drainage ways that is effective in carrying storm water and is compatible with the character of the County’s communities and its natural resources.

Policy 47.1 The County should encourage the design and siting of flood control/drainage facilities that are integrated with open space and landscaped areas.

Policy 47.2 The County should consider public safety, appearance, recreational use, and economical maintenance and operations in the design of flood control/drainage facilities.

Policy 47.3 The County will encourage flood control/drainage system design alternatives which maintain a natural appearance.

Policy 47.4 The County should require that flood control/ drainage facilities be designed and constructed to minimize the intrusion of pollutants and excess sediments into sensitive areas.

5. Transportation

Providing an adequate transportation system requires multi-jurisdictional cooperation and coordination. The flow of traffic is affected by the size and condition of County, State and Federal roads, as well as development along those roads. The condition of the road network affects the quality of most people’s lives on a daily basis. To maintain or enhance the quality of life of its residents, the County should actively participate in efforts to improve or maintain the level of service on roads Countywide. These efforts should include seeking increased funding for upgrading State and Federal highways; establishing a countywide major road network; and protecting existing and future major roadways from inappropriate development.

Key Transportation Issues

Securing Funding for Needed Highway Improvements. The County relies heavily on the State and Federal governments for highway funding. Logan County competes with other jurisdictions for limited transportation funding.

Coordination between all jurisdictions in the County is essential to ensure that funds are allocated for the most needed projects.

Key Growth Corridors. The long term effectiveness of the County’s arterial network requires the protection of those arterials from inappropriate development. By identifying key growth corridors, the County can anticipate where arterial streets will be needed and regulate development along those roadways to provide adequate right-of-way widths and to ensure that adjacent land uses, driveways and side streets do not create future traffic hazards.

Coordinating Roadways and Adjacent Development. Land use and roadway planning should be closely linked. Just as inappropriate land uses can dramatically reduce the effectiveness of adjacent roads, poorly planned roadways can reduce the viability of adjacent land uses. By coordinating land use planning with the planning of the future road network, the County can minimize future conflicts.

Transportation Goals and Policies

GOAL 48: To plan, construct and maintain an efficient transportation system that is adequate to meet the mobility needs of County residents and businesses.

- Policy 48.1** Logan County should provide transportation facilities with capacity to serve the growth planned by the Master Plan.
- Policy 48.2** The County should prioritize, phase, and schedule transportation system improvements in accordance with Master Plan policies and the County’s ability to fund such improvements.
- Policy 48.3** Logan County should coordinate with CDOT, and local jurisdictions when planning transportation system improvements.
- Policy 48.4** Logan County should monitor traffic conditions and studies to assess changing transportation needs. Transportation system improvement priorities should be based on these needs assessments.
- Policy 48.5** Streets shall be designed to provide safe access for vehicles normally accessing developed parcels and for emergency and service vehicles.
- Policy 48.6** The County’s street system shall consist of a network of arterial, collector and local streets. Collector streets should be arranged to provide easy access from property on local and collector streets to arterial streets.
- Policy 48.7** On-site local and collector streets shall be constructed by developers in accordance with County regulations. The County may also require the construction of off-site streets needed to provide adequate access to a

development. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

Policy 48.8 Logan County's roadway design standards should be appropriate to the function of the road and anticipated traffic volumes. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

GOAL 49: To promote compatibility between roadways improvements, land use patterns and natural features.

Policy 49.1 Logan County should use the development review and approval process to ensure that road improvements and rights-of-way are adequate to serve planned land use.

Policy 49.2 Logan County should require traffic impact analyses for major development projects. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

Policy 49.3 In areas experiencing or projected to experience traffic problems, the County Engineer should require the submittal and approval of a traffic impact analysis as part of a development application. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

Policy 49.4 The County should limit commercial and other uses that generate high volumes of traffic to locations where the use will not generate non-local traffic through residential neighborhoods.

Policy 49.5 Residential neighborhoods shall be designed to minimize through traffic on local streets.

Policy 49.6 Single family residential parcels generally should not take access directly from arterial streets. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

Policy 49.7 The County should develop buffering standards for multifamily residential projects that abut arterial streets to minimize the impacts of traffic on project residents. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

Policy 49.8 The County should develop access spacing standards for lots located on arterial and collector streets to promote the smooth flow of traffic and minimize the impacts of individual developments on the safe and efficient function of these roads. The County's development regulations should promote the use of local street access for lots located along arterial and

collector streets wherever feasible. Driveway access spacing standards for projects located on arterial streets should be consistent with spacing standards for local street intersections. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

Policy 49.9 Access to residential lots shall be provided from local streets or, where no access to a local street is practical, a collector street. Easements across private property when creating a subdivision is required to be a public access easement.

Policy 49.10 Except as otherwise approved for a multi-use facility, required parking space requirements should be based on peak demands.

Policy 49.11 Except as specifically approved by the County, all development should provide adequate on-site parking for normal operations. This policy shall be implemented through specific provisions of Logan County's subdivision and zoning regulations.

GOAL 50: To minimize the impacts of automobile travel on the County's air quality, natural environment and developed communities.

Policy 50.1 The County shall require the paving of all streets in UDA's and in those portions of SDA's within an identified urban overlay zone.

Policy 50.2 The County shall require all other public roads to be constructed with approved all weather surfaces, except for local streets in RDA's, which may consist of compacted base as approved by the County Road and Bridge Department.

GOAL 51: To minimize automobile miles and trips in Logan County through such approaches as transportation system management, provision for transit, bicycle use and other alternative travel modes, and through land use planning.

Policy 51.1 Logan County should encourage the development of neighborhoods that provide a mixture of uses to reduce the distances that residents must travel to work and to shop.

Policy 51.6 Logan County should consider the needs of pedestrians and bicyclists when planning and designing transportation facilities.

Implementation Measures - Public Infrastructure (PI)

PI1: Maintain a Capital Improvements Program (CIP) that is consistent with the Master Plan, the County's facility plans, the cities' and/or towns facilities plans,

and current growth trends. The CIP should be updated annually to reflect County priorities and budgetary constraints.

- PI2:** Designate areas within UDA's, and SDA's that are appropriate for development based on the availability of services. Use zoning and subdivision regulations to promote development of these areas. Discourage urban or suburban development of areas with inadequate services unless required facilities can be provided by the developer.
- PI3:** Adopt adequate public facilities requirements in accordance with the policies of Goal 44.
- PI4:** Use development agreements to ensure that adequate public facilities are provided in large scale or multi-phase projects. Standardize development agreements to the greatest extent possible to ensure that developers are treated equitably and to minimize the administrative burden of monitoring such agreements.
- PI5:** Establish appropriate design and engineering standards for water, wastewater, and flood control/drainage and transportation services in UDA's, SDA's, and RDA's.
- PI6:** Conduct periodic meetings between service providers to discuss service issues and to coordinate planning and service delivery.
- PI7:** Establish a system for monitoring and conducting traffic studies throughout the County. These studies should be summarized as part of an annual Master Plan review process.
- PI8:** Establish standards for the spacing of streets and driveways along collector and arterial streets.
- PI9:** Establish appropriate setback and buffer standards to ensure compatibility between arterial streets and adjacent development.

B. PUBLIC FACILITIES ELEMENT

1. Parks and Recreation

Parks and recreation facilities provide many important benefits. They give residents a place for both active and passive recreation. They provide a quiet setting for picnics and relaxation. They may include unique natural features or open space areas for outdoor recreation and nature study. Facilities for special activities or interests benefit community residents involved in the activity and create opportunities for others to become involved.

In addition to the benefits gained by individual residents who use the parks and recreation facilities, the County realizes other benefits from a carefully-designed parks and open space

system. Parks can shape and enhance the distinct identities of individual communities. By including a park with a school site and other community-serving facilities, a community focal point can be created, giving residents a meeting place and providing opportunities for efficient sharing of facilities.

Park sites emphasizing the natural environment provide important environmental benefits as well as recreational opportunities. These environmental benefits range from storm water retention and protection of steep slopes to preservation of sensitive habitats and significant views. By coordinating parks planning and design with other County programs, these multiple objectives can be efficiently achieved.

Finally, parks and recreation facilities can assist a community's economic development efforts. Attractive and available parks contribute to the quality of life desired by many firms seeking new locations for their businesses and their employees. Recreational areas are important attractions for tourism; park visitors from outside the County may generate revenue for the public and for commercial businesses during their visit. Special recreational facilities or events can place a community "on the map" for certain specified recreational activities, such as sledding, tubing, ice skating for winter events, walking and bike riding or long-distance racing. When coordinated with a communities other objectives, planning for recreation builds significant opportunities for enhanced quality of life.

Two types of park facilities are addressed in this Master Plan Element: community and special use facilities. Local Community Parks are typically used for such activities as field games, court games, crafts, playground activities and picnicking. They generally designed to provide areas for casual recreation such as open space, shelters, or playground areas. A local community park may also have areas of natural quality for our recreation such as walking, sitting and picnicking. These parks typically serve the immediate needs of the urban or suburban subdivisions where they are located.

Special use parks are those designed to meet the needs of a particular recreational activity. As a result, they serve a large population and service area, but they cater to individuals interested in a certain type of recreational activity. There is not a specific standard for measuring the adequacy of these facilities. Rather, the County's choice to provide such facilities should reflect the residents' interests and the opportunities afforded by the County's location or natural features.

Key Parks and Recreation Issues

In planning for the next ten years, the County faces several challenges in terms of parks and recreation facilities. These important issues relate primarily to keeping pace with the growing population and its changing recreational needs.

Adequate Parks and Recreation Facilities. As the County continues to grow, assuring adequate parks and recreation facilities will be an important concern. While there is an abundance of open space in the County, growth in outlying communities and new urban/suburban

subdivisions is likely to generate demand for additional local community parks.

Provision of Diverse Services. Residents will continue to demand a variety of park services and facilities. The County should provide in the design codes a range of park facilities to meet the diverse needs of its residents. Existing special use facilities will meet the community's needs for specified activities. The County should endeavor to provide for as many of its residents' recreational needs at community parks as is feasible.

Meeting Special Needs. Some County residents will need or desire recreational facilities tailored to meet special needs. The growing senior population will create a demand for some programs and facilities different from those desired by children and young adults. Persons with physical or other disabilities may need specially-designed facilities in order to fully benefit from the available activities. The County (and other providers) should periodically assess changing needs for special facilities, facility designs, or special programs and activities.

Parks and Recreation Goals and Policies

GOAL 52: To meet the recreational and open space needs of residents Countywide, with sites that provide for active recreation, specialized recreational opportunities and enjoyment of natural areas.

Policy 52.1 Logan County should indirectly provide, or coordinate with other entities to provide, park and recreational services and facilities to meet the community's demands for a variety of recreational activities. The Parks and Recreation Element establish policies for two primary types of parks: local community parks and special use facilities.

Policy 52.2 The County should continue to work with Logan County school districts in the development, of local school/park sites where it is economically and functionally desirable to do so.

Policy 52.3 Logan County should coordinate with other entities, such as the cities, towns, the State, Federal agencies and utility providers, to promote the efficient location, design and use of shared sites and facilities.

Policy 52.4 Logan County should allow through the Special Use Permit process shooting range(s) for the citizens of Logan County with such conditions and restrictions as are appropriate for the location and type of range operation.

Policy 52.5 Logan County should require community parks in areas of significant population within the County's new subdivisions.

- Policy 52.6** Logan County should locate local community parks only in designated Urban or Suburban Development Areas.
- Policy 52.7** When planning new local community parks, Logan County should identify sites and park configurations that create distinct community boundaries, gateways or focal points.
- Policy 52.8** Logan County should incorporate the planning and provision of identified community parks and special use facilities in its review and approval of development projects including or adjacent to planned sites. Project review should address park access, traffic patterns, land use compatibility and aesthetics.
- Policy 52.9** The County should periodically assess needs for new multipurpose facilities.
- Policy 52.10** Special use parks should be located with good access and address the specific needs of the community.
- Policy 52.11** Logan County shall support the opportunity for shooting ranges in appropriate locations with safety and attention to noise a requirement for approval.
- Policy 52.12** Logan County should encourage development projects to contribute to the acquisition or improvement of identified community parks and special use facilities.

GOAL 53: To provide recreational services for unique segments of the County’s population with special needs.

- Policy 53.1** In designing facilities or preparing recreational programs, Logan County should consider the needs of its senior population.
- Policy 53.2** Logan County should coordinate the provision of senior recreation programs with other senior facilities and services provided by public and quasi-public entities.
- Policy 53.3** The County’s review for park design and recreational activities shall address the needs of special populations, such as persons with disabilities.

2. Fire Protection

The Logan County Fire Districts provide services to most of the County’s urbanized and rural areas. The fire districts’ resources (in terms of equipment, personnel, water supplies and revenues) are limited.

Key Fire Protection Issues

Establishing Appropriate Levels of Services. Logan County offers urban, suburban and rural settings for its residents. The facility, equipment and water service costs to provide uniform urban fire protection service throughout the County would be prohibitive. Therefore, the County's fire districts should establish levels of service standards that are appropriate for their service areas, whether urban, suburban or rural. These standards could address factors such as response times, staffing and water supplies.

Addressing Fire Protection Through Development Review. The design of new development is a critical factor affecting the costs of future fire protection services. Roads should be designed to allow access by fire equipment, although local rural roads need not be paved. By involving the fire district(s) in the development review process, Logan County can insure that sufficient water for fire fighting is provided and building sites are located where emergency vehicles can reach them thus reducing future cost of fire service and protecting public safety.

Fire Protection Goals and Policies

GOAL 54: To plan and provide for adequate fire protection services at levels that are appropriate to the County's urban, suburban and rural areas.

Policy 54.1 Logan County should encourage and assist fire districts in developing standards for levels of service that are appropriate to the County's urban, suburban and rural areas.

Policy 54.2 Logan County should include the appropriate fire district(s) in the review of development proposals and should assist the fire townships in communicating their concerns to developers.

Policy 54.3 Logan County should consider inclusion of fire service standards or design requirements in its development regulations following adoption of these standards by fire districts.

3. Other Services and Facilities

In addition to its involvement in the services and facilities described in previous sections, Logan County plays an active role in protecting its citizens and providing them with cultural opportunities. The Sheriff's Department provides law enforcement services throughout the unincorporated areas of the County. The long distances between communities make this a formidable task. In addition to these highly-visible services, the County provides or supports specialized services, such as emergency response, planning, building and floodplain management. The County continually strives to ensure that these and other services provide excellent values for its residents' tax dollars.

Key Services and Facilities Issues

Establishing Appropriate Levels of Service. Standards for service provision are valuable tools for measuring and monitoring the effectiveness of service. Objective standards of service provision are valuable to assess how well services are provided. Establishing level of service standards that are appropriate for urban, suburban and rural residents can help the County make short and long-term budget and facilities planning decisions.

Providing Appropriate Levels of Service. Demands for services tend to exceed most jurisdictions' resources. Logan County does not have the resources to immediately satisfy all the service demands of its residents. The County should adopt service provision standards that are realistic in light of available public resources (Money – Man-power and Time).

Services and Facilities Goals and Policies

GOAL 55: To plan and provide for Sheriffs Department services at levels that is adequate to meet the needs of all County residents.

Policy 55.1 The County should plan and provide appropriate Sheriffs Department services to meet the needs of businesses and residents in urban, suburban and rural areas.

Policy 55.2 The Sheriffs Department should evaluate its services and seek to maintain or improve services over time.

GOAL 56: To support provision of adequate emergency medical services to meet the needs of County residents.

Policy 56.1 Logan County should encourage the provision of emergency medical services appropriate to meet the needs of urban, suburban and rural area residents.

Policy 56.2 Logan County shall continue to support E-911 services, and reverse E-911, providing regular updates of address information for new developments.

Policy 56.3 Logan County should continue to support the provision of appropriate facilities and services to meet the needs of the County's senior citizens.

GOAL 57: To promote improved coordination between the County and other governmental entities.

Policy 57.1 Logan County should coordinate with other jurisdictions (such as cities, school districts, special districts, State and Federal agencies) to identify

opportunities for joint service provision that will improve the quality and/or efficiency of public service provision. These efforts should explore options for sharing facilities and consolidating service provision.

Policy 57.2 The County should include other jurisdictions, as appropriate, in the development review process, to ensure that proposed developments can be effectively served.

Policy 57.3 The County should continue to use intergovernmental agreements to establish understandings that ensure compatibility between extraterritorial development (development in the Overlay Areas) and development in the city and incorporated towns.

Implementation Measures - Public Facilities (PF)

PF1: Continue coordinating with the State, local school districts the city and incorporated towns to provide a system of community and regional parks in Urban and Suburban Development Areas that meet the needs of County's residents.

PF2: Modify parks as necessary to meet the unique recreational needs of the County's seniors and disabled residents.

PF3: Work with the fire districts interested in developing appropriate standards for the review of development proposals in Urban, Suburban and Rural Development Areas. Modify the development review process as necessary to incorporate the opportunity for fire districts to communicate their concerns to developers.

PF4: Adopt operational level of service standards for County facilities and services (such as the Sheriffs Department), and use these standards as a basis for evaluating service adequacy and needs.

PF5: Continue coordinating with other jurisdictions to explore opportunities for shared facilities and joint service provision. Investigate opportunities to minimize redundant services within the County and between different jurisdictions.

PF6: Continue working with emergency service providers to enhance their levels of service. Consult with providers during the development review process.

PF7: Periodically review existing and available sources of funding for public facilities and evaluate the need to modify existing funding mechanisms.

VIII. Area Plans

Introduction
Area Plan Goals and Policies
Area Plans

VIII. AREA PLANS

A. INTRODUCTION

The Area Plan process provides a mechanism for the County and local residents to plan for future growth and development of communities at a greater level of detail than can be accomplished at a Countywide level. The Area Plan process enables residents of sub-areas within the County to refine the policies and Land Use Diagram of the Master Plan to tailor the plan to specific community needs.

The County may prepare Area Plans for any unincorporated area in the County. In addition to joint development planning, the County and a community may agree to apply County development standards and regulations within a mutually determined area, defined herein as the Area Overlay Zone. Plans for these areas must be prepared with the participation and agreement of the County and the affected community area. Such areas may be adjacent to incorporated communities.

For all other areas, the Area Plan process is similar to that used to develop the Countywide Master Plan, but at a greater level of detail. The process begins with collection of information that is pertinent to the area, including environmental demographic and land use characteristics and trends. This background data will provide a basis for the development of Area Plan alternatives. Once the specific alternative for growth and development is selected, a detailed land use diagram and area-specific goals, policies and implementation measures can be prepared. Throughout the planning process, public participation should be sought to ensure that the Area Plan effectively represents the concerns and objectives of local residents and property owners. Area Plan adoption is a minor amendment to the Master Plan and should follow that process.

B. AREA PLAN GOALS AND POLICIES

GOAL 58: To recognize the distinct character of individual areas and encourage land use patterns that is consistent with the goals of the Master Plan and each area's own objectives.

Policy 58.1 Logan County shall use Area Plans to establish the special goals and policies necessary to reflect and enhance the character of outlying communities and specific areas. Area Plans may be prepared for identified urban and suburban areas. These Area Plans shall be adopted as part of the Logan County Master Plan.

Policy 58.2 For those areas of Logan County with approved Area Plans, the policies of these plans shall apply in addition to the policies contained in other sections of the Master Plan. The more specific policies shall govern.

Policy 58.3 The Master Land Use Diagram contained in the Master Plan establishes the range of land use categories appropriate within a suburban Area Plan. The Detailed Land Use Diagram contained in the Area Plan should be

consistent with this General Land Use Diagram, and should be interpreted according to the policies set forth in this Land Use Element.

Policy 58.4 Logan County shall adopt or modify an Area Plan with the participation of the residents and property owners of the affected area and with the involvement of other community organizations or interest groups the County finds to be affected by the Area Plan.

Policy 58.5 Area Plans should be developed through a process including:

- a. analysis of natural resources, existing land use, population and economic characteristics, community character and design, existing and planned public facilities and services, and development trends;
- b. consideration of possible alternatives for area development and selection of a preferred alternative;
- c. definition of goals, policies, maps and implementation measures appropriate for the area and consistent with the Countywide policies contained in the Master Plan;
- d. public involvement throughout the plan development process; and
- e. public hearing and adoption of the Area Plan as a Master Plan amendment.

Area Plans may provide more detailed goals and policies for issues addressed in this Master Plan, including (but not limited to) natural resources, land use, community design, housing, economic development, parks and recreation, public services, water, wastewater and transportation.

Area Plan Facility Provision

GOAL 59: To provide for organized planning, funding, construction and maintenance of suburban infrastructure, at locations consistent with planned land uses and with capacities that are adequate to meet the needs of these planned land uses.

Policy 59.1 Logan County shall require that adequate levels of service are provided to serve planned urban development. These service levels are defined in the Public Restructure and Facilities Elements of this Master Plan, in adopted Area Plans, and in the County's development regulations.

Policy 59.2 Logan County shall coordinate with utility providers when amending Master Plan Land Use Diagrams, when updating its CIP, and when reviewing development proposals.

Policy 59.3 Logan County should give first priority to extending facilities to areas adjacent to existing suburban development.

Area Plan Implementation Measures (AP)

- AP1:** Assist specific neighborhoods in developing Overlay Zones that are consistent with this Master Plan and the character of individual neighborhoods while addressing the specific need generating the Overlay Zone.
- AP2:** Assist outlying communities in developing area plans that are consistent with this Master Plan and the character of individual communities.
- AP3:** Use Area Plans to establish goals and policies that are specific to any unincorporated area in the County.
- AP4:** Maintain complete, up-to-date, reproducible copies of the Land Use Diagram in the Planning Department to facilitate its use by the public.

C. AREA PLANS

*[The **Area Plans** contain the detailed information about each community or area within the County They include goals and policies that apply only in a particular community to deal with issues that are special concerns to that community. Land Use Diagram showing planned uses should be uses in each area plan and considered amendments to the Master Plan Land Use Diagram]*



AREA PLAN ATWOOD, COLORADO



**UNDER AUTHORITY OF
LOGAN COUNTY, COLORADO
COMPREHENSIVE PLAN**

**ADOPTED IN THE 2008-2018
LOGAN COUNTY MASTER PLAN**

Prepared by:

Logan County Planning Commission

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September 11, 2007/December 16, 2008

- **Acknowledgments (original adoption – September 11, 2007)**

The efforts put forth by the Atwood Community, organizations, agencies, the Logan County Planning Commission, and staff is recognized as contributing to the completion of this document. Without their efforts this Area Plan could not have come together.

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I. INTRODUCTION

A. PURPOSE

This Area Plan for the Outlying Community of Atwood is a guide for decision-makers. It is a statement of community values, ideals and aspirations about the best management of the natural and built environments. It recognizes that the town site of Atwood was platted and recorded on July 29, 1885. In addition to defining the community's view of its future, the Area Plan describes actions to take to achieve the desired future. The Plan establishes policies and programs to address the many issues facing the Outlying Community of Atwood, Colorado. The Plan is thus a tool for managing community change to achieve the desired quality of life as defined by the citizens of this Outlying Community.

B. CONTENT AND ORGANIZATION

The Area Plan incorporates the ten major sections of the Logan County Comprehensive Plan while modifying the *Land Use, and Housing* categories to fit the unique past development of the community. The Plan defines the community's vision for its future while taking into consideration past, existing and anticipated conditions affecting the community.

The issues relating to the continued development of the community have been identified based upon a community Town Hall meeting attended by a majority of the community citizens. Subsequent to the meeting several of the absent community citizens visited with planning staff their desires as it relates to their specific properties which have been incorporated into the plan. The requests were in order with the majority of the community.

C. EFFECT

Planning is not a single event -- the adoption of a particular document. Rather, it is an ongoing process involving the actions by the Citizens of Atwood, County, the private sector, other public and quasi-public agencies, and the community-at-large. As conditions change, the Atwood Area Plan should be amended to take advantage of new opportunities and respond to new needs. Periodic review and amendment of the Plan will be required to meet statutory requirements and to assure it addresses the needs of the Outlying Community of Atwood, Colorado, businesses and residents.

Standard definitions of goals, policies and implementation measures are used in all elements of the Atwood Area Plan. Goals describe a desired state of affairs in the future.

They are the broad public purposes toward which policies and programs are directed. They need not be fixed in time or quantity. Since goals are general statements, more than one set of actions could be taken to achieve each goal. In this Atwood Area Plan, goals are phrased to express the desired results of the Plan; they complete the sentence "Our goal is ..."

Policies are statements of government intent which individual actions and decisions are evaluated. Policies are phrased as sentences, with the agency responsible for implementing the

policy clearly identified. The wording of policies conveys the intended level of commitment to action. Policies which use the word **shall** are mandatory directives, while those using the word **should** are statements to be followed unless there are compelling reasons to do otherwise.

Implementation measures are actions recommended to carry out the policies. They are not the only possible actions which would achieve these goals. They are intended to set an initial agenda for implementation of the Plan.

The Atwood Area residents have selected measures for implementation in the next few months and years by considering the cost, urgency and benefit of each suggested measure. As a result, some projects may begin shortly after Plan adoption, while others may not begin for five or more years. Including a program or project on the list of implementation measures does not automatically create that program. The County will need to adopt each of these implementation decisions via specific Governing Body action.

D. AUTHORITY

Section 10. Area Plans of the Logan County, Colorado, Master Plan grants authority to develop with the assistance of identified outlying community citizenry, specific Area Plans for designated Outlying Communities. Atwood, Colorado, an unincorporated community is one such community.

II. RESOURCE CONSERVATION

Key Water Issues

South Platte River Water. The quality of water in the South Platte River alluvium must be maintained to continue supplying quality water for urban and agricultural uses. While many other jurisdictions have an impact on the River, Logan County's economy and water supplies are so directly linked to the alluviums, and our hydrologically connected deeper aquifers that the County has a vital interest in preventing their contamination.

Groundwater Quality. To ensure the viability of its continued use, the quality of area groundwater should be monitored regularly. Key recharge areas should be protected from development activities that degrade water quality. The effects of urban runoff and septic systems effluent on groundwater quality should be minimized.

Water Quality Goals and Policies

GOAL 1: Our Goal is to preserve the quantity and quality of water resources within the outlying community of Atwood, Colorado.

- Policy 1.1** Logan County and the Community should cooperate with Northeast Colorado Health Department, local water supplies, and other agencies to maintain the quantity and quality of the County's water resources, specifically those in and around the Atwood Community, encourage identification how those resources are being used, and retain awareness on commitments for future water use.
- Policy 1.2** The community should support programs to monitor groundwater quality and well levels.
- Policy 1.3** The community should encourage the efficient use of water resources through educational efforts.

Implementation Measures - Water Quality (WQ)

- WQI:** Support efforts by the Northeast Colorado Health Department and future utility providers to maintain a water use oversight for the outlying community of Atwood, Colorado, and for individual drainage basins, providing information on groundwater yields when requested, contracts, demands and changes in groundwater level.

III. COMMUNITY DEVELOPMENT

A. Land Use.

The pattern of land uses -- their location, mix and density -- is a critical component of any community's character. Past development patterns contribute to the attractiveness of an area. Future development patterns can support or retain the community's desired character or can change that character dramatically.

In addition to its effects on community character, the location of development also has a significant impact on the demands for public facilities and services, the costs of infrastructure construction and the cost-effectiveness of public service provision. A sprawling, low density development pattern is more costly to serve than is a compact pattern. Development within areas that are already adequately served reduces the need for expensive extensions of facilities to new areas. For these reasons, the land use plan for a community has important implications for the quality and cost of public services available to its residents.

The actual development of a residential subdivision, a commercial center or an industrial area is determined by the property's private owners. Although the public sector does not construct these projects, land use planning plays an important role in establishing a pattern for their future location. However, these developments affect the community's desired character and its ability to address public health and welfare concerns. The Atwood Area Plan is intended to give everyone - current and future residents, property owners and developers, elected officials and

staff -- a clear understanding of the development patterns the community has found to be most appropriate. As such, it sets forth the policies that will guide the County's review of individual development proposals. It establishes a consistent basis for review and action, and relates these development decisions to other public actions to provide community services, extend infrastructure, or attract economic development.

The Land Use Element of the Atwood Area Plan is the central statement of these policies regarding the pattern of development desired by the community. The set of Land Use Diagrams depict the types and locations planned for development. Its goals and policies interpret this diagram, and provide additional explanation of Atwood's desired development patterns.

The Land Use Element lists the basic goals and policies Logan County will use to review individual development proposals, plan capital facilities and services and establish design standards. It includes both written goal and policy statements and a graphic depiction of the type, intensity and location of planned land uses.

This graphic depiction is called a "Land Use Diagram," to indicate that it shows the proposed general distribution of land uses, but is not a precisely surveyed map of development or a zoning district map.

B. Land Use Diagram

The Land Use Diagram, found in Exhibit I. shows the planned land uses for most areas of Atwood, Colorado. The Diagram also identifies the boundaries of Residential Potential, Commercial Potential, Industrial Potential and Agricultural Potential development areas. The Land Use Diagram is not intended to designate land uses within any incorporated area.

Policies that refer to a "Land Use Diagram" apply to all of the diagrams adopted by the County. Atwood's official copy of the Land Use Diagram is available at the Logan County Planning & Zoning Department. It is a set of displays showing each area planned land uses. It provides the definitive reference for use in determining the intended boundaries of each land use area. The Land Use Diagram, together with the goals and policies contained in the Atwood Area Plan text, establishes the County's policy direction and acts as a guide for decisions affecting the community's future development.

The Land Use Diagram is not the communities zoning map. It is a guide to future land use patterns. Zoning and area plan designations may be more restrictive than the designated land use categories of the Land Use Diagram until demand and public facilities justify more intensive uses.

The Land Use Diagram uses four categories to describe the future land uses in the Atwood Area Plan. Land use categories are meant to be more general than zoning districts - there may be several zoning districts that could be consistent with a particular land use category. Included in the following general descriptions of each category is a statement of the land uses within the category and their character.

C. Agricultural Land Uses

The purpose of this land use category is to provide for a full range of agricultural activities on land used for agricultural purposes, including processing and sale of agricultural products raised on the premises; and at the same time offer protection to land used for agricultural purposes from the depreciating effect of objectionable, hazardous, incompatible and unsightly uses. This land use category is also intended to protect watersheds and water supplies; and to prevent and/or discourage untimely scattering of suburban residential, rural residential, and/or more dense urban development.

In this regard, all lands used for agricultural purposes, as described here, are and shall be limited from restrictions or limitations, however, commercial hog operations, dairy farm operations and commercial feedlot operations shall be required to provide public notice of their intent to create the same and be afforded a permit from the Board of County Commissioners with such stipulations and/or restrictions as the Board may deem appropriate. No administrative interpretation shall be made that results in any restriction or stipulation on land used for agricultural purposes other than may be further defined by implementation regulations, however, that consistent with state law, new agricultural buildings/structures will be required to meet setback requirements on that part of agricultural lands fronting on designated major roads and highways.

Logan County has adopted the Right to Farm and Ranch Policy pursuant to Colorado's Right to Farm law (C.R.S. 35-3.5-101, 102) which specifies that an agricultural operation is not, nor shall it become, a private nuisance by any changed conditions in or about the locality of such operation after it has been in operation for more than one year, provided it was not a nuisance at the time the operation began, and also provided that it is not a negligent operation and that a change in an operation or substantial increase in size of operation does not result in a private or public nuisance. This will apply to all properties identified as Agricultural land use category.

Examples of these conflicts include, but are not limited to: Livestock on highway and County roads; trespass by livestock; harassment of livestock and livestock losses due to free roaming dogs; fence construction and maintenance; chemical applications; maintenance of ditches across private property; storm water management; burning of ditches; complaints about noise, dust and odors from animal confinement operations, silage and manure; disposal of dead animals; weeds and pest control; and trespass.

Any proposal for change of land used for agricultural land use potential to nonagricultural land uses shall be subject to the requirement of notification and hearing to amend the Area Plan as approved.

D. Residential Land Uses

Residential land use categories are used to identify places where the principal planned land use is for residential purposes. There is one residential land use category.

Rural Residential Atwood (RRA). The category of Rural Residential Atwood permits single family development on lots of two (2) units per acre. Larger lot sizes may be appropriate to address environmental concerns (such as flood plain, high water or poor soil quality). The existing Atwood community character of these areas should be maintained. Residents in these areas are able to keep their own domestic animals with certain limitations and keeping of pets (but not a kennel operation). Development will be served by septic systems, wells, and other services planned and approved by Logan County, the State, the Northeast Colorado Environmental Department or their representatives.

Rural Suburban Atwood (RSA). The category of Rural Suburban Atwood permits single family development on lots of two (2) units per acre. Larger lot sizes may be appropriate to address environmental concerns (such as flood plain, high water or poor soil quality). This category of is similar to RRA with the exception that the keeping of animals is limited to pets. Development will be served by septic systems, wells, and other services planned and approved by Logan County, the State, the Northeast Colorado Environmental Department or their representatives.

Future development of residential will be limited to site constructed homes, modular homes or HUD Certified homes (double-wide) on a permanent foundation. Accessory structures are allowed that are for personal use or for use in a home occupation.

Although the lots are smaller than in other rural residential land use categories, they still provide a community setting and create opportunities for residents to live within the community in a fashion similar to past development and close to jobs and services, and to enjoy public facilities such as community parks. The Township was developed along the line of eleven (11) and five (5) lots to the acre and the community has determined the maximum density in the residential category for new growth shall be two (2) lots to the acre. This was due to individual well and septic tanks for each lot, the soil types and regulations in effect.

In keeping with the outlying community flavor, the citizens have determined there would continue to be County road development which would include drainage ditches adjacent to the roads and no requirement to pave driveways or to construct sidewalks for new construction/development in the residential areas.

Building setbacks for the residential community shall be as follows:

- Twenty (20') front yard setback (corner lots shall have two (2) front yard setbacks).
- Ten (10') foot side yard setbacks.
- Twenty (20') rear yard setbacks for garages where vehicle access to the garage is straight off of the alleyway. In the absence of an alley or direct vehicle access to an accessory structure or garage the rear yard setback shall be ten (10') feet.
- All setbacks are to the wall of the structure.
 - The following structures may project into a minimum front or rear yard not more than four (4') feet.
 1. Chimneys and fireplace structures provided they are not wider than ten (10') feet.

2. Eaves, sills, cornices, and similar architectural features.
3. Stairways, balconies, and awnings.
- The following structures may project into a minimum side yard not more than two (2') feet.
 1. Chimneys and fireplace structures provided they are not wider than ten (10') feet.
 2. Eaves, sills, cornices and similar architectural features.
 3. Balconies, and awnings.

E. Non-Residential Land Uses

Non-residential land use categories are used to identify places where the principal uses are for non-residential purposes, such as office, retail, resorts, manufacturing, and others. There are two non-residential land use categories. Both will be permitted within the community areas.

General Commercial Atwood (GCA). This land use category is used to indicate locations for retail service and office uses that serve this community or region. Businesses in this category should operate within the confines of their commercial buildings.

If outside storage is required it should be located behind a six (6') foot solid fence. Temporary outdoor display of goods for sale during business hours is allowed.

Within the *GCA* can be service stations, general retail business, multi-story office buildings and other intensive commercial uses should be located in areas designated for general commercial uses.

Dwelling unit will be allowed, provided it is occupied by the owner, operator or caretaker.

Rural Industrial Atwood (RIA). This land use category provides for industrial activities in rural areas. Agricultural or Manufacturing related industrial uses will be the primary land uses in this category. Setbacks will follow standard Logan County guidelines for this category.

Dwelling unit will be allowed, provided it is occupied by the owner, operator or caretaker.

F. Public Land Uses

Public land use categories are used to identify land that is owned by the Federal, State or local government. Public land may be used for facilities ranging from libraries to wastewater treatment plants, for parks and open space, or for other public purposes. In some cases, public lands will be developed for other, private uses in the future.

Public Facilities (PF). This category includes such public and quasi-public institutional uses as schools, colleges, fire stations, libraries, government buildings and hospitals.

Public Parks (PP). Local, State and National parks that are publicly owned and managed for the benefit of the general public are included in this category. Local parks can also be designated and owned by private entities or home-owner organizations with control and maintenance by the organization.

Public Rights-of-Way (ROW). The community as platted has road rights-of-way of 100' wide on all interior north-south streets and 85' wide on all east-west streets. 1st and 7th Streets are approximately 50' rights-of-way.

G. Community Balance

GOAL 2: Our Goal is to retain the beauty, the natural setting and resources, and the rural character of the outlying community of Atwood, Colorado while providing opportunities for coordinated growth and development.

Policy 2.1 Logan County shall establish and maintain its land use plans consistent with the Atwood Area Plan to provide areas for different types of future land uses and intensities, and shall plan for public services and facilities appropriate to the planned land uses.

Policy 2.2 Logan County shall plan for agricultural, residential, public, commercial and industrial development areas within the outlying community of Atwood, Colorado.

Policy 2.3 Logan County shall identify sufficient locations for residential and non-residential development to accommodate growth, with provision of additional land use capacity for market choice and flexibility.

Policy 2.4 Locations for commercial and industrial uses should be identified to support the communities' economic development objectives, including diversification of the economic base.

Policy 2.5 Logan County shall use its planning and development regulations to protect residential neighborhoods from encroachment of incompatible activities or land uses which may have a negative impact on the residential living environment.

Policy 2.6 Proposed non-residential structures adjacent to residential neighborhoods shall be designed and located to protect the privacy of residences.

Policy 2.7 Logan County shall use its planning and development regulations to retain the beauty and natural setting within the Atwood Area Plan by enforcing the cutting of weeds, allowances for inoperable vehicles and the screening

of same as identified in the Logan County Zoning Resolution (as may be amended from time to time) in the land use categories that are similar to the Atwood Land Use Categories with notice and enforcement as established in the zoning codes of Logan County without requirement of formal complaint.

- Policy 2.8** Development adjacent to a park or public open space should be designed to facilitate public access to, and use of, the park while minimizing potential conflicts between park users and residents of the development.
- Policy 2.9** In reviewing development proposals, Logan County should consider issues of community character, compatibility of use, environmental impact, resident security and safety, and efficient service provision.
- Policy 2.10** Logan County shall require phased commercial and industrial projects to be designed so a project is able to function effectively as each phase is completed.
- Policy 2.11** Logan County shall encourage future patterns of development and land use that reduce infrastructure construction costs and make efficient use of existing and planned public facilities.
- Policy 2.12** In planning for expansion of growth around the Atwood community, Logan County should give first priority to development of vacant or under-utilized land within Atwood (“infill”) and second priority to development that expands the community. The County’s policies and investments regarding public service provision should support this priority.
- Policy 2.13** Logan County should examine its need for the current rights-of-way widths and consider vacating a portion of the rights-of-way to adjacent property owners while retaining adequate rights-of-way widths for future growth.

H. Designation of Planning and Land Use Areas

GOAL 3: Our Goal is to use the Area Plan Land Use Diagram to graphically depict the outlying community of Atwood desired community form and character.

- Policy 3.1** The Atwood Area Plan Land Use Diagram depicts planned land use in the unincorporated areas of Atwood, Colorado. “Exhibit I” is the Atwood Area Land Use Diagram. “Exhibit I” shows the location of areas planned for agricultural, residential, public, commercial and industrial special planning policies. Logan County should use this exhibit and the policies in this Area Plan Land Use Element to establish the general pattern of

development in the Atwood unincorporated area. Zoning of individual parcels may continue to be more restrictive than the land use categories shown on the Area Plan Land Use Diagram. Existing conditions, such as environmental or facility constraints, may prevent the realization of the maximum development potential permitted in the designated land use category.

Policy 3.2 The official copies of the Area Plan Land Use Diagram is on file at the Logan County Planning and Zoning Department. The boundaries of land use categories, as depicted on this official diagram, should be used to determine the appropriate land use category for areas that are not clearly delineated on the Land Use Diagrams contained in the Comprehensive Plan document. Due to their size, the Land Use Diagrams reproduced in the Area Plan document may not completely reflect the official copy.

Policy 3.3 Logan County shall approve requests for rezoning, special permits, the division of land, other new development proposals or public projects that are consistent with this Area Land Use Diagram, the policies contained in this Area Land Use Element and the other Elements of this Atwood Area Plan, as further set forth in the County's Development Regulations. Amendments to this specific area plan or the County Comprehensive plan may accommodate other requests.

Policy 3.4 A residential proposal's density shall be considered consistent with the Atwood Area Land Use Diagram if the average gross density of the entire project is within the range of the land use category for the property. Logan County may approve projects at any density within this range, if consistent with zoning regulations; the category does not ensure approval at the maximum density.

Policy 3.5 Within a residential land use category's density range, the following factors should be considered in reviewing and approving individual development proposals. Land within a floodway should be excluded from density calculations. Floodway fringe lands may be included in the calculation if development can be appropriately engineered. These factors should be incorporated and applied through the County's Development Regulations:

- a) presence of moderate slopes, or floodplain;
- b) retention of the site's natural topography and vegetation;
- c) location in a high fire hazard area;
- d) the need to provide setbacks of twenty (20') feet from the front property line, access and traffic circulation according to established standards; and
- e) outstanding project design;

- f) inclusion of amenities or designs that enhance the communities desired character;
- g) design supportive of alternative energy use;
- h) effect on the County’s ability to achieve other Area Plan and Comprehensive Plan goals and policies; and
- i) ability to meet established levels of service and follow facility design requirements, as further defined in the Development Code.

Policy 3.6 Non-residential development proposals should be evaluated according to the number of uses proposed, their suitability to the site’s natural conditions, their compatibility with surrounding uses and the ability of existing or planned infrastructure to provide adequate service to the uses. These factors should be incorporated and applied through the Area Plan and the County’s Development Regulations. Non-residential development proposals should be considered consistent with the Atwood Area Plan and the Logan County Comprehensive General Plan’s land use categories if the uses are comparable to those described in this Land Use Element for such categories.

Policy 3.7 Proposals to allow alternative uses should be considered by Logan County through the Area Plan amendment process.

Policy 3.8 In instances where land uses or densities have been established or approved under prior development regulations, but which would not be consistent with the land use category shown on the Land Use Diagram for the site, the Atwood Area Plan shall not be interpreted to prevent continuation of such uses, except as may be appropriate under rules established in the County’s development regulations involving health and safety.

Policy 3.9 The area defined as Atwood, Colorado shall be a “Building Overlay Zone.” Within this designated area building permits are required for all construction except for agricultural rural designated land in excess of five acres. In such designation a Logan County Zoning Permit shall be issued.

I. Development of Public Lands

Goal 4: To provide procedures and policies for County consideration of changes in the use of land in public ownership.

Policy 4.1 Logan County should cooperate with those public agencies charged with managing properties in the public ownership, in order to achieve the goals of the County, the community of Atwood and other agencies.

Policy 4.2 If publicly-owned properties are anticipated to be considered for urban or suburban levels of development, Logan County shall depict these areas on

the Comprehensive Land Use Diagrams according to the appropriate planning area type. The County should use the appropriate land use categories to depict appropriate future uses on Detailed Land Use Diagrams.

J. Growth Coordination Goals and Policies

Development Review

Goal 5: Our Goal is to provide a development review process that is open to the public, consistent, predictable and designed to achieve the goals of the Atwood Area Plan.

Policy 5.1 Logan County shall periodically evaluate its development review and approval processes and revise as needed to ensure:

- adequate opportunity for public input at appropriate development phases;
- that consistency and predictability are maximized for all parties involved in the processes; and
- that these processes help to achieve the goals and implement the policies of the Atwood Area Plan.

Policy 5.2 Logan County shall ensure that adequate public notice is provided at appropriate phases of the development process and that hearings provide the public with the opportunity for meaningful input on public decisions.

Policy 5.3 Logan County shall endeavor to maintain policies and regulation that promote consistency and predictability in the development process.

[Note - this policy is not intended to diminish the County's ability to modify its policies or regulations to meet changing conditions.]

Growth Monitoring

GOAL 6: Our Goal is to regularly monitor the type and location of development occurring in the outlying community of Atwood, Colorado.

Policy 6.1 Logan County should keep accurate records of the types and locations of development approvals that it grants.

Policy 6.2 Logan County should monitor all subdivision activity, and record the types and locations of lots approved by the County.

Policy 6.3 Logan County or its agent should monitor all building and development permits and record the types and locations of development projects.

Policy 6.4 Logan County should regularly review development activity and identify growth trends.

K. Land Use Element Amendments

GOAL 7: Our Goal is to use a determined public process to consider proposals to change the Atwood Area Plan's land use and development and designations.

Policy 7.1 Logan County should consider the following factors in acting on a proposal to change from one land use category to another within an identified Atwood Development Area:

- a) effect on the character and identity of adjacent neighborhoods;
- b) compatibility with surrounding land uses, existing and planned;
- c) capacity of planned urban services and facilities to accommodate the proposed use in addition to previously-planned development;
- d) effect on the overall character and balance of the community;
- e) consistency with other goals and policies of the Area Plan; and
- f) consistency with the goals and policies of the Comprehensive Plan.

Policy 7.2 Logan County should consider interpretations in the boundaries between land use categories as part of Planning Commission and Board actions on proposed rezoning and subdivisions. Such adjustments may be found consistent with the Area Plan if:

- a) they affect no more than one acre of land;
- b) they involve change to the next higher or lower residential category or change between non-residential uses with comparable effects on the community;
- c) they do not affect the overall character or balance of uses planned for the community; and
- d) the adjustment does not change the land use or development expected on adjacent property.

Land Use Implementation Measures (LU)

LU1: Monitor population growth within the Atwood Area Plan boundaries as necessary to accommodate growth and provide additional capacity for market choice and flexibility.

LU2: Maintain complete, up-to-date, reproducible copies of the Land Use Diagram in the Planning Department to facilitate its use by the public.

LU3: Incorporate the compatibility standards within the County’s zoning resolution. These standards should address:

- a. the relationships between different zoning districts;
- b. the relationships between residential and non-residential land uses;
- c. the relationships between land uses and the environment;
- d. standards for commercial and industrial uses in rural areas; and
- e. standards for access to local streets.

LU4: Include applicable utility providers in the development review process and forward their comments to developers.

LU5: Monitor demands on the Areas water, wastewater and transportation systems. Compare these demands to growth trends to assess the impacts of various land uses and to project future facility demands.

LU6: Report to the community on need of rights-of-way within the community of Atwood, Colorado.

L. Housing Goals and Policies

GOAL 8: Our Goal is to meet the housing needs of Atwood’s population through retention of existing dwellings, placement of alternative and construction of new housing units.

Policy 8.1 The Atwood Area Plan should designate sufficient land for residential uses to meet the needs of residents in the year 2025.

Policy 8.2 The Atwood Area Plan should designate sufficient land for residential use, in areas where adequate services are available, to meet the needs of population growth projected for at least the next ten (10) years. The availability of sufficient serviced land should be reviewed as part of the Atwood Area Plan Review and service areas should be re-evaluated as necessary to provide opportunities for short-term residential development needs.

Policy 8.3 Logan County should identify substandard housing and promote the revitalization and rehabilitation of these structures within the Atwood Area as a priority.

GOAL 9: Our Goal is to provide locations for a wide variety of housing types.

Policy 9.1 Logan County should encourage a diversified mix of housing types, within the Atwood Area Plan including conventional single family homes,

manufactured housing, and apartments, to provide a range of housing alternatives.

- Policy 9.2** Logan County should provide for factory built homes within Atwood, Colorado, as an affordable form of housing, and should encourage site designs that help maintain the value of these homes and nearby properties. Factory built homes include panel homes, modular housing and HUD approved double-wide manufactured homes.
- Policy 9.3** Logan County's zoning regulations shall include zoning districts appropriate to implement the residential density classifications identified in the Atwood Area Plan Land Use Element and to permit the housing types consistent with these densities.
- Policy 9.4** Logan County's development regulations should provide mechanisms to permit flexibility and innovation in residential project design, to promote land use efficiency and environmental protection.
- Policy 9.5** Logan County should recognize the unique characteristics of senior households and should encourage provision of housing desired to meet their special needs.
- Policy 9.6** Logan County should promote compatibility between adjacent residential areas developed at different residential densities or with different unit types, and should encourage the use of design techniques to minimize the impacts between these areas.

M. Implementation Measures - Housing (H)

- H1:** Monitor the construction of residential units, within the community, housing type, and residential density.
- H2:** Periodically review and revise County codes to ensure that they continue to provide for reasonable design flexibility through planned developments. Guidelines and performance criteria should be adjusted periodically to accommodate design innovations that will further the goals and policies of the Area Plan.
- H3:** Periodically review and revise County code provisions addressing manufactured housing within the community on individual lots and in subdivisions to minimize impacts on surrounding uses.
- H4:** Consider incentives (such as density bonuses) for development projects that include housing for seniors; housing affordable to very low or low income households; or housing for persons with special needs. When considering the

affordability of units eligible for incentives, the County should consider energy efficiency, access to transit services and proximity to jobs and services.

IV. Economic Development

GOAL 10: Our Goal is to encourage economic development at appropriate locations throughout the outlying community of Atwood, Colorado.

Policy 10.1 The Land Use Element and Area Plan should identify areas designated for future commercial and industrial development. The Atwood Area Plan may include additional policies defining the appropriate types of non-residential development.

Policy 10.2 Capital improvement planning and funding by Logan County should consider economic development benefits as a criteria in reviewing improvement projects and in setting funding priorities.

Implementation Measures- Economic Development (ED)

ED1: Include economic development benefit as one of the criteria in ranking proposed capital improvement projects within a County Capital Improvements Program (CIP).

IX. Plan Implementation

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IX. PLAN IMPLEMENTATION

A. INTRODUCTION

This section provides an overview of many of the tools and techniques Logan County can use to implement its Master Plan. These are general descriptions, intended to describe the variety of tools and techniques that can be used to implement the Master Plan's policies. Effective implementation of the Master Plan depends on a series of individual decisions by a variety of people and agencies over time. By considering the Master Plan policies in daily decision-making, the County's administrative, appointed and elected representatives will use these decisions to achieve the goals of this Plan. These decision-making processes include development review, capital improvements planning and intergovernmental coordination. To be effective, the Plan must remain sensitive to the public's needs; therefore, this section also addresses public involvement and review of the Master Plan.

B. DEVELOPMENT REVIEW

Most of the physical changes taking place in the unincorporated parts of Logan County result from human activities and are reviewed by the County. The County regulatory authority permits the review of changes to land use, ownership patterns and development. Through subdivision, zoning and other regulations, the County can ensure that it grows in a manner consistent with the public's wishes.

1. Subdivision

Subdivision regulations govern the division of land into lots. The County's role in this process is to ensure that the lots and subdivision improvements will be of a sufficient size, shape and orientation to serve their intended purpose and to ensure that the subdivision plat adequately documents this information. The County also should ensure that subdivision improvements provide sufficient levels of service for future occupants and that the subdivision's design is consistent with planned land uses and infrastructure in the surrounding area. Lot splits are another means of land division that can affect the County's ability to implement its Master Plan. The County's approach to monitoring and regulating lot splits is particularly important in urban and suburban areas.

2. Adequacy of Public Facilities and Services

Evaluating the adequacy of public facilities and services to serve new development is an important aspect of the development review process. By establishing guidelines and standards for adequacy, the County can ensure that water; wastewater, transportation and flood control systems meet the needs of future residents and businesses.

Adequacy standards should address the location, capacity and timing of facilities. Facilities must be located so they can effectively serve new development. They must also have sufficient capacity to serve existing and proposed demand. Finally, they must provide facility capacity concurrently with demands for that capacity. In situations where adequate facilities are not

immediately available, the County may still permit development to occur through the use of agreements that establish phasing of construction over time.

Adequate public facilities regulations may be incorporated in the County's subdivision regulations or zoning regulations and/or may be placed in a free-standing regulation.

3. Zoning

Zoning regulations govern permissible land use and establish standards for the arrangement of those uses. The following zoning tools can be particularly effective in carrying out the goals and policies of this Master Plan.

Zoning Classifications. Zoning classifications promote compatibility between land uses on adjacent properties. Zoning classifications can protect neighborhoods from encroachment by inappropriate uses and foster a healthy local economy by balancing residential, commercial and industrial uses. The Plan's Land Use Diagram describes the land uses planned for the future. Compatible zoning classifications can be used to achieve this land use pattern over time.

Zoning Development Standards. Development standards establish the possible relationships between uses on a lot and adjacent development. By controlling height, setbacks, parking requirements, landscape requirements and a variety of other aspects of site design, these standards promote compatibility between land uses. Development standards also can achieve other goals. For example, landscape requirements can support policies related to community character, energy conservation and water conservation. For this reason, it is important to review development standards in light of the full range of community goals and policies expressed in the Master Plan.

Planned Residential Developments. Planned residential developments (PRD's) are residential projects of large-scale or of mixed dwelling types, (New Urbanist features) which are developed according to a concept plan and detailed development plan. PRD's may include commercial convenience uses as well. The detailed development plan allows the County to evaluate the relationship of the project to surrounding uses and the internal relationships among the proposed uses within the project. PRD's employ alternative design techniques for purposes of establishing common open space, fostering compatible design, and minimizing infrastructure costs, while meeting density standards established in the Master Plan.

Clustering. Clustered housing offers an alternative to traditional rectilinear lot design without the necessity of using PRD procedures. Cluster housing allows the concentration of residential density on unconstrained land within a development site consistent with Master Plan densities in exchange for preservation of constrained land (for example, land partially in the floodplain).

Zoning Conditions. The County may establish reasonable conditions in approving zoning applications. For instance, the County, in granting a zoning request, may establish a condition requiring a schedule of development that addresses each phase of the project. Clear guidelines for conditions placed on rezoning can provide greater flexibility in the zoning process without sacrificing its predictability.

Performance Standards. Performance standards such as those found in Planned Unit Developments (PUD's) are based on a use's effects on adjacent properties. They may address noise, spill-over lighting and emissions from a site. The developer of a site can choose the most effective design to meet these standards and ensure that offsite effects are within acceptable levels. Performance standards can vary depending on the type of adjacent uses. For example, requirements for noise levels at the property line could be stricter if the adjacent use is a single family residence than if it is a retail center. Well-designed performance standards can also make a normally incompatible use acceptable in a particular location because they address the effects which would otherwise make the use undesirable.

Special Use Permits. Special use permits are most appropriate for the kinds of uses that are not clearly compatible with other uses in a given district, but that can be compatible if properly located, developed, and operated. For instance, a child care facility may be compatible with surrounding single family homes if the number of children and hours of operation do not exceed certain thresholds. By establishing specific criteria for special use permits, the County can provide land use flexibility while protecting neighborhoods and areas of the County.

Site Plan Review. A site plan is a graphical depiction of the location, dimensions and relationships of proposed structures, landscaping, and driveways, parking facilities and utilities on a lot. County review of site plans ensures that the proposed development meets County requirements, promotes compatibility with adjacent development, and protects residents from hazardous driveways and other safety hazards. In addition to being a useful regulatory tool, site plans can provide valuable records of improvements for Road and Bridge and Emergency services personnel, as well as future property owners.

The type of information and level of detail required on site plans should be appropriate to the type of development proposed. Multifamily and non-residential projects typically require a higher level of site plan review than single family development.

4. Building Permits

The building permit process is the primary mechanism for ensuring that buildings are constructed or renovated in a way that ensures the safety of future occupants. Logan County issues building permits for and inspects all new development and redevelopment within its building overlay districts. The building permit applications and subsequent inspections ensure

that building code standards are enforced in these areas. The County will also require permitting and inspection of all commercial and public facilities outside of its building overlay zone that is not exempted from inspection by the Board of County Commissioners’.

5. Development Agreements

Development agreements can facilitate development by resolving land use and infrastructure issues. Agreements can address the timing, location and intensity of development, as well as the timing, location, sizing and funding of infrastructure improvements. Well written agreements can assure the County that adequate facilities and services will be available to meet new demands and they can assure developers that their investment in a project will not be lost due to some future change in County regulations or policy.

While development agreements can help overcome obstacles to development on a site by site basis, they can create administrative burdens, if the agreements are not drafted in a way that is easy to monitor and enforce. By establishing a common format and a tracking system for development agreements, the County can take advantage of this useful tool while minimizing its administrative costs.

C. FACILITY PLANNING/PROGRAMMING

Rapid growth areas such as Logan County face escalating costs for constructing, operating and maintaining public facilities -- costs that can be minimized through sensible planning and programming. Facility plans describe the locations and capacities of system improvements needed to serve planned growth. Capital improvements programs establish time frames for construction of planned improvements and describe how those improvements will be funded.

1. Plans

Facility plans are guides for the general design of water, wastewater, drainage, transportation or other systems. These plans project the size, location and timing of anticipated demands, show where facilities will be located, describe the general design and required capacities to meet anticipated demands, and estimate the costs associated with system improvements. Facility plans for water and wastewater systems should show the locations and sizes of major lines, as well as the location and capacity of facilities such as treatment plants, lift stations, booster pumps and water storage tanks. The drainage plan should provide a general analysis of anticipated flood conditions and indicate the types and sizes of natural and built drainage facilities required to accommodate anticipated floodwaters from the design storm. The transportation plan should address the location and design of major streets, including typical rights-of-way for urban, suburban and rural development areas.

2. CIP

The Capital Improvements Plan (CIP) is the primary tool for implementing facility plans. A CIP is a multi-year plan for publicly funded infrastructure projects, one that describes the locations and sizes of the County's high priority public improvements. The County's CIP should be

updated regularly so that decision makers can project anticipated costs and revenue needs and so that the public knows where and when to expect public investment in infrastructure. Capital improvements should be consistent with Master Plan policies, planned land uses and facility plans.

The County will need to monitor and project short term demands because the Land Use Diagram provides more than enough land for anticipated development through the year 2030. Monitoring development trends can help the County avoid under- or over-building infrastructure. Some areas planned for urban land uses will develop more quickly than others. By comparing anticipated demands with infrastructure capacity, the County can ensure that its CIP addresses the areas of greatest need.

D. INTERGOVERNMENTAL COORDINATION

Logan County is one of many agencies involved in decisions affecting growth and development. The U.S., State and County governments all participate in land use decisions on a regular basis. In addition, numerous utility providers plan system expansions to serve anticipated development. Coordinating land use and facility planning can help the County and other agencies make decisions that protect or enhance property values, minimize infrastructure costs and preserve the quality of life for Logan County's residents.

1. Joint Planning Agreements

The County is now using a process for cooperative planning with its constituent cities authorized under statute authorizing an Area Wide Planning Commission to hear and make recommendations on Land Use issues.

2. Utility Coordination

County residents and utility companies can benefit from similar coordination between the County and other utility providers. The County should maintain maps of existing service areas and work with utility providers to identify potential service area expansions. By coordinating utility extensions with planned land uses and development proposals, utility providers will be able to determine the most appropriate timing, location and capacity of utility extensions.

E. PUBLIC INVOLVEMENT

An informed, involved citizenry is a key element of democratic society. The County's primary mission is to meet the needs and desires of the public. By encouraging appropriate public involvement in decision-making through mail outs and the media, County leaders can ensure that their actions truly address public needs. Public involvement can take many forms, including active participation in County committees and boards, participation at public meetings, responding to surveys or requests for comments, or voting. Logan County can benefit from the collective wisdom of its residents, but only if it maintains an open decision making process.

F. REVIEW OF THE MASTER PLAN

1. Amendments

The Master Plan should be a dynamic document that grows with the County -- changing to meet changing needs and conditions. However, if the Plan is subject to modification too frequently, the County's planning efforts will lose their effectiveness and credibility. The Plan provides for major and minor amendment processes to maximize its flexibility while ensuring its consistency. Policies relating to amendment of this Master Plan are found in Goal 27 of the Land Use Element. Detailed descriptions of these processes are incorporated into the County's development regulations.

Plan implementation is not a single event. It results from consistent application of established policy to many decisions. While the County should consistently apply its policies, the Plan must be flexible enough to respond to changing conditions. Minor amendments, such as a change of land use category within a particular development area, may be considered as frequently as twice a year. Minor amendments are consistent with, and do not change, the plan goals or policies. Frequent modification of goals and policies introduces instability to the County decision-making process. Modification of the Master Plan goals and policies is a major amendment and should occur infrequently. The Logan County Board of County Commissioners has required the annual review of this document to determine if it continues to define the goals and directions of the community. Thus, with the annual review of the plan before the budget hearings of the County the Master Plan remains current and looks ahead for ten (10) years to determine the needs of the County. Annual amendments should accompany the review and update of demographic, economic, development and facilities information.

This Plan establishes the Area Plan process to refine the policies and Land Use Diagram for specific areas within the County. Area Plan modifications (or other changes to the adopted Land Use Diagram) may be made more frequently than amendment to the Countywide goals and policies in the Plan Elements without reducing the Plans effectiveness.

2. Plan Monitoring

This Master Plan will be most effective if the County regularly monitors its implementation. Annual reviews shall be used to evaluate the County's progress in implementing the Plan. An annual review should summarize the year's development activity, describe the public actions taken to implement the Plan, report obstacles to implementation, recommend modifications and suggest priority implementation strategies for the coming year.

Annual reviews can be conducted with minimal administrative burden if the County incorporates Master Plan references into existing procedures. For instance, the County's budget should draw upon Plan policies to establish priorities. Regulatory actions and capital improvement programs also should reference the Master Plan goals and policies that they implement. By collecting data on development applications when they are reviewed and by directly relating public actions to Plan policies, the County will have the information it needs to conduct its annual reviews in a

time and cost effective manner. Ongoing monitoring can also help the County evaluate the appropriateness of the Plan's goals, policies and implementation measures.

3. Plan Policy Review

The goals and policies of the Master Plan should periodically be reviewed to ensure that they reflect the County's needs. This review should examine the assumptions and conditions that form the basis of the Plan. Base data should be updated to reflect changes in demographics, utility systems, environmental conditions, development trends, regulatory condition and other pertinent information. The County should provide the opportunity for neighborhood groups, the development industry and other persons or groups to have input into the reevaluation of the County's goals and policies.

G. INDEX OF IMPLEMENTATION MEASURES

1. Goals and Implementation Measures

Exhibit IX.1 lists the implementation measures recommended in this Plan and the numbers of the goals that each measure implements. This list illustrates how individual actions can support many goals. The County can use this analysis to evaluate the consistency of an action with the goals of the Master Plan. The policies listed under the goals in the Plan elements should be consulted because they include specific information about the way the goals should be implemented. The goals represent a desired outcome for the County. The implementation measures are suggested means of achieving those outcomes. The County may employ other methods to achieve the same goals.

2. Tabulation of Implementation Measures

Exhibit IX.1 lists the goals of this plan and specific implementation tools used to implement those goals. As is evident in the exhibit, achieving a goal may require several implementation mechanisms. As the County plans its work programs and uses or modifies implementation mechanisms, it should examine each goal to determine whether proposed actions support the Plan's goals. Master Plan policies also should be consulted to ensure the consistency of proposed actions.