

Appendix A: Summary of Planning Influences

Overview

A thorough inventory of existing conditions was prepared early in the planning process to inform and guide the development of the Pagosa Springs Comprehensive Plan. This information, together with the Issues Summary, helped identify and shape key directions for the plan by making clear the various conditions, priorities, and dynamics operating within the community.

The inventory provided background and context to the planning team and the community in the following areas:

- Population and Growth,
- Land Use and Development Patterns,
- Housing and Neighborhoods,
- Economy,
- Transportation, and
- Utilities and Services.



Pagosa Springs is a small town with a strong sense of community.

Population and Growth

The population of the Pagosa Springs planning area is relatively dynamic due to the strong influence of seasonal fluctuations from visitors and part time residents in addition to the year-round population. In fact, much of the recent growth in the greater Pagosa Springs area has consisted of second home owner part time residents. This has had an impact on the community, not only in the amount of growth, but in how that growth has begun to shift the resident profile and character of the community.

Population Profile

Population: In 2000, the town had a population of 1,591 persons. This number had grown moderately to 1,618 persons by 2003. Data from the Pagosa Area Water and Sanitation District (PAWSD), however, indicate that 88 percent of the county population resides within the Pagosa

Springs Urbanized area. Using this assumption, in 2003, 8,235 people would have resided within the county directly adjacent to Pagosa Springs within their district boundary, giving the greater Pagosa Springs area a population of approximately 9,853 people.



The many natural features, including the hot springs along the San Juan River, create a draw for seasonal residents and visitors.

Seasonal Peaks: In addition to tracking permanent population, it is important to consider peak population in Pagosa Springs because of the significant tourist activity in Pagosa Springs. The peak population places increased demands on infrastructure (streets, water, sewer, police, fire) not reflected in permanent resident population numbers. Peak population numbers include people staying overnight in Pagosa Springs and Archuleta County. The population count incorporates part-time residents staying in second homes and the occupants of lodging units and campgrounds. During the busy summer season, between July 4th and Labor Day, the 2005 peak population is estimated to have reached 2,813 in the town and 18,686 in the county (EPS, 2005). The peak population of the greater Pagosa Springs area would have therefore been approximately 16,444 people.

Growth Trends: On a yearly basis from 1990 to 2003, the town's population grew at an annualized rate of 2.3 percent. During the same time period, the unincorporated area of the county grew by an annual rate of 6.7 percent, nearly three times the rate of growth in the town.

Age: According to the 2000 Census, 37 percent of the town's population is less than 25 years old and only 33 percent between the ages of 35 and 54. However, a community survey conducted in the summer of 2004 indicates the bulk of full-time residents are between the ages of 35 and 54 years old (51 percent) and a smaller portion of the second homeowner or part-time residents are between the ages of 35 and 54 years old (38 percent). According to the survey, the second homeowner (or part time) population is older than the permanent population, with the majority of second homeowners (55 percent) over the age of 54 years old.

Income: The 2004 survey identified significant differences between the permanent population and the seasonal population. 34 percent of full-time residents have incomes of less than \$25,000, compared to less than 3 percent of part-time residents. Only 14 percent of full-time residents have annual incomes higher than \$75,000 compared to 65 percent of the part-time population. However, 23 percent of full-time residents have incomes ranging from \$50 - \$75,000, compared to 14 percent of part-time residents. Sources: US Census, CO State Demography Section, Pagosa Chamber of Commerce Lodging Inventory.

Growth Forecasts

Housing Forecasts: Forecasts for housing units were developed by Economic & Planning Systems, Inc. (EPS) based on trends in population and households, regional permits, and real estate sales. Relying on recent permit trends (313 residential permits annually), 300 new housing units are assumed to be constructed annually in Archuleta County until 2010. After 2010, the number of new housing units is expected to increase each year. The average number of new units per year between 2010 and 2020 is projected to be 347 units. These construction estimates yield approximately 4,000 new units in the greater Pagosa Springs area by the year 2020. Roughly one quarter of this housing estimate has been met by current development proposals that will add 1,096 new units (see Table A-1).



Much of the recent growth and development has occurred in the county to the west of town.

Growth Forecasts: Archuleta County is expected to grow by 4.1 percent per year between 2005 and 2010 and 3.6 percent between 2010 and 2020. Pagosa Springs is forecasted to grow at a rate of 1.0 percent annually in the initial time period increasing to 1.1 percent between 2010 and 2020. The most rapid growth is expected to occur within the county adjacent to Pagosa Springs at a rate of 4.8 percent between 2005 and 2010, and 4.0 percent between 2010 and 2020.

Population Estimates: The household and population forecast results indicate an annual population growth rate of 2.8 percent in the initial time period and 2.1 percent between 2010 and 2020. The population growth rate is lower than the development forecast as it only accounts for the



Many developments are already underway to accommodate anticipated population growth.



Commercial development has also occurred in the western portion of town to serve the needs of those residents.

permanent population and does not account for second homeowners or seasonal residents. The year-round population in Pagosa Springs is projected to grow to 1,906 persons by 2020, while the population of the unincorporated portions of the county adjacent to the town is expected to grow to 13,398. It is anticipated that the second home population in the town will account for an additional 144 persons, with a second home population of 2,256 in the unincorporated portions of the county adjacent to the town. Current development proposals, however, could accommodate 2,718 people in the greater Pagosa Springs area, which already accounts for half of the projected population growth over the next 15 years. The population increases may therefore be reasonably expected to exceed data driven projections, though the larger proportion of seasonal residents anticipated for the future may account for some of the disparity between residential units and permanent population numbers.

Location of Development Activity: Development activity within the county is expected to be concentrated in the greater Pagosa Springs area. This area includes the incorporated town and surrounding unincorporated developments in the county, and is proximate to the Pagosa Area Water and Sanitation District (PAWSD) boundaries.

Primary and Second Homes: The number of second homes is expected to increase rapidly over the next fifteen years. By 2020, the overall split between primary and secondary homes within the area adjacent to the town is estimated to be 60 percent primary and 40 percent second residence, up from a 77 percent primary/23 percent second home split in 2003.

Table A-1: Summary of Current Development Proposals

Project Name	Total Acres	Residential Units	Commercial Space	Status	Estimated Completion Date
14th Street Project	0.30	3		Building Permit Issued	2006
Harman Park	49	0	24 lots	Approved	2006
Thornell Mixed-Use Building	1	4	9,421 sq.ft.	Building Permit Issued	2006
Towne Terrace	0.28	4	8,577 sq.ft.	Building Permit Issued	2006
Aspen Village	76	103	31 lots	Approved	2007
Hermosa Court	0.2	4	9,000 sq.ft.	Approved	2007
Pagosa Overlook	2.32	16		Approved	2007
Riverwalk Condominiums	3	39		Approved	2007
Villas at Pagosa Lodge	5.6	33		Approved	2008
The Timbers at Whispering Pines	8.6	49		Approved	2008
Whispering Pines (phase 10)	4.76	26		Approved	2008
The Links	3	33		Approved	2009
Trujillo Heights	52	246		Sketch Plan	2010
Cartwright Annexation	51	36		Conceptual Plan	2012
Big Sky Subdivision	95.81	500	100,000 sq.ft.	Sketch Plan	2015
Total	154	1,096			

Source: Archuleta County, Town of Pagosa Springs Development Review data.

Land Use and Development Patterns

The Town of Pagosa Springs lies within Archuleta County in southwestern Colorado. The U.S. Forest Service or Bureau of Land Management owns or manages approximately 50 percent of the land within the county. An additional 15 percent of the land within the county is owned by the Southern Ute Indian Tribe. The Town of Pagosa Springs and the area immediately adjacent to the incorporated town comprise a majority of the remaining 35 percent privately owned land within the county. (See Figure A-2: Ownership map.)

The Town of Pagosa Springs covers 2,666 acres. The Pagosa Springs Planning Area, the subject of this Comprehensive Plan covers 11,683 acres, and includes the incorporated town and areas within the county immediately adjacent to Pagosa Springs. (See Figure 1-1: Planning Area Boundary map.)



Much of the land within the county is public land, offering a scenic backdrop to the town.

2004 Existing Land Use – Pagosa Springs Planning Area

Table A-2, below, includes a summary of the planning area’s land use patterns as shown on Figure A-3: Existing Land Use map. Nearly half of the land within the planning area is used for agricultural purposes, with most of the agricultural land (in the county) outside of the incorporated town limits. Residential land occupies 17 percent of the total land and tends to be concentrated within the older downtown area and the newer county development in the Lakes area to the west of downtown. Commercial uses (4 percent of land area) tend to be focused along Highway 160, including the downtown commercial center. Approximately 18 percent of the land within the planning area is classified as vacant indicating significant potential for future development. This will be discussed in greater detail below.

Table A-2: Summary of Existing Land Uses within the Planning Area

	Town		County		Planning Area	
	(Acres)	%	(Acres)	%	(Acres)	%
Agricultural	471	18%	4,755	57%	5,226	47%
Residential	506	19%	1,331	16%	1,837	17%
Commercial	223	8%	177	2%	400	4%
Industrial	3	0%	7	0%	10	0%
Open Space and Parks - Private	5	0%	511	6%	515	5%
Open Space - Golf	0	0%	258	3%	258	2%
Open Space and Parks - Public	199	7%	0	0%	199	2%
Public and Quasi-Public	238	9%	387	5%	625	6%
Vacant	1,022	38%	910	11%	1,932	18%
Total	2,666	100%	8,336	100%	11,002	100%

Source: Clarion Associates, Town of Pagosa Springs’ parcel data, August 2005.

Recent Development Trends

Recent Pagosa Springs building permit activity, as shown in Table A-3 below, illustrates that the majority of the residential development within the Planning Area has occurred in the county rather than the incorporated town limits.

Table A-3: Pagosa Springs New Development Permit Activity (2000-2005)

Land Use Type		Permits					
		2000	2001	2002	2003	2004	2005
Residential	Permits	12	8	7	5	12	4
	Units	12	8	21	5	13	5
	Total Project Cost	\$1,359,100	\$682,950	\$1,394,000	\$473,000	\$2,103,900	\$1,458,000
Commercial	Permits	8	5	4	0	0	0
	Total Project Cost	\$3,349,837	\$705,000	\$1,307,558	0	0	0
Public/Quasi Public	Permits	2	2	1	0	0	0
	Total Project Cost	\$3,200,000	\$3,150,000	600,000	0	0	0

Source: Clarion Associates, Town of Pagosa Springs' building permit data, July 2005.

Potential Development – Pagosa Springs Planning Area

Table A-4 provides a snapshot of the current land development status in the Pagosa Springs Planning Area, as shown on Figure A-4: Land Development Status map. On this map, land is separated into four basic categories. They are:

- Developed**, which includes smaller lot development, typical of urban and suburban areas;
- Vacant**, which includes land currently not in use;
- Open Space and Parks**, which includes all owned and conserved parkland and open space areas; and
- Partially Developed/Agricultural**, which includes lands that may have one structure but that are largely undeveloped. This category more accurately assesses the potential for future development within the Planning Area.

The low density, rural development patterns within the Planning Area, particularly in the eastern portions, involve very large parcels of residential and farmland, with limited or no developed structures. Under prevailing market forces, these lands could reasonably be expected to experience additional development. Inclusion of these lands within this discussion as subject to future development should not be taken to imply that such development is preferred; rather, it is only intended to inform discussion of



Ranching and agricultural activities are a historic part of the economy and landscape.

possible future land use patterns under current zoning and development trends.

Table A-4: Land Development Status

Land Use	Town		County		Planning Area	
	(Acres)	%	(Acres)	%	(Acres)	%
Partially Developed/Agricultural	605	23%	4,966	60%	5,572	51%
Vacant	1,022	38%	942	11%	1,964	18%
Developed	834	31%	1,659	20%	2,493	23%
Open Space and Parks	204	8%	769	9%	973	9%
Total	2,666	100%	8,336	100%	11,002	100%

Note: Does not include right-of-way.

Source: Clarion Associates, Town of Pagosa Springs' parcel data, Development Status Map, August 2005.

Based on these numbers, almost 70 percent of the planning area, or approximately 7,536 acres, could experience new or additional development. If current development patterns were to continue within the town, and the town did not acquire any additional open space in the future, this land could accommodate approximately 24,556 new residents residing in 9,900 additional housing units and almost 1.9 million square feet of business and industry. (See Figure A-5: Existing Development Capacity.)

Table A-5: Summary of Potential Future Land Uses within the Planning Area

Land Use	Archuleta County (acres)	Pagosa Springs (acres)	Total (acres)	% Total
Residential	5,799	1,452	7,251	96.3%
Commercial	28	176	203	2.7%
Industrial	22	0	22	0.3%
Open Space - Public	18	0	18	0.2%
Public	37	0	37	0.5%
Total	5,904	1,628	7,531	100%

Note: Total does not include 4 acres right-of-way.

Source: Clarion Associates, Town of Pagosa Springs' parcel data (Future Development Capacity Analysis Map), August 2005.

Housing and Neighborhoods

Housing dynamics within the Pagosa Springs Planning Area can be divided into four categories and reflect larger influences currently facing the community: older housing stock and the downtown; agricultural homesteads; county subdivisions; and seasonal residences. The first two categories reflect the history of the town and are important to the overall character and identity of the community. More recent development, including residential subdivisions in the county directly surrounding the town and an increase in seasonal residences, is beginning to impact larger community dynamics of population and housing costs.

Housing Profile

Households: In 2003, the town contained a total of 644 households, while the unincorporated areas of the county within the planning area contained a total of 3,861 households. Since 2003, 18 new dwellings were constructed in the town, increasing the total to 662 households.

Seasonal Housing Units: According to the 2000 Census, over 1,450 units out of the 6,200 total units within Archuleta County were dedicated to seasonal use, which is 23 percent of the total housing stock. Although the total number of seasonal units within the Town of Pagosa Springs represents a smaller percentage of the total (six percent, or 45 units out of 746 units), seasonal units have been growing more rapidly in the Town of Pagosa Springs (9.6 percent annually) than within the county.

Housing Prices: Over the past six years, residential housing unit sales prices have increased on average by more than \$6,000 annually. The average sales price of a single family residence in 2004 was \$201,303. Average sales prices for single family residences have risen by 3.8 percent annually in Archuleta County. Average sales prices for multi-family housing have remained stable with 0.8 percent growth annually. During the same time period, average sales prices for mobile homes have dropped significantly—19.3 percent annually.



Much of the housing in the downtown consists of older homes.



Newer developments offer some variety in housing, such as these townhomes.

Sources: *Economic Development Plan*, Town of Pagosa Springs, by Economic & Planning Systems, Inc.: May 2005; U.S. Census 2000.



Pagosa Springs has several developed parks, particularly along the river.

Parks and Open Space

The scenic natural beauty and numerous recreational attractions of Pagosa Springs are a key feature enjoyed by residents and visitors alike. While much of the open space is located in the San Juan National Forest just outside of town, there are a number of public and private parks, golf courses and open space areas throughout the planning area. (See Figure A-6: Parks and Open Space map.)

Current Public Parks and Recreation Opportunities

Public Parks: Pagosa Springs has four public parks and a Riverwalk area, identified in Table A-6, below. The four parks combine with school district resources to offer residents over 20 acres of parkland and various recreational amenities, or 12.3 acres of developed parkland per 1,000 residents.

Table A-6: Existing Town Parks and Recreation Facilities

Developed Parkland	Acres	Facilities
Belltower Park		Ball fields (owned by school district)
Centennial Park	2	Gazebo, picnic area, waterfront park with River Walk access, fishing access.
River Center Park	3.5	River Walk access, boat takeout (Fishing Ponds)
South Park	15	Playground, picnic area, volleyball, horseshoes, basketball, BMX & Skateboard parks.
Town Park	4	Playground, picnic tables, river access, gazebo, ball fields (fields owned by school).
Open Space		
Reservoir Hill	137	Hiking/biking trails. Special event: Four Corners Folk Festival

Source: Clarion Associates, RPI Consulting, Town of Pagosa Springs' parcel data, August 2005.

Current Parks Staffing: The town employs 3.09 parks employees per 1,000 residents.

Special Recreation Facilities: The town does not currently own and operate any developed ball fields. Residents are, however, provided access to three softball/baseball fields and three soccer fields through a use sharing agreement between the town and school district. The Pines Golf Course, located near the Pines residential subdivision is the only golf course in the greater Pagosa Springs area and is privately owned, but open to the public.

Parks and Recreation Needs

Parkland Level-of-Service: The recommended level-of-service for small community park systems is fifteen acres of developed parks per thousand people. Under this standard, the current park system (including the new Sports Complex) is now at capacity for the existing population of the incorporated town. In reality, however, the population served by the town parks includes nearby residents within the county and seasonal residents. As illustrated in Table A-7, the current system is not at capacity when these populations are included.



The new sports complex will add to the supply of ball fields.

Table A-7: Population Based Parkland Estimates

Population Considered	2003 Population	Acres needed for LOS
Annual Town	1,618	24.3
Seasonal Town	2,813	42.2
Annual Town and Surrounding County	9,853	147.8
Seasonal Town and Surrounding County	16,444	246.6

*Note: Assumes 88 percent of the county population resides in the greater Pagosa Springs area.
Source: Clarion Associates, EPS report (2005).*

Supply of Open Space: Pagosa Springs, with 137 acres of open space on Reservoir Hill, possesses a relatively large parcel of land dedicated to this purpose. Additions to open space should consider demand for use and ongoing maintenance costs for these large parcels.

Future Recreation Needs: The 15-acre Sports Complex in South Pagosa, currently under development, will include a new soccer field, adult softball field, and youth baseball field. A recreation center is under consideration and, if developed, would likely be located adjacent to the new Sports Complex.

Environmental Resources

A number of environmental features contribute greatly to the quality of life that retains residents and attracts visitors. These resources contribute scenic, recreational, and ecological value to the community and are valued by residents. Figure A-7: Environmental Features map, illustrates the topography, hydrology, and vegetation of the greater Pagosa Springs area, while Figure A-8: Wildlife Habitat displays major habitat patterns in the area.



The hot springs are a central feature of the town.



The San Juan Mountains are offer beauty and recreational opportunities to residents and visitors.

Hot Springs: A major tourist draw for the town is the presence of its natural mineral hot springs which has given Pagosa Springs its motto “land of the healing waters.”

San Juan River: The San Juan River, which flows north-south through the town, is a major environmental feature and an amenity to the downtown area. The river supports numerous recreational activities including kayaking, fly fishing, rafting, tubing, and wading. The 100-year floodplain of the river contains a number of wetland areas, including a portion of the wetlands within the downtown protected by a conservation easement.

San Juan National Forest: The town is bordered to the north and east by the San Juan National Forest which affords residents excellent outdoor activity opportunities, including camping and hiking.

Vegetation: The Pagosa Springs area is rich with mixed woodland, including numerous mature trees, such as Ponderosa Pine, and riparian shrubland.

Rare Species: The town is home to Colorado’s rarest plant species, the Pagosa Skyrocket Plant (*Ipomopsis Polyantha*). Documentation of the species locations will be an important aspect to long term preservation activities and land use planning.

Hillsides and Areas of Steep Slopes: The town’s mountain setting affords scenic vistas and a varied landscape. The presence of steep slope areas pose some potential limitations to development and will require careful

planning on the part of the town for reasons of engineering, safety, and visual aesthetics.

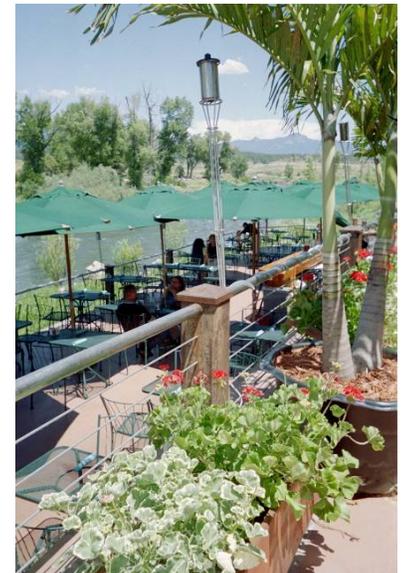
Economy

The Town of Pagosa Springs is a vibrant small town that has been transitioning from a resource-driven economy to a service-oriented economy based, to date, largely on second home development and tourism.

Economic Profile

Construction Trades: The continued growth of retiree and second home construction will fuel growth in the construction trades which now account for 17 percent of total county employment, compared to a statewide average of 7.5 percent. This residential growth, along with tourism growth, is expected to increase the demand for retail workers that now comprise 12 percent of employment (compared to 10.5 percent in the state), and increase demand for accommodation industry employees.

Sole Proprietorships: The local market is dominated by sole proprietorships comprising 40 percent of employment, compared to 22 percent in the state. This category includes self employed persons including much of the real estate and construction workforce as well as a wide range of individual entrepreneurs (“lone eagles”) working from a home base.



Tourism is the single-most important economic driver in the town.

Employment Growth

Future Employment: A large portion of the future employment in the region will be derived from entrepreneurs drawn to the region for its quality of life, and in particular from the application of this entrepreneurial talent to the abundant local natural resources of the region.

Employment Growth: The following employment growth within Archuleta County and Pagosa Springs was estimated by Economic & Planning Systems Inc., and assumes 3.3 percent annual growth used by the Colorado



Small, locally owned businesses are a central feature of the economy.

Department of Local Affairs: From 2005 to 2010, the region will see 198 new jobs annually, increasing to 253 annually from 2010 to 2020. According to the estimate, Construction, Retail Trade, and Services will contribute the most new jobs over the next 15 years.

Source: Economic Development Plan, Town of Pagosa Springs, by Economic & Planning Systems, Inc

Transportation

Transportation is an essential component of any community. The transportation system includes automotive, pedestrian, bicycle, and public means of getting to and around the community. The following section provides an overview of the current conditions of the transportation infrastructure and services within the town.

Highways



Highway 160 is the main east-west corridor for the town.

Highway 160: This east-west highway corridor dominates travel within Pagosa Springs. Most trips to and from Pagosa Springs, as well as trips within Pagosa Springs, use Highway 160. Recent traffic counts indicate that Highway 160 carries nearly 17,000 vehicles per day through Pagosa Springs. At signalized intersections, congested conditions occur during the busy morning and afternoon school and commute times, particularly during seasonal recreational peaks. Motorists experience unacceptable delays when attempting to execute left-turn movements onto 160 from most non-signal controlled side streets during peak 15-minute periods in the morning, school PM peak, and commute PM peak.



Highway 84 is the north-south highway that connects to Highway 160 just east of downtown.

Highway 84: This north-south highway connects to Highway 160 just east of the downtown. While development along this highway is currently limited, it is likely that future development to the south of town will increase the traffic along this corridor. Growth and development will need to be carefully planned and staged with roadway improvements to ensure a high level of service for the roadway as the area develops.

Local Streets

Downtown street network: The local street network within the downtown and older developed areas of the town generally follow a grid street pattern and allow for multiple route options for local travel. Certain streets face problems of congestion, but road widening is often restricted or complicated by terrain or current development patterns.

Residential development street network: Street networks within residential developments tend to lack overall connectivity to the larger roadway network. While this creates the benefits of lower vehicle counts and little to no through traffic, it also lessens the ability of vehicles to chart alternate routes to reach destinations within town. The result is a limited number of roadways that can be used to travel across town, particularly east-west travel, resulting in higher congestion levels on certain roadways such as Highway 160.



Many local streets are narrow and not designed to accommodate anticipated traffic volumes.

Paths and Trails

Sidewalks and Pedestrian Movement: Sidewalks throughout the town comprise a disconnected system and are often in some state of disrepair. The mixture of pedestrians and motor vehicles, especially in the downtown is, in most cases, less than ideal. The portions of Highway 160 wider than two lanes create an environment that is not very pedestrian-friendly and that creates a barrier to downtown cohesiveness. Elsewhere in the planning area, poor overall connectivity hinders movement, particularly between different areas of town. (See Figure 11-3: Trails Plan.)

Paths and Trails: Paths and trails are recognized as a key component of the Pagosa Springs transportation system. Many of these facilities, although referred to as trails, accommodate both pedestrians and bicycles. Current trails, illustrated on the Parks, Trails and Open Space map, include the Reservoir Hill trail, and two trails along the San Juan River – one in the downtown area and another in Riverside Park.



Increased connectivity of sidewalks would improve the pedestrian system.



The Riverwalk is a central trail feature.



Current streets lack bike lanes to accommodate safe travel.



The Mountain Express.

Future Trails: A key challenge lies in connecting trails, sidewalks, and roadways to build a relatively seamless system of interconnected facilities. The 2003 Trails Plan, prepared for Archuleta County and Pagosa Springs, identifies a number of proposed future trails. These trails are planned with an overall focus on proximity to key civic, natural, and residential areas as well as overall connectivity within the greater Pagosa Springs area. Many of the planned improvements include creation or expansion of the San Juan River Trail, Riverwalk, Springs to Springs Trail, Pagosa Trail, Pagosa Blanco Trail, and Highway 160 Trail.

Bicycle

With a favorable climate for over half of the year and manageable topography, Pagosa Springs offers an inviting environment for bicycles. Currently, opportunities for convenient travel by bicycle are limited. Streets do not have bike lanes and paths tend to be narrow, resulting in conflict between cyclists and other users. In addition, other bicycle amenities, such as bike racks, are not consistently located near commercial areas to make travel by bicycle more user-friendly and functional.

Public Transit

Public transportation is supplied by the Archuleta County bus service, the Mountain Express. Service is offered Monday through Saturday from 6:30 AM till 7:50 P.M. with routes within Pagosa Springs and to Fairfield, Turkey Springs, and Aspen Springs. If routes are to be expanded in the future, coordinated street planning along major corridors and activity centers should incorporate appropriate curb heights and stopping areas in anticipation of service extensions.

Parking

Parking is an essential component to a successful downtown shopping and tourist area. The current downtown parking supply has an estimated 65 parking space deficit, if calculated according to codified parking standards of the town. It is unclear, however, if this deficiency detracts from the downtown shopping experience. Informal observations indicate that there are some specific locational deficiencies;

however, the overall parking supply seems to be in balance with current parking demands.

As development progresses in the town, the town will need to consider parking within the downtown. Possible avenues include: developing a system of signage and wayfinding to assist tourists with locating parking areas; identifying areas where additional parking may be needed; separating out long- and short-term parking; facilitating non-motorized travel to help decrease the number of vehicle trips needed; and, investigating possible shared parking options.

Parking issues and any strategies to address them will need to be closely linked with planning of the downtown currently underway with the Downtown Master Plan effort.



Parking in the downtown is limited and may need to be expanded to accommodate future business growth.

Future Conditions

The Colorado Department of Transportation has no imminent plans to widen Highway 160. The most recent planning document for 160, the Highway 160 Access Management Plan, was completed in October 2002. This Plan assumes that Highway 160 will be widened from two lanes (one lane in each direction) to four lanes (two lanes in each direction) between Pagosa Boulevard and 10th Street. However, there is no identified funding source for the widening project. The Colorado Department of Transportation (CDOT) recently reviewed Highway 160 intersections at 2nd and 8th streets. Their review indicates that a traffic signal is warranted at the 8th Street intersection, while the 2nd Street intersection does not meet signal warrants. The Plan includes traffic signals at 5 additional locations along Highway 160:

- Vista Boulevard/Meadows Drive,
- Timber Ridge (under construction, will be completed by June 30, 2006),
- Majestic Drive,
- Great West Avenue, and
- 8th Street.

Like many similarly-situated communities throughout the United States, Pagosa Springs' residents have expressed interest in a potential bypass facility. This bypass would remove through trips from Highway 160 through all or part of

Pagosa Springs, with locally-destined traffic on the existing Highway 160 facility.

Utilities and Services

Law Enforcement/Courts

Current Staffing: The Town Police force currently employs seven full time equivalent (FTE) officers.

Current Level-of-Service: This level of staffing provides an officer to resident ratio of approximately 4.9 officers per thousand people within the Pagosa Springs town limits. This level-of-service is more than twice that of the national average for city's/towns, but only slightly above average for many Western Colorado towns.

Future Needs: In planning and assessing future staffing needs it may be prudent to consider law enforcement service levels in comparison to both peak season and year round resident population levels.



The Fire District has the excess capacity to serve a larger population.

Fire District

Current Staffing: The Pagosa Fire Protection District currently possesses about 20 firefighting vehicles and employs four full-time firefighters and approximately 60 volunteer firefighters. The Pagosa Fire District service area boundary is illustrated in Figure A-9: Service Districts and Utilities.

Current Level-of-Service: The Pagosa Fire Protection District currently serves close to 6,000 households and over 700 non-residential structures. The level-of-service (LOS) for fire service is typically referred to as the insurance or ISO rating. Currently all in-town property has an ISO rating of 5 (with 1 being the best and 10 the worst).

Future Needs: The District Chief suggests that additional stationhouses might need to be developed for new unforeseen developments. The District is currently serving at a relatively low capacity and could serve

considerably more residents – perhaps as much as 50 percent more than are currently being served.

Fire Flows: Fire flows are a major concern for the Pagosa Fire Protection District as the majority of the town’s fire hydrants fail to meet the minimum flows as specified by the Uniform Fire Code.

- In the downtown (east of Putt Hill), only 4 fire hydrants meet the minimum fire flow requirements for commercial areas (1500-2000 gallons per minute). The hydrants on Pagosa Street at 1st, 2nd, and 3rd Streets and the hydrant near Town Hall at Hot Springs Blvd. and Apache Street yield 1,500 gallons per minute (gpm). All other commercial areas in the downtown area do not meet the Fire Code minimum flows.
- 30 out of a total of around 55-60 hydrants in Pagosa Springs do not meet residential minimum fire flows (1,000 gpm) and many of these hydrants are in commercial areas.
- Downtown waterlines are 6-inch waterlines, and lack the carrying capacity needed to meet the required flows. However, many commercial fire hydrants in West Pagosa or Uptown do not meet fire flow minimums even with 8-inch waterlines throughout the more recently built West end of town. For example, one of the hydrants near West City Market flows less than 900 gpm where 1,500 GPM is the minimum.
- Low flows will be further impacted by future developments, particularly large water users like hotels and restaurants, which place higher demands on the water system, further reducing fire flow levels and non-compliance with the Uniform Fire Code.
- Current developments have been allowed only with the requirement of sprinkler fire retardant systems which, under the current Uniform Fire Code, allow some level of flexibility for hydrant minimum flows.

- Water supply evaluation accounts for 40 percent of a Fire District's ISO rating, the standard for measuring fire protection level of service. The Pagosa Fire Protection District's ISO rating has been and will continue to be reduced by fire hydrant flow non-compliance.

Wastewater

Service Provider: Wastewater in Pagosa Springs is provided by the Pagosa Springs General Improvement District east of Piedra Road, while the western side of town is serviced by Pagosa Area Water and Sanitation District (PAWSD). The service area of PAWSD and the town sewer lines are illustrated in the Service Districts and Utilities map. (See Figure A-9.)

Current Capacity and Demand: The wastewater treatment plant has approximately 4.494 million gallons per day (mgd) effluent treatment capacity. The plant currently operates at about 65 percent of its capacity. Extra-territorial wastewater services are provided in some areas by PAWSD.

Future Wastewater Service and Capacity: The town's wastewater treatment system, located just south of town Hall, represents the only water/sewer utility not owned and managed by PAWSD. The town is currently evaluating three alternative locations further south along the San Juan River for a new, larger treatment plant to replace the existing facility. The new facility would have a mechanical system and therefore only require a 10-acre site, much smaller than what would be required for an expanded lagoon system. Town officials estimate that this plant could initially provide service to around 2,400 acres of developable land south and east of the current town boundaries of Pagosa Springs.

Currently, the year-round average wastewater flow treated by the sewer plant is about 0.275 mgd and the new plant will nearly quadruple that with a capacity of just under one mgd. To put this into perspective, one mgd is enough treatment capacity to serve over 3,500 residences (does not include associated commercial/institutional development).

Water

Service Provider: Pagosa Area Water & Sanitation District provides water to all of the Town of Pagosa Springs and much of the area in and around town. The Pagosa Springs town limits and area directly north and south of town boundaries are primarily served by the Snowball treatment facility. The western portion of the Pagosa Springs Planning Area is served by the Hatcher and San Juan treatment facilities.

Current Demand: The average per capita water usage in the district is nearly twice the national average – over 200 gallons per day. This high average usage probably reflects widespread use of treated water for irrigation although the district has, and will continue to take steps to provide untreated irrigation water for major parks and other high intensity irrigation uses.

Current Capacity of Snowball Facility: The Snowball facility currently serves 1,794 equivalent units (EUs) and is operating close to its 1.5 mgd maximum capacity during peak demand days (approximately 90 percent of capacity). It is unlikely that any significant development can occur under this plant's purview without major infrastructure upgrades including treatment, pumping and transmission capacities.

Current Capacity of Hatcher and San Juan Facility: These treatment facilities have a combined capacity of 2.5 mgd, and serve approximately 4,092 existing EUs. District personnel estimate that these facilities operate at 50-60 percent of full capacity, which would enable them to serve as many as 4,000 EU's of additional units.

Water Supply: Water rights are not a limiting factor to additional development.

Water Storage: Currently PAWSD has ten water storage tanks with a total storage capacity of about roughly six million gallons of treated water storage. One third (roughly 1.75 million gallons) of the treated water is stored at the Snowball facility, enough to meet peak water needs in the town for roughly two days. Many towns use a two day

storage capacity as a rule of thumb for facility planning. In addition to the treated water storage, PAWSD holds eight million gallons of raw water in a reservoir near the facility. While the storage capacity is sufficient to meet demand of the current town population, future growth may require additional treated water storage capacity.



The geothermal activity of the area has been captured to offer a sustainable source of heat in the downtown.

Geothermal

Pagosa Springs is in the unique position to utilize a truly local energy source that produces no by-products or pollutants. The Geothermal District includes the area served by the fresh water loop system. The current service area includes much of the downtown Pagosa Springs business district as well as limited spurs extending into the South Pagosa neighborhood. (See Figure A-9: Service Districts and Utilities.)

Hot water lines are available to property owners who can reasonably take advantage of this resource. There is no fee for tapping into the hot water loop, but users must pay for all construction costs and materials to do so. Key facilities with geothermal heating include the Middle School, Elementary School, and County Courthouse complex.

The resource, with only 30 customers, is not widely used. The majority of the customers are public facilities and businesses. One deterrent to tapping into the geothermal resource is the costly heat exchange systems necessary to extract the heat from the water to heat a structure. A second limitation is the current water rights of the town. If the town were to add one (1) CFS to its current water rights, it could potentially double the service capacity of the geothermal system.

The Geothermal District does not have any formal rules for use of the resource at this time. District representatives believe that formulating rules and accounting for and developing funding mechanisms for future infrastructure costs will be an important step forward.

Energy

Electric service is provided by La Plata Electric Association, Inc. This energy cooperative provides service throughout all of La Plata and Archuleta counties as well as portions of

Hinsdale, Mineral, and San Juan counties. In 2004, the cooperative had a delivery point capacity of 541.78 MVA and provided service for residences, farms, ranches, commercial and light industrial businesses, snow making machines, irrigation and street lighting. The cooperative offers the option of receiving green energy from hydroelectric, wind turbine and biomass generators for an additional 2.5 cents/kWh. Average residential electric bills in 2004 were \$61.04/month. The Town of Pagosa Springs is a member of the cooperative.

Schools

The Archuleta County 50JT School District serves virtually all of Archuleta County. The School District educated 1,577 students in 2004, 300 – 400 students directly from Pagosa Springs and the remaining student body residing elsewhere in the county. The district has a student/teacher ratio of approximately 17:1, just slightly higher than the state average of 16.8:1. Population projections created by the Colorado Demography Office for Archuleta County indicate that by 2020 the number of school age children within the district will have increased from 2,027 to 3,210.

Neither Archuleta County nor Pagosa Springs currently have any school land dedication that would collect new land areas or fees in lieu of that land for future school sites.

Schools serving the Planning Area include: Pagosa Springs High School, Pagosa Springs Junior High, Pagosa Springs Intermediate School, and Pagosa Springs Elementary School. The Archuleta County Education Center offers adult learning classes and offers some community college courses through the Pueblo Community College. (See Figure A-10: Community Facilities.)



Pagosa Springs Junior High downtown serves the wider community.

Town Administration/Development

There are approximately three administration employees per one thousand residents (five total administration/ planning/ building inspection employees). This is an average service level for western Colorado towns. Pagosa Springs may want to consider its peak population levels (e.g. 2nd home owners rather than year round residents) when determining

appropriate service levels. The relatively new Town Hall has capacity for almost 40 office based employees and this facility should accommodate growth well into the future.

Other Public Facilities

Community Center: The Community Center, completed in 2002, is 20,800 square feet in size and contains numerous facilities including:

- Meeting Room,
- Multi-purpose room (Gymnasium),
- Commercial kitchen,
- Offices,
- Computer center,
- Art room, and
- Game room.

The popular center is already near its use capacity. Relocation of some of the activities, such as the Senior Center, to a separate location, would release additional capacity within the Community Center to meet future demand.

Silver Foxes Den Senior Center: The Archuleta County Senior Center, located within the Community Center, contains an office, lounge and dining room where meals are served daily. Programs offered at the center include: AARP Alive Driver Safety program, AARP Tax Aide, art classes, card games, computer classes, Qi Gong, and yoga. The senior center is also strongly affiliated with Mountain Express public transportation.



The Community Center is home to the Silver Foxes Den Senior Center and Teen Center.

Teen Center: The Teen Center, located within the Community Center, started operation in 2003 to serve youth aged 12-19 years. Since January of 2005, the center has been closed for restructuring of the programming and leadership of the center. A recent survey of junior high and high school students in Pagosa Springs indicates a desire for more equipment and facilities such as a skateboard park, BMX course, pool, multi-purpose recreation center, and outdoor ball fields for organized sports. Teen Center representatives see the future role of the center as offering a consistent and well-balanced range of classes, activities, and support services.

Shop: The Town Shop is a building of approximately 3,000 sf. on 1.5 acres with eight bays and 18 vehicles. The shop superintendent considers the current acreage to be adequate but at capacity. In order to improve capacity at current demand levels, the shop may need as many as five additional bays and up to four more sheds for storage. As the town grows in the future, the shop would need to expand in both shop space and acreage.

Fairgrounds: The Fairgrounds, operated under Archuleta County, is a well-used facility offering a venue for several events and functions including:

- County Fair,
- 4th of July Rodeo,
- Thursday night rodeos,
- Taste of Pagosa,
- Various auctions,
- Extension offices,
- Community meetings, and
- Home and ranch shows.

The on-site facilities are currently being expanded with the pending construction of a 4,800 sq. ft. building containing restrooms and the new 4-H livestock facility. The Fairgrounds currently includes the 2,000 sq. ft. Extension offices and the Rodeo Grounds.

Sisson Public Library: Many years of planning and fund raising will culminate this year with the expansion of the Sisson Library, the library within the Upper San Juan Library District that serves the town and county. The planned addition to the Sisson Library will offer the following features to residents and visitors:

- Expansion of library from 4,500 sf. to 7,200 sf.,
- Enlarged and enclosed children's center allowing for increased children's programs,
- More seating and study areas,
- Expanded public internet access facilities, and
- Expansion of the collection.

The estimated cost of the library addition is \$900,000, which will be funded entirely through a combination of grants and private donations, and will not increase the mill

levy. Library staff attributes the successful funding of the project to the former Director's persistence and to the amount of research and community outreach conducted to identify the desired services and facilities at the library from the community's perspective.

The library operates on a 1.5 property tax mill levy for the district and is run by four full-time and three part-time staff members. With 30,000 circulation items, there are currently approximately 2.5 circulation items per full time resident in the District. According to a 1999 report entitled *Public Libraries in the U.S.* funded by the U.S. Department of Education, the average number of circulation items per capita for library districts the size of the Upper San Juan District is 5.3 items per capita. The current plans to increase circulation upon completion of the library addition will push the Sisson library circulation closer towards the national average.