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Comprehensive Plan

The Comprehensive Plan is the guiding document for all development within the City of Ashland. The Plan incorporates ten specific elements related to development including: citizen participation, environmental resources, population projections and growth, housing, economy, aesthetic resources, public services, transportation, energy and urbanization.

The attached document is incomplete. It does not contain tables, graphs, maps or charts. The Community Development Department is in the process of converting those items to an electronic format and they will be included here at a later date.

Until that time, copies of the missing items can be obtained from the Community Development Department at City Hall.

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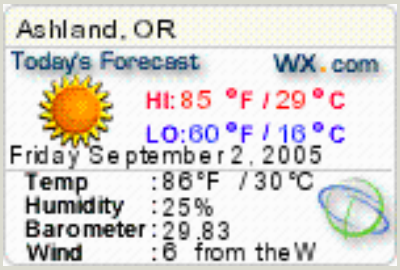
Ashland Fiber Network



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Chapter 1

An Historical Overview

Sections:

Section 1.01 Ashland's History and Historical Resources

There were settlements in the Willamette Valley, and gold was being mined in northern California, when, during the winter of 1851-1852 two pack train operators who were passing through this southernmost part of the Oregon Territory discovered gold at Rich Gulch, a tributary of Jackson Creek. News of the strike spread, and soon there was a tent city, the place we know today as Jacksonville, on the banks of Jackson Creek.

Up until this time, the Bear Creek Valley, a flat fertile valley protected on the west by the Siskiyou Mountains and on the east by the Cascades had been inhabited only by small, scattered bands of Takelma Indians. They found this a hospitable place, with abundant fish, game and edible vegetation. The Indian bands moved from place to place in the valley gathering food and materials for their livelihood.

Their peace was disturbed by the miners who flocked to the Jacksonville/Applegate area, and then by the farmers, who were either newcomers or discouraged miners who found a new wealth in the rich fields and creek valleys. Families from all parts of the country, encouraged by the Donation Land Claim Act of

1850, came to make their free claim up to 320 acres, build homes and till the land. Many of Ashland's earliest settlers came for this reason, the Walkers, Dunns, and Hills among them.

Jackson County was so designated by the Oregon Territorial Legislature on January 12, 1852. Six days earlier, Robert Hargadine, and his partner, a man named Pease, had taken up a Donation Land Claim and built a log cabin in the narrowing end of the Bear Creek Valley, about where the railroad Station is now in Ashland. They were soon joined by Abel Helman, Eber Emery, Jacob Emery, James Cardwell, Dowd Farley and A.M. Rogers who also decided to stay. Helman filed on a Donation Land Claim adjacent to Hargadine's.

There was need for sawed lumber in the valley, so the men built a water-power sawmill on the banks of Ashland Creek. Then they built a flour mill in what is now the entrance Lithia Park. Business grew around the open space in front of the mills and people began to call it the Plaza.

Settlers came to the Plaza from neighboring farms to trade their wheat for flour, or to purchase lumber for improved cabins and homes. The California-Oregon Trail route passed through the little community and travelers bumped over ruts in the summer and tracked through mud in the winter pass either direction. Gradually stores and small businesses appeared on the Plaza and some individuals, who made their living by them, built homes nearby. The earliest homes were built on Main Street, then on Granite and Church Streets.

Ashland developed gradually during this time, and, perhaps then, got its roots as a solid community where people came to stay, to live their lives. Unlike neighboring Jacksonville, which began as a boomtown, and later Medford, which developed with the coming of the railroad, Ashland grew slowly as people moved into the area or as generations of families grew up.

Section 1.02 The First Twenty Years

Ashland was named after either Ashland, Ohio, or Ashland, Kentucky, in both of which the early settlers had ties. The Ashland Mills Post Office was established in 1855 - it took six months to get mail from the east - and the town became official. In 1871, the word "Mills" was dropped.

Ashland, a growing community of 50 by 1859, was a stopping point on the California-Oregon Stage Company's route. A hotel was built to accommodate travelers, then a school on East Main Street near where Gresham Street now intersects. A sawmill and shop were set up, then a planing mill and cabinet shop. In 1867, the Ashland Woolen Mills were built on the banks of Ashland Creek where B Street now intersects with Water Street. Underwear, hosiery, shawls and blankets were all made from wool produced locally. Nursery stock, brought to Jackson County by Orlando Coolidge and his wife, Mary Jane, and planted on "Knob Hill" is credited by many as stimulating the fruit industry of Southern Oregon. W.C. Myer brought imported stock to his farm just north of town. The barn still stands in a field near the railroad overpass on North Main Street.

The Methodist Episcopal Church, organized in 1864, held a conference here in 1869 and it was suggested that Ashland would be a "remarkably fine" place for an institution of higher learning. The Ashland College and Normal School that was housed in a building on the site where Briscoe Elementary School now stands was the forerunner of today's Southern Oregon University.

Section 1.03 Growth and Incorporation

Ashland grew faster than any other Oregon town south of Portland during the 1870s and 1880s. As the shallower mines in Jackson County were worked out and abandoned, agriculture became the main industry. The production of wheat and oats, corn and hogs, sheep, hay, honey and potatoes made farming profitable and this in turn brought more people.

Ashland, population 300, was incorporated on October 13, 1874.

In the first issue of The Tidings, published June 17, 1876, the editor remarked, "There is no church and no saloon, but whiskey is sold by the bottle and preaching is done in the schoolhouse; and therefore, the people are generally happy."

The Methodist Church was built on the corner of North Main and Laurel Streets, then the Presbyterian Church on North Main and Helman Streets. Land for a Catholic Church was purchased, and a First Baptist Church was organized.

Fire destroyed many of the wooden business buildings on the Plaza in March 1879. That summer they were replaced by a number of brick structures, including the Masonic Hall and the IOOF building. The Ashland Library and Reading Room Association was established, and in 1880, Alpha Chapter, Order of Eastern Star, was established in Ashland. It was the first Eastern Star chapter in Oregon.

There were 854 people living in Ashland on September 28, 1880, when President Rutherford B. Hayes, Mrs. Hayes, General Tecumseh Sherman and their entourage made a brief stop here. They were greeted by a crowd of some 2000. A platform was built on the Plaza and an arch was made of evergreen boughs. Under the greeting "Welcome to Oregon" was Ashland's motto, "Industry, Education, Temperance - Ashland honors those who foster these." There were speakers, and four little girls presented President and Mrs. Hayes with a tray of peaches, pears, apples, plums, grapes, blackberries, almonds and figs, all grown in Ashland. The stagecoaches then rolled on to Jacksonville where the presidential party spent the night in the U.S. Hotel.

Section 1.04 The Coming of the Railroad

For two decades, Oregon had been relatively isolated from the rest of the world and wanted the opportunity to ship goods in and out. Ashland had bountiful crops, products of mills, and a desire for growth, but no practical way to carry on trade outside of the local area.

One of the most important events in the development of Ashland, therefore, was the coming of the railroad.

Track was being laid south from Portland north from Sacramento. On May 4, 1884, the first train rolled into the Ashland station from the north pulling a short string of mail, express and passenger cars. Shouting and waving from the windows was a group of people in high spirits who had gone as far north as five miles to ride the train into town. Waiting at the station were the Ashland Brass Band, predecessor of today's Ashland City Band and a number of dignitaries with speeches and congratulations.

Ashland was the southern terminus of the railroad for three years. Merchandise and passengers were carried on south over the Siskiyou Mountains by freight wagons and stagecoaches. The Golden Spike that connected the Southern Pacific's San Francisco-Portland line was driven in Ashland on December 17, 1887. This completed the circle of railroad tracks around the United States.

Ashland was a railroad division point. Already twenty-one employees lived here, and more were to come to build homes, rear families and participate in the development of the community.

Section 1.05 Development & Growth

The coming of the railroad meant fruit could be exported. Apple, pear and peach orchards were well established. Thou- sands of fruit trees had been planted and a number of five- and ten-acre tracts near town had been cleared of brush and turned into fruit farms. South of the Plaza were orchards planted by S. B. Galey, who planted the first peach orchard for commercial purposes. The Galeys and the Henry B. Carters (Mrs. Galey's parents) were prominent in local affairs. They felt every self-respecting city should have one wide, main street, a thoroughfare that would provide a sense of dignity, so they laid out, right through the middle of their orchards, a boulevard 60 feet wide. The grand new avenue led nowhere until U.S. Highway 99 joined it late in the 1930s. All travel through the city then was along East Main Street.

Ashland's entire street system got attention in 1888. The city spent $3,000 grading, putting in culverts and crossings, and improving, somewhat, the muddy mess that was the Plaza. In response to a petition, the city council ordered construction of one and one-half miles of solid planking sidewalks.

By the late 1880s, Ashland had a bank, two schools - South School and North School - a small college, the Ashland Electric Power and Light Co. (which produced enough electricity to light the city streets and homes), the Ashland Hotel (a beautiful brick building that stood on Main Street between Oak and Pioneer Streets), the Depot Hotel (at the railroad station, this hotel had forty sleeping rooms and a large dining room). There were stores and shops, a real estate and insurance office, several livery stables, a laundry, bakery, doctor, dentist ... and a swimming pool called Helman Baths that had been opened to the public by Grant Helman who enjoyed swimming in the sulfur springs on the Helman property. By now, Ashland also had five saloons.

The Ashland Gold Mine was discovered in the hills west of town in 1891. It tapped a rich mineral belt which was known to extend more than 200 miles between Yreka, California and Cottage Grove, Oregon. The mine and three ingots of its bullion displayed on the Plaza were proclaimed "harbingers of a Golden Era." Plagued with disputes over property rights and legal problems, the mine was worked on an on-again, off-again basis until 1942 when it was closed as a wartime measure. Ashland High School's first graduating class - Miss Lora Colton, valedictorian; Oley Thornton, salutatorian; and Miss Moody Scott, who read an essay - received their diplomas on May 22, 1891, before a packed audience in the Ganiard Opera House (this stood on Main Street at the comer of Pioneer Street and was used for many public gatherings).

Section 1.06 Chautauqua Chooses Ashland

Chautauqua, a traveling program of lecture seminars and entertainment that originated in New York, was the first mass education entertainment program in this area.

The Southern Oregon Chautauqua Assembly was organized in Central Point in 1892. The plan was to hold meetings in a grove near that town, but at the encouragement of George F. Billings of Ashland and others -- they pointed out that Ashland had electric lights, city water and a better hotel that did Central Point -- it was decided that Ashland, where there was a small college and a wooded site on a hill above the Plaza, would be a more suitable spot.

A bond issue in the amount of $2,500 covered the cost of land acquisition, the building, and the first year's program. A large beehive-shaped building was built and the first Chautauqua program was presented in it in 1893.

People came from miles to camp in Roper's Grove on the banks of Ashland Creek, and indulge themselves in the luxury of culture. Admission was low, $1 for the ten-day season, in order to keep the support of the people and make it possible for all to attend.

Ashland College and Normal School

Ashland's "institution of higher learning," now called The Ashland College and Normal School, had been approved as a state institution, but allocated no money. It closed its doors for lack of funds and the school district bought the property on North Main Street.

In 1893 Portland University said if the people of Ashland would furnish land and provide a building, the university would endow the school in Ashland and make it a branch.

The Carter Land Company made a gift of a campus site (about where Beswick Way and Normal Avenue now intersect Siskiyou Boulevard) and a building was started. Before it was finished, however, Portland University withdrew its offer. Under the leadership of Professor W.T. VanScoy, and with funds raised by the citizens of Ashland, the building was finished, furnished and renamed Southern Oregon State Normal School. In 1899, the state accepted the property and endowed the school.

Section 1.07 Turn of the Century

January, 1900. There were 3,000 people in Ashland, the largest town in Jackson County (population 15,000). There had been no boom, but steady, continued growth. Fifty new homes had been built during the last year and several business buildings. There were no vacant houses to rent. People were coming from various parts of the coast and from the Middle Eastern states. Ashland was known as the "home town" of Southern Oregon.

It was also a payroll town. The Southern Pacific Railroad payroll ran from $7,500 to $10,000 per month. The woolen mills, flour mills, creamery (Ashland had the only creamery in the county), a sawmill, two planing mills, the Ashland Iron Works (doing a brisk business with the miners and lumbermen), and the Ashland Canning and Evaporating Company all contributed to this payroll. Fruit and vegetables raised here were shipped by the thousands of boxes -- the "Ashland peach" was known all over the Pacific Coast, and Max Pracht orchards took a World's Fair premium for peaches in Chicago in 1893. There was a noticeable increase in activity in timber harvest, and stockraising was an industry of considerable proportions in the foothills near Ashland.

Ashland claimed industry, beauty, charm, culture, diversified resources, bright business prospects, and the "sweetest flowers and prettiest girls in the world."

On January 21, 1900, the Ashland Woolen Mills, considered one of the most important manufacturing industries in the state at that time, burned. Thirty-two Ashland workers were without jobs.

In September, 1900, Ashland's first brick school building was constructed on Siskiyou Boulevard (on the site now occupied by the Safeway store). Hawthorne School served as a grade school, then a junior high school.

Section 1.08 Main Street Develops

Main Street began to develop during 1904 with brick business buildings replacing a number of homes. The Fourth Street business section was, by now, well established. Many new homes were built, including the C. C. Chappel residence on Siskiyou Boulevard, known today as the Swedenburg House. (Most home construction ran between $1,000 and $2,500; the Chappel house cost $7500.) Mountain View Cemetery was opened, and the city spent $25,000 to install a "comprehensive sewer system."

It was in 1908 that the fire department replaced its two hand- pulled hose carts with a hose wagon pulled by horses. This was phased out in 1913 with the purchase of a gas-powered fire truck.

Section 1.09 Library and Hospital

For seventeen years the ladies of Ashland had maintained a library collection. "Although fiction predominates, it is generally good fiction, "said the state librarian. Following a controversy over whether or not Ashland should build a library building with "tainted" money offered by industrialist Andrew Carnegie, who was funding libraries all over the world, a formal application for $20,000 of Carnegie money was made. The reply was that $15,000 would be given if the city would provide a site and a maintenance fund. There was so much controversy over the site -- on the knoll near the Chautauqua building, on Meade Street, on Siskiyou Boulevard at Gresham Street -- that the matter was settled by election. The library was built on Gresham Street and ready for use in 1912. The total cost $17,673.

In March 1909, fire extensively damaged the Southern Oregon Hospital that had been operating for eighteen months in a converted private residence on Main Street. Discussion of the need for a newer, larger facility led to the backing of the Commercial Club, and the construction of the Granite City Hospital on the south side of Siskiyou Boulevard, near the intersection of Palm Avenue, about where Stevenson Student Union now stands.

The Commercial Club worked to promote growth in Ashland but was powerless to help when, in 1909, the state legislature withdrew all normal school support. The doors of the Southern Oregon State Normal

School were closed and nailed shut. Alumni and citizens immediately set to work to get it reopened, but it was fifteen years before that goal was achieved.

Section 1.10 Parks for Ashland

"Ashland the beautiful must be deserving of its name," said the members of the Women's Civic Improvement Club. They raised money to buy land on Siskiyou Boulevard between Liberty and Beach Streets so it could be developed into a triangular park, they inaugurated a system of small parks in town, and they were instrumental in getting the landscaped strip down the center of Siskiyou Boulevard and shade trees planted in residential park rows.

The Chautauqua grounds had been improved by the Ladies Chautauqua Park Club, and now the ladies began to press the city council for assistance in an expanded program.

The flour mill on the Plaza had been closed and abandoned. At the rear of the big building was a pigsty, a barn, and mud puddles. The Chautauqua building stood on the hill above this unsightly mess that also produced flies and gnats.

The ladies talked of razing the mill and making this a park entrance. Immediately there was a wail of protest from some of the businessmen who felt the land was too valuable and should be used for business purposes, and from some of the "dear old pioneer women" who felt the mill was a landmark and should be preserved.

On December 17, 1908, the people of Ashland, by a vote of more than five to one, dedicated the old mill site for a city park. They also approved a tax levy. In 1909, an additional forty-five acres of land south of Chautauqua Park, bordering Ashland Creek was purchased.

The mill was torn down; a park board was selected. Ashland was soon known not only for the annual Chautauqua, but as a town with a park. This first park in Southern Oregon was used for all large public celebrations.

Although Ashland had just built a new school, classrooms were becoming overcrowded again. In 1911, the new high school building on Iowa Street, between Morse and Mountain Avenue, was opened. Crowded conditions were once again alleviated.

Section 1.11 The Lithia Water Era

Following discovery of a Lithia water spring in the hills east of town, the idea occurred in 1911 to Bert Greer, editor of The Tidings, that Ashland might become a famous health spa like Carlsbad, Germany, or Saratoga, York. Meetings were held and there was great enthusiasm until it was learned that owners of the spring refused to cooperate. Then another spring, finer and just as accessible, was found, and the project surged forward.

Mass meetings took place, chemists analyzed the water, land adjacent to the Chautauqua Grove was acquired for additional park development, and a bond election was scheduled. The promotion committee brought in John McLaren, designer of Golden Gate Park in San Francisco, and top-ranking Southern Pacific railroad officials. Songs were written and slogans such as "Ashland Grows While Lithia Flows" were chanted. The election carried, providing $175,000 to pipe the water to town (it cost $50,000 more by the time it was done), and McLaren was retained to landscape the new Lithia Park.

In 1915, the work was completed; the health-giving water bubbled from fountains in the park, at the railroad station, the hotel, the library and the Plaza, but no more was heard of plans to make Ashland a spa city. The community enjoyed the park and went on to other things.

School grounds were landscaped during the early 1900s, a "city beautiful" campaign encouraged the tearing down of many old barns and outbuildings, and Main Street continued to develop. The Vaupel Store/Oregon Hotel building was built, as was the Elks Temple, the first building in Southern Oregon

with poured solid cement walls. The Vining Theatre, a magnificent theatre that had box stalls and a most ornate interior, opened in May 1914, with the opera "Faust."

The people of Ashland were also enjoying swimming in the twin pools of the big, new Ashland Mineral Springs Natatorium building. This grand structure was expected to help bring visitors to Ashland. Along with other features, it had a solid maple dance floor, which doubled as a skating rink.

Section 1.12 Improved Highways

In 1913, there was a "better roads" movement in the West. The decision was made to build a Pacific Highway over the Siskiyou Mountains, a highway that would follow nearly the same route as the Siskiyou Mountain Wagon Road, which had been operating as a toll road. Governor Oswald West, state highway commission members, and about 100 prominent citizens joined for a ground-breaking ceremony near Ashland and the governor predicted the Pacific Highway linking Oregon and California would be the "scenic boulevard" of the west. (In Ashland, East Main and North Main Streets would become part of this interstate route.) In order to cut costs, however, only an eight-foot wide strip was paved.

Several years later engineering began for building a highway over Greensprings. The original Greensprings Mountain Road was not much more than a trail chopped through the trees, a trail that led from the settlements in the Rogue River Valley to the homesteads in the Klamath Basin. There had been increased pressures to lay out a better road because of the number of families who were moving between the two areas, and because of the movement of freight.

Section 1.13 Troubles for Chautauqua

The 24th annual Southern Oregon Chautauqua season of 1916 lasted for twelve days and brought an excellent program, including a concert by the Marine Band, but there was a deficit of $200. Directors felt if the building were enlarged to seat more, it would pay for itself. The Chautauqua "tabernacle" was replaced with a new building -- the cement walls enclose the Oregon Shakespearean Festival's outdoor Elizabethan theatre, but under the combined pressures of the radio, the automobile, and poor management which took the program planning out of local hands, the Golden Age of Chautauqua was coming to an end.

Section 1.14 Ashland Granite

An off-again, on-again industry here for more than forty years was the quarrying of granite. In the late 1880s, a ledge of stone comparable in quality to the famous Barre granite in Vermont was discovered on Nell Creek and worked spasmodically until about 1916 when W.M. Blair took it over and decided to develop it.

Blair harvested money and bought enough machinery to fill small orders. The Lithia water fountain on the Plaza was built of Ashland granite. Ashland granite was used in the construction of the post office in Salem and to build the rotunda and steps of the Washington State capitol building at Olympia. In 1918, it was considered for construction of the First National Bank in Portland, but rejected because Blair could not get out such a large order promptly.

Later a group of local men tried to sell enough stock to form an operating company and finance a larger operation, but nothing came of their venture. The quarry remains today as it was last worked in the 1920s, a gash in a canyon, its perpendicular walls rising above a streambank strewn with huge chunks of glossy, gray granite.

Section 1.15 World War I

April, 1917. America declared war on Germany. Young men from Ashland enlisted in the Army and the Navy, and the families who stayed behind helped by buying war savings stamps and bonds, supporting the many war charities, knitting scarves and caps, collecting clothes for war orphans, feeding troops who passed through Ashland, and doing whatever they could to support the war effort.

December, 1918, World War I was over. The Tidings published an article saying:
Practically all the youth of the city answered the call of the country and entered into military or naval service and a large majority of able-bodied men responded to the call for labor at shipyards and war industries... Social life of the community was extremely quiet... Merchants reported good sales...There was an increase in the payroll of railroad employees, crops and fruit brought good prices, and the men who left and worked in war industries sent money home.

Section 1.16 The 1920s

In 1920, the Pacific Highway over the Siskiyou Mountains was widened to a sixteen-foot strip, a surface highway was being built over the Greensprings, Oregon was growing, and, in Ashland, the mood was optimistic.

Ashland businessmen invested money in the development of shale oil beds on the backside of Grizzly Peak, and they built the nine-story Lithia Springs Hotel. When the hotel opened in 1925, it was advertised as the tallest building between San Francisco and Portland.

Another distinctive feature of downtown Ashland was the Enders Store. On Main Street, extending between First and Second Streets, a series of separate buildings was opened into one so that there was a corridor -- an inside shopping mall -- running the entire length of the block.

It was during the 1920s, however, that many of Ashland's "great visions of the future" began to fade. Little or no more effort was put into the promotion of Lithia Water. The Ashland Mineral Springs Natatorium failed (this has been attributed to many things, including the advent of the bathtub in the home and motorized travel, plus the building of outdoor swimming pools), and Chautauqua faded into nothing. The tabernacle was abandoned, the dome crumbled, weeds grew and the walls flaked off in chunks.

Section 1.17 Train Robbery

The most publicized crime ever to take place on the Southern Pacific Railroad lines occurred near Ashland on October 11, 1923, when the DeAutremont Brothers blew up Train No. 13 in Tunnel No. 13 on the Siskiyou Mountains.

The brothers -- Roy, Ray and Hugh -- shot and killed three trainmen and a postal clerk when they dynamited the mail car, which was so badly damaged that they were unable to collect any loot from the smoking, steaming tunnel where the attack took place.

One small scrap of evidence, a registry receipt for a letter mailed by Roy DeAutremont found in a pocket of a pair of overalls left at the scene, put police on the track of the brothers.

Four years later, Hugh was arrested in the Philippines, Roy and Ray were apprehended in Ohio and returned to Jackson County for trial. All were given prison sentences for the crime.

Section 1.18 Campus Moved, School Re-Opens

In 1925, the state legislature appropriated $175,000 to re- establish Southern Oregon State Normal School. Because of a desire to have the campus closer to the center of town, the city gave twenty-four acres on Siskiyou Boulevard, where Churchill Hall was constructed and served as administration and classroom building.

Doors opened at this location on June 21, 1926. The school since has operated continuously as a state-supported institution.

It was also in 1926 that the Ashland School District, once again feeling the need for more classrooms, enlarged Hawthorne School to serve as the Junior High School, and purchased land on Beach Street to construct Lincoln School. This project received financial assistance from the state because it was used as

a training school for teachers being trained at the college. West Side School was re-named Washington School.

Ashland now had a high school, junior high school, two elementary schools, and 1,519 children on the census rolls.

Section 1.19 Southern Pacific Deals a Blow

In 1927, the Southern Pacific Railroad Company opened the Natron cut-off, a straighter, better, newer, more efficient and more economic route over which to move passengers and freight between California and Oregon. The Natron line left the main north-south line at Black Butte, just south of Weed, and headed north through Klamath Falls, rejoining the main line again at Eugene. It eliminated the Siskiyou grade, one of the steepest in the nation, and it nearly eliminated Ashland.

The railroad company continued to maintain its division point, repair shops, etc. at Ashland, but all .the fast freight and the best passenger service were re-routed. There remained only two through trains per day. Most of the crews were moved out. Some families packed up their things and left for new jobs, others were transferred. The economic impact on Ashland was nearly disastrous. Businesses lost some of their most regular customers, and at least one business closed. Landlords lost renters, organizations lost members, and the whole area of town now called the Railroad District changed character.

During the late 1880s, when the first railroad employees and their families arrived in Ashland and built homes, the Railroad District became a small community of its own. Fourth Street, where remnants of some of the old establishments can still be seen, was the center of business activity. People were coming and going. There were hotels and rooming houses, eating houses, liveries, and stores opened to serve both the passengers and the neighborhood residents. After the railroad began using the Natron line, there was little activity to keep this district alive.

Section 1.20 The Depression

The 1920s culminated in Ashland, as in the rest of the country, with the stock market crash in October 1929. The community struggled along to get through the Depression years of the 1930s. Most residents continued life as usual, finding ways to live and raise their families. Many citizens who lived here during these years recall that life did not change drastically, partly because the size and relative isolation of Southern Oregon had fostered a resourcefulness in people who had long tried to make a living here.

Section 1.21 Crime & Violence

During 1931, a year of rum-running and violence, Ashland was known as "Little Chicago."

A blast on the fire siren was recognized as an all-out call for help and more than once a "war-like" atmosphere prevailed as heavily armed men combed streets and countryside" looking for bandits and killers, the Tidings reported.

In January, Sam Prescott, a city police officer, was shot and killed on Siskiyou Boulevard by a professional rum-runner. The runner's car carried thirty-five cases of liquor, a cargo valued at $3,000.

In April, two men held up the State Bank on the Plaza. One was killed by the clerk in a nearby drug store who shot him as he attempted to escape carrying $100 in currency, and the other escaped. "Not long ago we observed that with modern highways, it would be only a matter of time till bank bandits … la Chicago would try their skill in these parts ... The incident calls attention to the fact that Gov. Meier is at least on the right track in his efforts to create a state policing system," said The Tidings.

In November, Victor Knott, an Ashland merchant police officer, was shot and killed while on night patrol in the Railroad District.

The man who killed Prescott was hanged. The man found responsible for Knott's death was given a life sentence for murder, second degree. In 1945, he was granted full commutation of sentence.

Section 1.22 Two Men with Special Talents

A young man named Angus Bowmer arrived in Ashland in 1931 to teach English composition and public speaking at Southern Oregon Normal School. The school at this time had a faculty of thirteen and 250 students.

The abandoned Chautauqua shell caught his attention. In it he saw a "peculiar resemblance" to a 17th Century sketch of Shakespeare's Globe Theatre.

As Ashland prepared to celebrate July 4, 1935, Bowmer encouraged the city to include a three-day festival of Shakespearean plays produced in the Elizabethan manner. The festival was considered a success and more productions were scheduled for the next summer. In this rather inauspicious way, the Oregon Shakespearean Festival came into being. It continued to grow under the leadership of Angus Bowmer, founding director.

Another man whose special talents have contributed a great deal to Ashland is Chester C. Correy, who came in 1935 as assistant park superintendent. In 1937, he was named superintendent, a position he held for thirty-two years. It was under his direction, and to his design, that many sections of Lithia Park were developed.

Section 1.23 Southern Pacific Reduces Service

In 1931, through passenger service between Portland and Oakland via Ashland and the Southern Pacific Railroad's Siskiyou route was reduced to one train a day. In 1938, this service was terminated. There was one train a day from Portland to Ashland and return, and one from San Francisco to Grants Pass and return, but no through trains. The "crack" trains were routed over the Natron line. Passenger service in and out of Ashland was reduced a bit at a time until it was finally cut off all together in the 1950s.

At the close of the 1930s, Ashland industry included a cannery, an iron foundry, a box factory, creamery, granite works, car shops, and a dry ice plant located near the Lithia Springs. Sawmills in the mountains near town also provided work. And, the importance of tourism had been recognized. In a booklet, "Where Nature Lavished Her Bounties," published by the county, Ashland was described as the "front door" to Oregon. Ashland's clean air, abundance of water and scenic beauty were recognized as potential economic assets.

Section 1.24 World War II

In 1940, the Oregon Shakespearean Festival, which had been gaining each year in quality and in popularity, played its last season for the next seven years. Its closure was in response to the new focus of America's energy, World War II. Ashland's young men left to join the military and the community rallied to support them. Families left behind participated in war relief efforts, and kept track of the war events through letters, the newspapers and radio. As in all small towns, most families gave up a loved member or shared the grief of their neighbors.

Housing was extremely scarce in Ashland during the war years because of the large Army training camp built on Agate Desert just out of Medford. On weekends, the streets were filled with servicemen milling around, looking for something to do. Camp White was activated in August, 1942. It was a training center for between 36,000 and 38,000 troops at any one time. Wives and families of the regular post personnel came when, and if, they could find a place to stay. Many of them made Ashland their temporary, wartime home.

The college declined in population through these years and by the end of the war it was at its lowest ebb. A new president, Dr. Elmo Stevenson, came to the school to try and rescue it from failure. Dr. Stevenson found enthusiastic, talented and dedicated educators to welcome the returning servicemen and other

students. During the next few years, education again became a strong part of the Ashland scene. Enrollment climbed from a low of forty-five in 1945 to 782 in 1949.

Section 1.25 Post War Ashland

The Shakespearean Festival re-opened in 1947 and replaced 'the old theatre, which had suffered fire damage late in 1940. The Festival began to attract more participants and a larger audience.

Ashland grew after World War II. To meet a need, two new schools, Walker Elementary School and the George A. Briscoe Elementary School, were built. Briscoe replaced the old Washington School, but Walker stimulated the growth of a new residential area. Land that had been farmed was subdivided for homes.

The demand for lumber immediately following World War II saw a proliferation of small, family-owned sawmills in and near Ashland. By the early 1950s, there were more than a dozen mills in town, many of them running three shifts a day. Log ponds, drying sheds, and stacks of lumber awaiting shipment meant jobs, and jobs meant money. People didn't talk about air pollution; they simply swept away the soot that came from the wigwam burners.

Because railroad access was important to the shipping of lumber, most of the mills were located adjacent to the tracks, generally from Helman Street to the Mistletoe Road area.

The mills substantially contributed to the economy of Ashland until the mid to late 1950s when the attrition rate of family-owned operations soared following the arrival in Jackson County of the large, diversified wood products manufacturers.

Some Ashland men and women who had retained active reserve status following World War II were called back into military service in 1950 when Communist North Korea attacked the American-supported regime of South Korea and the United States sent troops to resist. This was the last military action or history-making event that was "remote" from Ashland.

In August 1953, television came to the Rogue River Valley through the local broadcasting station, KOB1-Television 5M. Ashland, 101 years old, was now part of the visual, instant world. A spectacular but costly event occurred in August 1959, when fire swept from the hills above Jackson Hot Springs along the forested ridges above and toward Ashland. Audience members at the Shakespearean Festival that warm summer night watched "Antony and Cleopatra" and could see and hear the fire burning, exploding and cresting behind the stage of the theatre. Before the blaze was brought under control, nearly 5,000 acres were blackened.

Section 1.26 Growth & Expansion

The new Ashland Community Hospital, a 35-bed facility, was built on Maple Street in 1961 at a cost of $507,180. It has grown substantially in size, and in services offered, ever since. The old hospital building was taken over by the college, used for a few years, then razed as part of the campus expansion program.

In 1963, the city council appointed an airport committee to study the possibility of acquisition and expansion of Parker Field, the airstrip adjacent to Dead Indian Road. Later that year, the site, which had been leased, was purchased. In 1968, the airport runway was paved and lighted, a small apron was paved, and an administration building was built. Ashland now had a municipal airport.

Interstate 5 was opened between Ashland's north and south interchanges in 1964. This took the heavy traffic off Siskiyou Boulevard and North Main Street and out of downtown Ashland, which was considered good, but at the same time there was concern about the effects on business of "being by-passed."

Ashland grew physically and expanded in several directions during the 1960s. A new Junior High School was built on Walker Avenue and the old Junior High School site on Siskiyou Boulevard was converted to commercial use (Safeway store). Commercial growth continued in the area of the college and along Oregon 66.

The Bellview district annexation in 1964, the largest annexation in the history of Ashland, stimulated growth in this southern section of town and Quiet Village, a large subdivision, stimulated growth in the north end of town. In 1966, Helman Elementary School was built to serve this developing neighborhood.

The Mount Ashland Ski Lodge and Winter Sports Area was built during 1963-64 because of the enthusiasm, backing and dedication of winter sports enthusiasts and businessmen who felt there was economic potential in an expanded tourist season.

The Shakespearean Festival continued to bring more and more visitors to Ashland each summer. The outdoor theatre, completed in 1959, had a seating capacity of 1189 and frequently was filled. Plans were started for an indoor theatre. The Angus Bowmer Theatre, seating 600, opened in the spring of 1970. With this facility, the theatre season was extended into the spring, fall and winter.

Section 1.27 Planning for the Future

The 1960s brought change to both the face and community life of Ashland. A new awareness of the necessity for planning for growth resulted in a update to the 1946 zoning ordinance in 1964, and the first sign code in 1967. There was more concern about the appearance of buildings. A project was undertaken in 1973 to add visual enhancement to the Main Street commercial area with trees, planters and decorative streetlights. Utility lines were buried underground.

Tourism had, by now, become a major recognized source of income in Ashland. Artists and craftspeople opened studios and shops, motels and restaurants were filled with visitors. There was concern, however, over lack of a stable economic base. A wood products plant, one lumber mill, a tank and steel manufacturing plant, a firm that manufactured dental office equipment -- this, for the most part, comprised the source of Ashland's "industrial" payroll. For "new money" the community was heavily dependent upon the college, the schools, governmental agencies, and tourists. Economic Development Commissions, it seemed, could sell livability more easily than they could sell plant location.

During the 1960s, through the medium of television, the people of Ashland watched with horror the fighting in Vietnam. Never had a war seemed so close, yet so far. They knew that some local young men were there, and that from time to time some local young men completed their tour of duty and returned home. They also knew that much of the unrest in the nation and on the local college campus was the result of this undeclared war. It was also through television that Ashland witnessed the assassination of President John F. Kennedy in November 1963, and the landing of American astronauts Buzz Aldrin and Neil Armstrong on the moon in 1969.

Section 1.28 Historic Awareness

In the early 1970s, Mayor Archie Fries appointed a committee of five women to serve as Ashland's first official Historic Preservation Committee. This step echoed an interest growing throughout the country in historic architecture and the past it reflected. Aesthetic awareness and economic necessity combined to encourage interest in the restoration and conservation of older commercial buildings and homes. Newly refurbished building facades brightened the face of the community. Historic preservation became a recognized part of Ashland's profile.

The 1960s and 1970s also brought new faces to Ashland. The college encouraged foreign students and American black students; cultural exchange programs, most notably with Guanajuato, Mexico, gave many Ashland young people the opportunity to experience life in other countries. Ashland began to attract retirees, people whose professions allowed them to live wherever they chose, and those who were withdrawing from a kind of lifestyle fostered by larger cities. They came because they found Ashland beautiful and, for the most part, accepting.

Ashland today is a unique mixture of longtime residents, retirees, workers, alternate lifestyle folks, students, artists, business people, and others, all tied together with an uncommon love and concern for our community, continuing Ashland's heritage into the future.

Section 1.29 Historic Preservation

Many buildings and sites in and around Ashland are of historic interest due to age, design and association with historic events or people. These resources represent a unique part of Ashland. The identification, protection and preservation of these resources is critical in maintaining Ashland's cultural integrity and attractiveness and enables eligible property owners to take advantage of special legislative measures and tax benefits. Several adaptive uses have appeared throughout older districts and the City has strongly supported uses and restorations of historic structures, and in the decade of the 1980's restored City Hall, the Ashland Community Center, Pioneer Hall, the Carter Memorial Statue, the Butler-Perozzi Fountain, and the Abraham Lincoln Statue.

The Downtown Commercial District, the Railroad Addition, the Siskiyou-Hargadine District and the Skidmore Academy District comprise four historic interest areas in Ashland at the present time. Each is distinctive, but with the others forms the core of our historic resources. The Commercial District extends roughly from the Plaza to Gresham Street along East Main Street. The Railroad Addition is adjacent on the northeast, the Siskiyou-Hargadine District to the southwest, and the Skidmore Academy District to the northwest.

The Commercial' District, with resources ranging in date from 1879 to 1937, evolved as businesses moved out East Main Street from the Plaza. Vernacular brick structures, the eclectic former Lithia Springs Hotel, the Ashland Public Library, the former First National Bank, the Citizens Banking and Trust Company and the Varsity Theatre highlight the area. Several buildings were designed by prominent Rogue Valley architect Frank Chamberlain Clark, including the Elks and Enders Buildings.

The Railroad Addition developed with the Oregon and California Railroad's arrival in 1884. Most of the extant buildings date from periods of intense growth, notably 1884-890, and 1898-1910, and represent a variety of architectural styles. The Railroad Addition has particularly significant historic associations with the railroad worker and laborer families who occupied the area during the late 19th and early 20th centuries.

The Siskiyou-Hargadine area is primarily composed of several additions platted in 1888, the year the final rail link occurred at Ashland. Exceptions are the Beach and Hargadine Tracts, laid out before the railroad's impact. The majority of historic structures date between 1888 and 1925, and a wide range of residence style and scale appears. Siskiyou Boulevard is lined with dwellings whose associations with prominent Ashland citizens and architectural diversity lend a particular significance.

The Skidmore Academy District, named in honor of the early Methodist College which stood on North Main Street, contains within its boundaries much of the Original Town and some of Ashland's oldest resources. Several of Ashland's earliest families, as well as citizens prominent in commerce or the professions, chose this area to live. North Main Street, one of the two oldest entrances to Ashland, constitutes a highly visible and significant presence in the town's configuration.

The four historic interest areas were formally delineated in 1984 when the City of Ashland asked the Oregon State Historic Preservation Office for an opinion regarding its eligibility for inclusion in the National Register of Historic Places in preparation for an extensive housing rehabilitation project. An architectural field survey was conducted that year on all properties within the three pertinent residential areas. During ensuing years, the Historic Commission worked closely with City staff and property owners to monitor construction, remodeling or demolition within the districts.

In 1988-1990 the Historic District was surveyed and historic research completed for all properties to determine their historic significance. Approximately 800 properties were evaluated for relative

significance according to National Register criteria. Indexed volumes of inventory sheets and qualitative evaluation material are available for City staff and public use.

The Ashland Cultural Resources Inventory is an evolving project to which information should be added or deleted when necessary. Additional resources may emerge and new information may require reassessment of a property's significance. While over thirty individual Ashland properties are listed in the-National Register of Historic Places, more nominations, either singly or in districts, may be initiated. New challenges lie ahead. Individual properties as well as neighborhoods need to be surveyed, design guidelines should be explored, and continued public education must be pursued. Ashland's rich historical heritage deserves the continued efforts of the public, the Historic Commission and City staff to ensure that the buildings, landscapes and streetscapes, tangible evidence of that heritage, are protected.

The Ashland Historic Commission, a nine-member citizen committee appointed by the Mayor, presently reviews all demolition, moving, building, and sign permits for structures within the districts identified as Areas of Historic Interest. These area delineations have been formally accepted by the Ashland City Council and are depicted on Map I-1. Building and sign permits generated in these areas are reviewed by the Historic Commission or its hearings board. All demolition and moving permits within the pertinent areas are subject to a stringent review process by the Commission prior to submission to the Planning Commission and the City Council. The Historic Commission has eagerly sought cooperation with developers and property owners to ensure that both new construction and renovation compliments the historic integrity of the area.

Section 1.30 GOAL

To Preserve Historically Significant Structures and Sites in Ashland

Section 1.31 POLICIES

1. The City recognizes that the preservation of historic sites and 0uildings provides both tangible evidence of our heritage and economic advantages.
2. The Historic Commission shall offer recommendations to the City Council and Planning Commission concerning the alteration or disposition of structures, sites, or neighborhoods within the historic interest areas in Ashland.
3. The Historic Commission shall review all building, sign, demolition, or moving permits occurring in the areas of historic interest, using procedures established by law, in order to offer its opinion on the proposal's impact on historic preservation.
4. The Historic Commission shall encourage and promote educational programs to inform the public of the values of historic preservation.
5. The Historic Commission shall seek the official designation of important historic buildings and districts by national, state and local organizations. The Commission shall assist the Planning Staff and Planning Commission in exercising appropriate controls on the external appearance and disposition of such buildings and districts.
6. The City shall identify and inventory its significant historic buildings, structures, sites, objects and districts employing photographic, written and oral documentation, and maps, and shall protect those resources identified as significant.
7. The City shall develop and implement through law design guidelines for new development as well as for alteration of existing structures within the historic interest areas for structures and areas that are historically significant.
8. The Historic Commission shall take appropriate measures to encourage City communication with local, state and federal agencies, which can supply funding, information and political support for Ashland's historic preservation activities.
9. The City shall develop and maintain guidelines for analyzing and resolving conflicting uses of its historic resources, and shall encourage traditional uses of historic resources.

Chapter 2

Introduction and Definitions

Parts:

Part 2.01

Introduction and Definitions

Sections:

Section 2.01.01 Setting

Ashland is located at the southeast end of the Bear Creek Valley, nestled between the Siskiyou Mountains to the south and the Cascade Range to the northeast. Due to the topography of the area and the City's location on two major transportation routes, Ashland has developed in a lineal fashion, 4 miles long and 1 mile wide.

Ashland is part of a larger marketing area centered around Medford. The City has a diversified economy, made up primarily of wood product manufacturing, tourism, and Southern Oregon University.

Section 2.01.02 Plan Assumption

Some present residents wish the community to remain at its present size and feel the most important planning function would be to ensure a constant, stable population. But, unless the natural growth inducements of the area should disappear or the City adopts restrictive growth policies as a result of resource constraints, most people realize that some growth is inevitable.

The challenge to the community is to have all changes, by growth or any other cause, result in a living environment equal to, or better than, the present one. That task becomes increasingly difficult as human actions become more complicated and interrelated. An increase of population puts a strain on the environment and produces a possibility that traditional rights may have to be reevaluated when considering the public good.

The Comprehensive Plan is based on a number of premises that should be clarified:

1) There will be continued changes and the City can and must guide these changes for the best interests of Ashland residents.
2) There is an obligation to have a livable city for the future residents of Ashland, and to ensure that the decisions of today do not eliminate all planning options for future generations.
3) If long-range goals are to be achieved, some programs and plans must be activated; delay often creates a crisis situation which makes problem-solving more difficult.
4) Though the Plan is based on goals to be in effect until the year 2000, it is obvious that all policies and proposals cannot be enacted immediately. Plan programs, especially those requiring direct City expenditures, must be selected by elected officials during capital improvement planning, with due consideration to available funds and City priorities.
5) The Plan suggests many programs, some of which are not immediately feasible with existing City funding levels. Rather than accepting a do-nothing philosophy related to a current, funding situation, the Plan makes some future funding assumptions:
    a) That the legislative body can rearrange priorities based on what it thinks is important, actually changing the funding of some existing programs.
    b) That funding mechanisms may be changed and altered in the future. (Some changes are proposed in the Plan.)
    c) That the City will receive some funds from outside sources, i.e., State and Federal governments.

Part 2.02

Background

Sections:

Section 2.02.01 Introduction

This current Plan is a complete revision of the previous General Plan completed in 1966. The old Plan was revised for a number of reasons, some of which could be summarized as follows:

1. The 1966 Plan was written in such a way as 'to ensure that no matter what population came to Ashland (up to 69,000 people), the City had plans to accommodate them. How this population could be serviced, and the effect of such increased population on the environment, were, however, not researched.
2. The Plan did not address environmental concerns.

The City decided, in 1971, to revise the Plan. The actual acceptance of the work schedule for revision took place in November 1974. A number of State legislative actions have altered the content and impact of any land use plan in the State of Oregon. One of the most far-reaching was the establishment of the State Land Conservation and Development Commission (LCDC) in 1973. The Commission has adopted 19 State Goals, of which 13 apply to Ashland.

The present Comprehensive Plan was adopted April 18, 1978, and amendments were adopted in January 1980. The City submitted its plans and ordinances for acknowledgment of compliance from LCDC in July 1980. The Commission found the Plan deficient in 11 of the 13 applicable State Goals.

This latest revision, adopted in 1982, includes those amendments necessary to comply with State Goals, and, as four years have passed since the original plan was adopted, it also has involved a major review and revision of the plan reflecting the City's needs and priorities.

Part 2.03

Plan Text

Sections:

Section 2.03.01 Scope

The basic purpose of a city general plan is to have a document to refer to in making city decisions. The hope is that decisions will then have long-term consistency. The Council and Planning Commission and other City commissions and committees would refer to the plan in making decisions, and citizens would be aware of the policies of the City before making a specific request to the City. Therefore, a Comprehensive Plan should attempt to deal with the same problems that face the City.

Because the Plan cannot answer all questions specifically, it must be general in nature. General statements can apply to a variety of problems, and can be relevant over a long period of time. Neither should the Plan map be considered a specific document. The Plan map does not always follow lot lines, but rather serves as a guide for a more specific land use document.

Section 2.03.02 Format

An attempt is made in this Plan to include the reasons for goals, policies, and implementing measures. Both findings (current information) and assumptions (suppositions about future events and trends) are included in the Plan document.

The Plan attempts to proceed from the very general (goal statements) to the fairly specific (implementing measures). This progression accomplishes the objective of further refining a goal by a number of statements, making it easier to understand.

Section 2.03.03 Definition of Terms

It is extremely important to understand the different statements in the Plan and how they affect City decisions. There are four types of Plan statements: findings, assumptions, goals, and policies.

Findings illustrate either specific facts or specific attitudes of the residents of the City. They help show the background of a subject section of the Plan and in some part explain why certain goals, policies, and proposals were adopted.

Assumptions are suppositions about what will happen in the future. Most plans assume an extension of existing trends, but, unless this assumption is clearly stated, there is no assurance that plan statements were based on existing trends.

A goal statement is an attempt to illustrate what the City is striving for, i.e., it sets City direction. It has a direct effect on future planning, as a city cannot legally be in opposition to its own goals. Programs should be directed toward achieving those goals.

Policies are statements supportive of the goals, as they are to aid in achieving listed goals. They have a strong effect on a city, because city decisions and programs cannot directly contradict the policies. Policies do not have to be implemented if they require funds that are not available, since funding is dependent on Council priorities and available money. When decisions are being made, and policies are directly or indirectly applicable to such decisions, the policies must be followed unless it can be shown

and recorded that a different decision supports the goal statement better than a decision based on the applicable plan policies.

Section 2.03.04 Plan Map

The purpose of the Comprehensive Plan Map is to guide development of the City to ensure the best use of financial, natural, and energy resources. The map is intended as a guide for City planning, in conjunction with Plan goals and policies, until the year 2000, or until the City reaches a population of about 21,000. It is assumed that there may be changes in the map during this time, but those changes must be made with attention to the best long-term interest of the City, and must be in agreement with Plan goals and policies and State planning goals.

According to State law, zoning decisions must be in agreement with the Plan map, meaning they cannot be of greater density or intensity than allowed on the Plan map. They may, of course, be of lesser intensity.

The Comprehensive Plan map is not intended to be a zoning map. Its boundaries are expected to be more flexible, with classifications meant to guide uses, not to specify permitted and non-permitted uses. But it is similar to a zoning map in the way it divides the City into a number of districts, each with its own distinctive color or patterns. These districts can then be incorporated into implementing ordinances (e.g., there may be examples of a variety of uses, which would fit into a given area on the map). Any implementing ordinance should attempt to enforce the designated purpose of a district by incorporating development and performance standards rather than by relying solely on permitted and non-permitted uses. There should be a continuing transition from strict use zoning to a more flexible performance and impact zoning.

Part 2.04

Land Use Classifications

Sections:

Section 2.04.01 Residential - General

The residential categories are for the purpose of establishing land use intensities by assigning different densities to different areas. Densities are not intended to specify types of uses, but rather the suggested number of units per gross acre (gross acres include streets, parks and open space). Thus, housing clusters are allowed and can even be encouraged within the overall allowed density. The actual density would be established, with some specified exceptions, by implementing ordinances. It is possible for ordinances to specify densities less than that shown on the Plan, which would constitute an interim use.

It is often desirable to establish density regulations that are somewhere in the mid- range of those proposed, with density bonuses provided as an incentive for the achievement of certain desirable results (e.g., housing for the low-income aged, or energy-efficient housing). Specific densities established by regulations can also take into account topographical features, which would limit development.

Section 2.04.02 Low-Density Residential

These areas are meant to be a fairly low density -- up to two units per acre -- with predominance of single-family homes. The lower density designation is necessary for several reasons, which are:

a) Slopes of 30-50% in areas that are well dissected, containing gullies, and drainage areas, which are steeper.
b) Access problems; the inability to vent an area using existing road networks without creating undue traffic congestion on residential streets in other existing neighborhoods.
c) The necessity to have lower density housing developments at the urban-woodland interface, especially to prevent forest fires.
d) Limited public facilities, which cannot be improved in the foreseeable planning future. These public facilities may include paved access, sewer, and water service, as well as other necessary public facilities.

Section 2.04.03 Single-Family Residential

This designation allows single-family residential uses with some mixture of attached units. Lot sizes are generally sensitive to topography in that greater slopes should have lower densities. The zoning designations for areas designated as Single-Family Residential generally range from 10,000 sq. ft. lots, or

areas which are from 3-5 dwelling units per acre, to areas with a minimum lot size of 5000 sq. ft., or which are from 5-8 dwelling units per acre. The zoning shall be varied, based on adjacent development densities, topography and access to collector and arterial streets.

Section 2.04.04 Townhouse Residential

This designation allows multiple-family residential uses at a density of up to 12 units per acre. This designation would encourage innovative residential housing to provide low-cost, owner-occupied housing in addition to lower density rental units.

Section 2.04.05 Multi-Family Residential

This is intended to be a higher density area, up to 20 units per acre, for multiple- family units, single-family homes, small professional offices, and small, home-oriented, light retail commercial uses in the historic Railroad District. Implementing codes should not encourage the removal of structurally sound housing for new units. They could allow, however, for older homes to be converted to multifamily use.

Section 2.04.06 High Density, Multi-Family Residential

This is for a higher density residential area, with up to 3 units per acre. The densities allow for large multiple-unit structures with greater consideration being given to street capacities and the quality of existing neighborhoods. High-density areas are grouped around commercial facilities, the college and the hospital to lessen the dependence on auto transportation for residents using those facilities. Professional offices would also be appropriate under this designation.

Section 2.04.07 Single-Family Reserve

These lands are included in the Urban Growth Boundary because they either already have some City services (sewer and/or water), are in a rural area in the existing City limits, or are in an area that may be needed to be included in a future assessment district for needed sewer and water lines. These lands are committed to eventual urbanization due to the small lot sizes (averaging less than 1-acre generally). They are a low priority for development in this planning period, but will become more readily available in a longer time frame for urban development.

Section 2.04.08 Commercial

These areas are designed for commercial activities. They are designated on the map to encourage retail businesses to locate close to each other, with minimum traffic disruption on adjacent streets. Private off-street parking facilities are required, but joint use of facilities is encouraged. In the Downtown Overlay area, off-street parking is not required.

Section 2.04.09 Employment

These areas are for a variety of office, retailing, manufacturing, storage, repair, and wholesale operations. Uses should be compatible with any adjacent residential areas, and would need to be attractive, especially when located on major streets. Development standards should be strict and emphasize appearance and mitigation of adverse effects. Performance standards will be the main regulatory mechanism in this area.

Section 2.04.10 Industrial

This area is for manufacturing, processing, or related establishments that are possibly incompatible with other uses. These areas are best separated from residential areas and adjacent to railroad facilities. Appearance is still an important consideration in these areas.

Section 2.04.11 Parks

Park areas are to be controlled by the City for active or passive recreation. The City should attempt to obtain park property or the desired easements before other development is imminent. There is no requirement or Plan intention to have all such areas highly developed or maintained. Some areas could well serve community needs by remaining in a natural state.

Section 2.04.12 Open Space

These areas are to remain in a natural state, but need not be in public ownership. Uses are allowed which do not destroy this naturalness, such as recreation or some type of agriculture. Open spaces could be utilized for public or semi-private trails and paths, thus encouraging non-automotive travel and connecting recreation facilities.

Section 2.04.13 Woodland Residential

These areas are located on the steep, forested slopes in the southern portion of the City. They are generally defined as lands which are more than 300 ft. from the closest City services, have little opportunity for development, generally are greater than 40% slope, with areas of greater than 100% slope, although there may be some plateau of 20%-30% slope in areas generally designated Woodland Residential. They are usually fairly well dissected by gullies and drainage areas, and some isolated gullies and drainage areas which are exceptionally steep (over 40%-50% slope) may be designated Woodland Residential in localized areas. These lands are generally not available for urbanization. They should be retained for their forest, environmental water quality, erosion control and scenic value. They also provide a buffer between urban uses within the City and forested areas of the County. Developments of these areas must be of low density to ensure that the value of these areas would not be compromised by the residential areas. As commercial logging in these areas could also be detrimental, there should be special regulations for commercial logging. The maximum density is 0.5 dwelling units per acre, which may be reduced as the slope increases.

Section 2.04.14 Public Schools and Facilities

These are areas needed for existing or future public uses, such as schools, treatment plants, airport, and so forth. These areas should be programmed into the City or school system budgets and purchased prior to projected development. In cases of possible combined uses (e.g., school parks), a joint acquisition should be encouraged.

Section 2.04.15 Southern Oregon University

These areas are designed to provide for the unique needs of Southern Oregon University (SOU). It is applied to areas that are located within the mutually approved SOU boundary. It is implemented by the Land Use Ordinance, but the actual rezoning of the property cannot occur until it is actually owned by the University.

Section 2.04.16 Plan Review

This plan will be reviewed for adequacy of its policies and timeliness of the supporting data every two years from the date of plan adoption. Revisions of the plan text or plan map shall be subject to the complete citizen involvement process including public workshops, CPAC participation, Agency coordination, Planning Commission hearings and recommendations and Council action by ordinance.

Chapter 3

Citizen Participation and Involvement

Sections:

Section 3.01 Initial Plan Formulation

The City has made every attempt to involve as many people as possible in the planning process. During the initial drafting of this Plan document, four citizen advisory committees were established, each with a different area of concern.

1. Environmental Resources Committee: Areas of interest include subjects related to the environment (air, water pollution) and park, open space and recreation programs.

2. Economic and Manpower Resource Committee: Areas of interest include economic development, commercial and industrial land, and manpower programs.

3. Public Facilities Committee: Areas of interest include water, sewer, police, fire and transportation.

4. Housing and Social Services Committee: Areas of interest include housing, aging programs, health, and other social services.

The committee memberships were established by selecting certain individuals with relevant skills, including SOU faculty members, and by advertising in the newspaper for volunteers. An attempt was made to give each committee a balanced membership with regard to income, age, sex and geographic area of residence. All meetings were advertised and open to the public and all attending were encouraged to take part in the discussion and policy formulations.

The committees met frequently, both separately and jointly, with an average attendance of 9 and 4O respectively. This represented approximately 1250 citizen hours of participation as of December 15, 1975.

There was also a neighborhood involvement element in the Ashland Plan procedure. The City was divided into eight neighborhoods according to areas with similar problems. There were two neighborhood meetings to review the planning process and the Land Use Map. Attendance averaged about 30 for each meeting.

Section 3.02 Citizen's Planning Advisory Committee

After the initial Plan draft, a permanent committee was formed to provide continuing citizen involvement. The Citizens' Planning Advisory Committee is appointed by the Mayor. It consists of 16 persons who meet monthly to review planning issues which involve LCDC and Comprehensive Plan Goal items. They also provide direction and expertise in development of new ordinances and policies.

This committee will shoulder the bulk of the ongoing citizens' involvement in the planning process. All major changes in Plan direction or implementation will be reviewed by the committee, and the committee will be responsible to assist in increasing communication between the City and the government decision-makers.

Section 3.03 Goal

To Maintain A Citizen Involvement Program That Ensures the Opportunity for Citizens to be involved in All Phases of the Planning Process.

Section 3.04 Policies

1. Continue existing Ashland Citizens' Planning Advisory Committee to assist the Ashland Planning Commission and Ashland City Council on significant planning issues, implementing ordinances, and all LCDC and Comprehensive Plan goals.

2. Ensure, as much as possible, that the 16-member Citizens' Planning Advisory Committee represents a geographic, occupational and ideological cross-section of the citizenship of Ashland. All future selections to the Committee should be with the ideal of representing a cross-section of Ashland' s population.

3. Ensure in the future that all citizens are given the opportunity to contribute their views to planning issues through the public hearing process.

4. The City shall sponsor informal workshops during the development of significant elements of the Plan implementing ordinances so that complex issues may be better understood by the public.

5. The City should develop education materials such as guidelines, handouts, etc. to increase understanding of the City codes by the general public. When necessary, the City should sponsor seminars and classes to better inform the public.

Chapter 4

Environmental Resources

Sections:

Section 4.01 General

Ashland is situated at the southeast end of the Bear Creek Valley. The varied topographical setting is characterized by conifer-forested mountains and a valley floor comprised of open grasslands and mixed woodlands. This setting adds significantly to the city's attractiveness and to the living environment's quality. Urbanization, however, has disturbed the setting and contributed air, water and noise pollution, as well as soil erosion and the loss of small creeks and wetlands. Despite these problems, significant areas of natural beauty remain within the city limits.

Section 4.02 Geological Background

Located in the Bear Creek Valley, part of the larger Rogue River Valley, the area surrounding Ashland is a natural geologic boundary, separating the older, metamorphic and granitic Klamath Mountains province to the southwest from the younger, volcanic Cascade Mountains to the northeast.

Reconnaissance mapping of the Ashland area was carried out in the summer of 1975 by the Southern Oregon State College Geology Department. They discovered that rock and contact exposures within the map area are sparse, and are estimated to be less than five percent of the total surface area. The mapping's nature and poor exposure has resulted in the approximate location of geologic contacts and faults.

Section 4.03 Description of Major Rock Groups

Applegate Group

The oldest geologic unit within the map area is a varied suit of meta-sedimentary rocks belong to the Applegate Group: A tentative Triassic age (195-225 m.y.) has been assigned to the Group based on meager fossil evidence in the Grants Pass region. This rock unit barely enters the northwestern corner of the Ashland area. The rocks are highly silicified mica schists and phyllites. Foliation generally trends northeast and dips at high angles. The rocks exposed along the Southern Pacific Railroad cut behind Jackson Hot Springs exhibit extreme deformation, silicification, and other mineralization. These effects apparently are the result of contact with a major plutonic body of molten rock exposed further south in the same cut.

Mt. Ashland Intrusive Complex

Much of Ashland, as well as the hills along the southeastern flank of the valley, are underlain by rocks belonging to a moderate-sized pluton named the Mt. Ashland Intrusive Complex. Igneous granitic rocks of the complex intruded and contacted metamorphosed rocks of the older Applegate Group in the Late Jurassic (142 m.y). The dominant rock type within the area is a medium crystalline grano-diorite, a granite-like rock. Quartz diorite and diorite also appear. The plutonic rocks are poorly exposed and, where seen in road cuts, tend to be highly weathered. Granitic terrain can be easily identified from the surface by the light-colored, feldspar-rich soil and rilled or finely gullied topography developed on it.

Hornbrook Formation

Marine sandstones and mudstones nonconformably overlying the granitic rocks are named the Hornbrook Formation. Abundant marine fossils indicate the presence of an ancient sea in this region -- sometime in the Late Cretaceous (85-100 m.y.). The oldest rocks, in contact with the granitic rocks, are composed of thin beds of well-cemented, brown to olive-gray, fine-grained sandstone. The lateral thickness of the sandstone varies greatly, reflecting in part the in-filling of ancient topography developed on the granitic terrain.

A relatively thick (2000-4000 feet) sequence of dark gray mudstone overlies the sandstone. The mudstone weathers readily into small angular chips and exposures are rarely seen. The mudstone is rhythmically interbedded with thin siltstones near the top of the sequence and sheet-like beds of sandstone occur through the section.

Payne Cliffs Formation

Unconformably overlying the marine sedimentary rocks is a thick sequence of continental sandstones and conglomerates named the Payne Cliffs Formation for the exposures east of Phoenix, Oregon. The sandstone slightly resembles the Hornbrook but is more friable, tufaceous, and pebbly. The only fossils exhibited by the Payne Cliffs Formation are petrified wood, coals, and scattered carbonized vegetable matter. The Payne Cliffs' age is undetermined, dating either as Eocene (38- 54 m.y.) or Late Cretaceous (65-100 m.y.).

Some small-scale coal mining occurred at Payne Cliffs Formation about 1900, but it is unlikely that the Rogue Valley Coal Fields will be active again. The coal is scarce and low grade with veins that dip moderately beneath the foothills of the Cascade Mountains.

Roxy Formation

Basaltic lavas and volcaniclastic beds unconformably overlie the Payne Cliffs Formation. This unit underlies the lower hills of the Cascade Mountains, east of the subject area. An assumed Oligocene age (26-38 m.y.) for the Roxy Formation is based on fossilized leaves.

Intrusive Rocks

Dark, fine-grained igneous rocks intrude all of the geologic formations within the study area. Many of these minor bodies are localized within the soft, easily intruded mudstone of the Hornbrook Formation. Only one of the many bodies is indicated on the geologic map.

Section 4.04 Structural Geology

Tilting

The dominant structural feature in the study area is the moderate northeast tilt of the stratified formations. The tilt or dip ranges between five and twenty-five degrees. The Hornbrook dips slightly more steeply than the younger Payne Cliffs and Roxy Formations.

Strong vertical uplift along the eastern margin of the ancient Klamath Mountains, represented in the study area by the Applegate Group and Mt. Ashland pluton, has produced this northeast tilt. The amount of tilting or dip grows progressively less proceeding northeast from Ashland across the valley. The Bear Creek Valley is geologically classified as a strike valley.

Faulting

A number of faults are located within the area. Two subparallel faults trend northwest from Emigrant Creek Reservoir toward Walker Creek. The displacement and linear trace of these faults indicate they are a normal or gravity type with nearly vertical fault planes. The faults bound a rotated block containing the Payne Cliffs Formation near Emigrant Creek Reservoir. Dips as great as 30 degrees northeast can be measured and differential erosion on resistant, thick sandstone beds has formed well-defined, hogback ridges in this vicinity. Pompadour Bluffs is an example. The faults extend southeast, joining the Mt. Ashland fault at the head of the valley.

A minor normal fault occurs west of Tolman Creek where the Hornbrook sandstones are sharply displaced. Other small faults along the valley's southern edge may account both for the contact irregularities between the sandstone and granitic rocks and the marked topographic lineations.

All of the faults in the region are believed the result of stresses generated by the uplift along the eastern margin of the Klamath Mountains. None of the faults are interpreted to be currently active, although further uplift in the geologic future can be predicted from the geologic history of the region.

Section 4.05 Geologic History

The geologic story of the Ashland area began over 200 million years ago when this region was covered by an ancient sea. Sand, mud, and limestone-like sedimentation graded northward into submarine volcanic rocks.

During the ensuing 60 million years, the sediments of this ancient sea were severely compressed into tight folds and the rocks were altered (metamorphosed) by heat and pressure on a regional scale forming the Applegate Group. This disturbance generated volcanic magma and intruded upward into the metamorphic terrain approximately 40 million years ago. The intruded metamorphic rocks became part of an ancient mountain system, which was being deeply eroded.

The sea returned to the Ashland area approximately 100 million years ago. Its edge lay close to Ashland where sand and mud were washed eastward from erosion of the ancient Klamath Mountains.

The ancient Klamath Mountains' regional uplift and the Hornbrook sea's retreat occurred during an interval 50 to 80 million years ago. Erosion cut deeper into the Klamath rocks and newly exposed marine sediments. The eroded debris flowed eastward and spread by rivers into a broad alluvial apron along the margin of the ancient Klamath Mountains. Vegetation was plentiful and thin beds of volcanic ash settled and washed into numerous lakes and sloughs.

The building of the Payne Cliffs alluvial apron was terminated again by uplift of the ancient Klamath Mountains. An erosional episode was followed by widespread vulcanism about 25 to 35 million years ago. The Cascade Mountains' earliest volcanoes produced lava flows, ash, and other volcanic sediments which spread west over the eroded margin of the Klamath Mountains.

The strongest uplift of the Klamath Mountains occurred approximately 15 to 20 million years ago. Formations overlying the Klamaths tilted and erosion stripped the younger rocks back northeastward away from the rejuvenated mountain front. Faulting was focused at the southeastern end of the valley due to the strongest uplift located around the Siskiyou Pass area. Bear Creek Valley's erosional beginnings occurred at this time.

Slight regional uplift still occurred, evidenced by a number of river terraces developed along modern Bear Creek.

Section 4.06 Geologic Observations for Comprehensive Planning

Recent research has greatly improved the understanding of earthquake hazards in Oregon, and geologic and seismologic studies now show that most of western Oregon is probably subject to much greater earthquakes than any in our 150 year historic record. It is not currently possible to reliably predict the frequency, magnitude or location of damaging earthquakes, but such earthquakes may pose a threat to many existing or planned structures. Over the next few years, urban areas will be faced with difficult decisions about earthquake-resistant design.

The probability of the marine Hornbrook Formation becoming a petroleum or natural gas target is small.

Mineralization and accompanying mining in the Applegate Group and Mt. Ashland pluton, as well as the non-marine Payne Cliffs, is a geologic fact. Future mining potential may exist within the area.

Future development on steeper slopes on granitic terrain should be planned with the contours of the terrain in mind, rather than following a rectangular grid. In many areas of the city, streets are impassable during icy conditions due to steep grades. Rain showers often tend to be short and intense, favoring a high surface runoff. Deeply weathered, easily eroded, plutonic terrain, commonly silts local storm drains, and diverts volumes of water down the north-trending streets, occasionally flooding streets and private property. These negative effects could be diminished by strict development controls on areas over 20 % slope.

The Ashland planning area has a moderate to high landslide potential, especially where granitic terrains and steep slopes exist. "Mass Wasting in the Ashland Watershed," the study by Wilson and Hicks indicated that landslide hazards may exist above 50% slope. The granitic rocks are easily weathered, mechanically and chemically, to remarkable depths. Many slopes are potentially unstable due to over-steepening by erosive undercutting and long gullies and streams produced by uplift's long geologic history. To prevent activating potential slides, deep cuts and excavations should be forbidden without extensive engineering and geologic study, surface run-off should be directed toward existing natural drainages, and clearing vegetation on especially steep slopes should be prohibited. Undercutting's results on a deeply weathered quasi-stable slope are evident four miles southeast of Ashland along Interstate 5.

Section 4.07 Groundwater Resources

Groundwater conditions are highly variable in our planning area. Its potential in those areas underlain by dark gray mudstone is very poor. Mudstone typically has low porosity and permeability and is generally unsuitable for septic percolation. Classic geologic conditions for the occurrence of artesian wells exist along the southwest margin of the valley and several are present. The Hornbrook Formation's basal sandstone beds form an aquifer with seepage that carries water along bedding planes and the porous weathered surface of the granitic rocks beneath the sandstones. A hydrostatic head develops as the sandstone dips northeast under the impermeable mudstone of the valley floor. This aquifer is only a drilling target along a narrow strip of land on the extreme southwest side of the valley. The northeast dip rapidly places it at a deep level farther out in the valley, a location that makes it financially impractical to recover. The volume of water carried is inadequate for municipal development.

Moderately good domestic wells can be expected in thick alluvial deposits along the major creeks.

The Paynes Cliff formation, due to its high content of volcanic material, has poor permeability and porosity. It should not be considered for municipal development.

Crushed zones along faults often form excellent aquifers. Drilling into fault zones for municipal water supplies is not advisable in the Ashland region. Most of the major faults in the region have highly mineralized springs along them, and drilling could produce this unsuitable water.

The surface contact between the Mt. Ashland intrusive complex and the Hornbrook formation is the site of several hot springs. Low-temperature geothermal water (80 degrees - 115 degrees Fahrenheit) exists in this region. A detailed study of geothermal resources found few exploitable resources.

Detailed data necessary to evaluate the location, quantity and quality of groundwater for areas within the City Limits is not available. The lack of a citywide groundwater/well index prevents evaluation of the resource and therefore for the purpose of Goal 5 compliance, it is listed as a "lB" resource.

Section 4.08 Aggregate Resources

The mineral aggregate resource areas in the Ashland vicinity consist of plutonic, sedimentary and volcanic geologic formations and floodplain gravel formations. The Klamath-Siskiyou Mountains west and south of Ashland are partly comprised of granitic rock, particularly on the east slope and decomposed granite is mined from this formation. Both private industry and public agencies operate granite quarries in the slopes south and west of Ashland. Mining on these steep slopes subjects the area to erosion problems, and successful restoration of a granite quarry has not been accomplished in the Ashland area.

The sedimentary areas in the vicinity of Ashland lie along the eastside of Bear Creek between the 1800 and 2800-foot elevations and near the Siskiyou Summit and Colestine area. These rocks are not considered an important aggregate source.

Volcanic rock underlies the entire Cascade Plateau from Howard Prairie south to the California border. Twenty-three registered quarries are located in this formation, mining from basalt and andesite deposits. The aggregate's use in forest and remote sectors of the volcanic formation has been exclusively for construction and maintenance of forest access roads and recreation sites. At two points in the Dead Indian and Butler Creek area, the volcanic deposits drop to near the 2400-foot elevation line.

The flood plain gravel formations occur within the floodplain of Bear Creek. Lesser deposits are found in the point bars and channels of smaller streams. The Bear Creek gravels occur at three levels: underlying colluvial fans, terrace gravels, and riverwash deposits. The colluvial area lies east of Ashland near the confluence of Neil and Emigrant Creeks. Gravel deposited in this area is cross-bedded under approximately three to six feet of silty loam soil. No removal of this gravel deposit has occurred. Low stream terrace gravel deposits are adjacent to Bear Creek. These are generally found as narrow strips ranging from 25 to 300 feet from the stream.

Gravel has been removed from this formation in areas near the easterly city limits and adjacent to the stream in the Valley View area. Low stream terrace gravel deposits are generally covered with a thin soil overburden. Deposits are four to ten feet in depth to bedrock. Adjacent riverwash gravels occur only as substantial deposits on inside stream curves. Where these occur, a substantial deposit of low stream terrace gravels can be found away from the creek. Past gravel operations along Bear Creek near Ashland have nearly depleted the resource. The gravel that now goes into concrete products for Ashland urban uses comes predominately from sources along the Rogue River.

Section 4.09 Granite Quarries

There are presently three granite quarries located with the city limits. Both of the major quarries are located on Granite Street, while one smaller quarry is located on Glenwood Drive. The two quarries in the south of the City are owned by the City of Ashland, while the other site, near the band shell in Lithia Park, is in private ownership. Municipal need for these quarries will decrease when the city's granite streets are paved. All quarries in the city limits should be phased out and re-vegetated.

The size of these properties, in relation to the percentage of the property that is presently being mined, indicates that they should supply ample granite for the city's needs until the year 2000. Additional quarries should not be allowed within the city limits because they are incompatible with other urban uses. Additional demands for aggregate should be satisfied outside the city in locations not visible from populated areas or major thoroughfares.

The City should ensure that its own granite pits will be reclaimed and revegetated once the quarry is spent. Regulations regarding private quarries are currently enforced in Jackson County and similar regulations should be adopted for the private quarry in Ashland.

In determining a policy for aggregate resources in the City, an analysis of the environmental, energy, social, and economic consequences of the policy must be made.

Urbanization of the surrounding area and the use of Lithia park in close proximity to the existing quarry are conflicting uses.

Section 4.10 Economic, Social, Environmental and Energy Consequences

1. Economic

A. Urbanization of surrounding neighborhood: An increase in the demand for residential property, accompanied by rises in property values may degrade the economic viability of existing quarrying uses within the city.

B. Lithia Park: One of Ashland's three quarries is located in close proximity to Lithia Park. The residential areas surrounding the park consist of the some of the most desirable parcels in town. The future operation of the Granite Street quarry may be in jeopardy due to residential development pressures.

2. Social

Unlimited allowance of conflicting uses would result in the eventual loss of the quarries non-conforming status. Individuals relying on these sites for income or raw material supply would have to find alternative sites in the Rogue Valley.

3. Environmental

Loss of the resource resulting from the allowance of conflicting uses would have no significant environmental consequences.

4. Energy

None noted.

Jackson County has provided for an adequate supply of aggregate without the relatively minuscule contribution that granite quarries located within the Ashland Urban Growth boundary would contribute.

GOAL: To Guarantee That There Is An Adequate Supply Of Granite Available For Use In & Around the City of Ashland, While Ensuring That The Incompatible Effects Of Mining Are Sufficiently Mitigated.

POLICIES

1. Restrict the three existing granite quarries to operations within the confines of their existing tax lots, subject to the non-conforming use section of the Land Use Ordinance.
2. Forbid the expansion of the quarries through the Conditional Use Permit procedure as spelled out in the City's implementing ordinances.
3. Prevent the establishment of any additional quarrying sites within the City due to the incompatibility of mining with other urban uses.
4. Ensure that all the existing private and public quarries are reclaimed and revegetated after mining activities are completed.

Section 4.11 Soils & Slopes

Erosion degrades Ashland's environment by removing topsoil, creating soil and water pollution, damaging drainage systems, and by creating safety hazards and unsightly conditions. Many times, erosion also causes trespass as soil and granite run from one property to the other. Eroded material on the public streets and sidewalks cause slippery surfaces and may increase hazards of driving or walking. These problems are caused by construction, unpaved streets, alleys and driveways, exposed street banks, steep hillside cuts, fills that are not revegetated, and by generally poor erosion control. The problems are compounded by Ashland's steep slopes and unstable soils, and by draining water off-site as quickly and efficiently as possible.

Solutions to these problems -- such as protecting and utilizing natural drainageways and vegetation, releasing water slowly, minimizing site changes -- are known and required of all developments over 40% slope, and most developments over 30% slope. The city building code now regulates safety factors in cuts and fills and governs the extent of cuts and soil protection practices.

The Soil Conservation Service rates the majority of the soils in Ashland as severe for construction or installation of dwellings without basements, roads and streets, and septic tank absorption fields. A severe rating for an area means that the soil presents serious problems that need to be recognized. Use can usually be made of these soils, but with the expenditure of time and money.

Areas of steep slope on highly erosive granitic soils are very sensitive to development activities. The best control to erosion is to limit development in areas that are sensitive. The City's policy is:

Areas over 50% slope -- landslide danger, very severe erosion -- severe limits on development.
Areas between 40% and 50% slope -- Slight landslide danger, moderate to severe erosion potential, difficult development problems -- Prevent creation of new lots in these areas, control land disturbances in any development that does occur.

Areas that are between 30% and 40% slope -- Moderate erosion potential -- use low-density (2 dwelling units. per acre or less) zoning and lot coverage restrictions to reduce erosion damage.

GOAL: To Have Sound Soil Conservation and Erosion Control Practices in and Around Ashland.

POLICIES

1. Require that development be accommodated to natural topography, drainage, and soils and make maximum use of existing vegetation to minimize erosion.
2. Prevent development and land management practices which, result in rapid runoff and accelerated erosion.
3. Require site-preparation procedures and construction practices, which minimize erosion and sedimentation.
4. Protect essential hillside drainage areas for absorption of storm runoff, and other areas subject to severe soil erosion, unless control can be established.
5. Incorporate site drainage practices that reduce runoff velocity and volume, by utilizing the natural properties of the soils and vegetation in conjunction with sound engineering practices.
6. Insure that areas of general slope over 30% are zoned for two dwelling units per acre or less, and permit total lot coverage to be no more than 20%.
7. Restrict any new partitioning or subdivision of land on slopes greater than 40%.
8. Forbid any new development or cuts and fills on slopes greater than 50% unless absolutely necessary and scientific and geologic evidence is available showing that it may be done safety.
9. Use development performance standards based on the natural topography, drainage, soils, lot coverage, and densities in place of arbitrary subdivision standards to ensure that natural features are an integral part of the design phase of future developments.

Section 4.12 Water Resources

The Ashland Creek watershed is located entirely within a granitic batholith, and the soils within the watershed are extremely susceptible to slope erosion. Reeder Reservoir is located within the watershed at the confluence of the east and west forks of Ashland Creek and is Ashland's major water supply source. In 1929, the Forest Service and the City entered a "Cooperative Agreement for the Purpose of Conserving and Protecting the Water Supply of the City of Ashland, Oregon." Before the Forest Service adopting watershed multiple use management in 1955, only limited man-related activity occurred. Prior to 1955, sediment accumulation in Reeder Reservoir was minor and easily sluiced through the dam into Ashland Creek without significant cost or downstream impact. The annual average sediment yield in the watershed at that time was approximately 3500 cubic yards.

Following multiple use management of the watershed in 1955, approximately 45 miles of additional roads were constructed, 1000 acres were logged, and the Mt. Ashland ski area was constructed. The total acreage disturbed was approximately 10% of the 14,400-acre watershed. The corresponding sediment yields from erosion and mass slope failures are well documented. The road building and timber harvest occurred from 1956 to 1963.

Since 1962, large amounts of sediment have been deposited in the reservoir, ranging from 20,000 to over 120,000 cubic yards per year. On two occasions (1966-67 and 1974) costly dredging operations have been needed to free the dam outlet of sediment and debris.

The impact on Ashland Creek's water quality downstream of the dam during sluicing or dredging has been significant. Turbidity 1000 times above normal has been measured and fisheries and other downstream uses have been negatively affected.

During reservoir sluicing or flushing operations, suspended solids, turbidity and bacteria levels can increase far beyond those normally experienced. Removing sediment deposits from Reeder Reservoir is essential to maintain the domestic water quality and storage capacity of Ashland's municipal water supply. Rapid removal and discharge of sediment into and through Ashland Creek during the high late winter and spring flow periods will minimize downstream environmental damage to fisheries and water quality. The only practical method for the rapid removal of sediment without draining the reservoir is hydraulic dredging. While this will substantially increase the short-term solids load carried by Ashland Creek, USFS data indicates that the material moves rapidly through the system, and that within several days after dredging is completed, suspended solids levels return to normal. However, solids deposition will occur in some areas of the stream channel.

The Oregon Department of Environmental Quality has issued a National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit to Ashland. This permit requires that the City discharge accumulated reservoir sediment only from November 15 to March 31.

The City sluiced Reeder Reservoir in 1987 and, for the first time, diverted the sediment-laden water through a pond before the confluence of Ashland Creek with Bear Creek. This successfully trapped much of the sediment in the Ashland Creek drainage, and will be used in future sluicing operations. This essentially mitigated the adverse effect of sluicing.

Section 4.13 Assumption

Natural siltation will continue to mandate the periodic cleaning of Reeder Reservoir.

GOAL: Reduce The Impact of Urbanization And Other Land Uses On The Quality of Water In And Around Ashland In Order To Ensure That The City Water Supply Is Of The Highest Possible Quality And Is Drawn From Dependable Sources.

POLICIES

1. Encourage public awareness of problems of the Ashland watershed and their causes.
2. Prevent any development or activity, future or existing, which has an adverse effect on the watershed.

3. Maintain and improve the quality of both surface and groundwater resources, and prohibit new practices and developments which cannot meet water quality standards.
4. Cooperate with agencies, firms and citizens' groups in improving water quality and the condition of the watershed.

Section 4.14 Water Related Resource Areas

Water areas, such as streams and their surrounding vegetation, are extremely important to Ashland. Water areas provide wildlife refuges, erosion control and storm drainage, water quality improvement, recreation, and aesthetic and psychological benefits. Flood damage is directly related to the structures existing in flood plains, and development can actually increase downstream damage. Ashland has utilized flood damage grants in the past and is obligated to comply with the Federal Flood Insurance Program. The Comprehensive Plan has noted all significant drainages, their associated flood plains and riparian areas as open-space districts. City ordinances restrict development in streams, and encourage or require the preservation of stream areas in a natural or near natural state.

Ashland has many varied water sources: irrigation canals, small ponds, Ashland and Bear Creek, and several small creeks. Our concern for water areas extends beyond the city limits as most streams originate outside Ashland.

Water pollution and rubbish and normal urban development (signs, buildings, roads, and fills) threaten waterway's benefits when they are located too close. Public use of waterways may detract from the benefits to wildlife habitats and stream quality.

Many of the smaller creeks in Ashland have been culverted and filled. This has removed both an important urban amenity that the creeks and their riparian vegetation provide, and also removed an important wildlife habitat in the City. The City has identified all the remaining creeks. These should be retained in as natural a state as possible, limiting the changes to those that make utilization of the property practical for urban purposes, or enhancing the riparian areas beauty or wildlife compatibility.

In determining a policy for water related resource areas in the City, an analysis of the environmental, energy, social, and economic consequences of the policy must be made.

Conflicting Uses

1. Road Construction and Maintenance
2. Residential and Commercial Development
3. Urban Storm Run-Off

Economic, Social, Environmental and Energy Consequences

1. Economic

All conflicting uses identified adversely impact the quality and quantity of the resource. Higher costs are normally associated with developments adjacent to identified water resources. This is a result of having to install culverts or bridges for access across streambeds and often involve the importation of large quantities of fill. Design costs for engineering these road crossings are higher and in turn are passed on to the homebuyer.

2. Social

The conflicting uses identified can reduce the recreational opportunities found in these areas, such as bird watching, hiking and educational studies. These areas, when left in a natural state, function as narrow open space corridors, acting as a visual resource and providing a necessary ingredient to the urban form. All conflicting uses can serve to reduce the aesthetic and psychological benefits the public derives from these water areas.

3. Environmental

All conflicting uses can negatively impact a stream's ecological balance, including water quality, temperature, riparian habitat, bank erosion and turbidity. The removal of vegetation from stream banks for urban development destroys wildlife habitat and causes erosion, impacting the fragile stream ecology.

4. Energy

Disturbance of stream corridors caused by urban development would result in the expenditure of energy to carry out reclamation activities.

GOAL: Protect The Quality Of Riparian Resource Lands, And Preserve Their Wildlife Habitats.

POLICIES

1. Identify, protect and seek conservation easements throughout significant riparian areas (streams, stream banks, and flood plain areas), and wildlife habitat areas.
2. Encourage more public access to waterways, but define what public activities can take place. Ensure that such access does not result in water and visual pollution.
3. Where possible, utilize water-related areas for visual relief, pockets of wildlife habitat, landscaping amenities, natural site design elements, recreational uses, bike paths, and pedestrian and jogging trails.
4. Utilize local resources to form a technical advisory committee to identify plants and animals, which rely on riparian habitat for their continued existence. Retaining these areas in a natural state should be of high priority, and development should consider and accommodate the habitat utilized by these plants and animals.

Section 4.15 Wetlands

Wetlands are among our most valuable natural resources, yet are often neglected and endangered. Wetlands include a wide variety of swamps, marshes, meadows, ponds, mudflats, and bogs that commonly occur throughout the country. In general, wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and associated plant and animal communities. The single feature that most wetlands share is soil or substrate that is saturated at some point in time during an average rainfall year. The water creates severe physiological problems for plant life not specifically adapted for soil conditions, which are at least periodically deficient in oxygen. For the purposes of making jurisdictional determinations of wetlands regulated under Section 404 of the Federal Clean Water Act, wetlands should possess three essential characteristics: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology.

Wetlands have numerous valuable functions, which justify their preservation economically, socially, and environmentally. They serve as habitat for many species of plants and animals, which rely on them for feeding, breeding, shelter and protection. Studies show that wetlands harbor many of the world's rarest and most threatened species. Tangible benefits of wetlands include flood and storm damage protection, erosion control, and recreation and aesthetics. In foul weather, wetlands act as giant sponges within flood prone areas (i.e. floodplain), temporarily storing flood waters and helping to protect downstream property owners from flood damage. This flood storage function slows the velocity of flood waters, thereby reducing a stream's erosive capacity.

The wetlands located within Bear Creek's and Clay Creek's floodplains could help reduce the impacts of future floods. Intact wetland vegetation along stream banks reduces erosion by binding roots with the soil and increasing the durability of the bank. Wetlands also help maintain water quality and improve it by removing chemical and organic pollutants. Some wetland plants have proved to be such efficient waste removers that they are being used in artificial waste treatment systems in metropolitan areas. Finally, many recreational activities take place in and around wetlands. Although most of the popular hunting and fishing areas associated with wetlands are located on county or National Forest lands, other recreational endeavors such as hiking, bird watching, and nature observation can be appreciated around preserved wetland areas within the city limits.

Conflicting Uses

1. Residential and commercial development
2. Road construction
3. Urban storm and agricultural irrigation run-off
4. Livestock grazing
5. Failing septic systems

Section 4.16 Economic, Social; Environmental and Social Consequences

1. Economic

a. Residential and commercial development: The construction of residential, commercial or industrial buildings near wetlands may entail higher construction costs, resulting from the installation of drainage systems. These higher construction costs could then be passed on to the individual home-buyer and general public.

b. Road construction: Additional expense would be associated with the development of a road base and asphalt surface through wetland areas. Elaborate drainage systems would be required to stabilize the street. Road construction and maintenance adjacent to wetlands may require that run-off be diverted away from the water feature in order to protect the resource.

c. Urban storm and agricultural runoff: Additional costs would be associated with capital improvements designed to hold and divert runoff. Man-made and natural wetland areas could be designed to treat run-off from city streets and agricultural lands. Public expenditures for natural treatment systems would be retrieved over a period of time.

d. Livestock grazing: None noted.

e. Failing septic systems: A number of residences throughout the City Limits and within the UGB rely upon septic systems for sewage treatment. Drain-fields associated with septic systems can, if not monitored, contaminate the hydrology of a nearby wetland. Additional costs would be associated with the extension of sewer lines in order to hook these properties up to city sewer service.

2. Social

The conflicting uses listed above could result in a financial burden to both the public and private sectors. Passive recreation and aesthetic appreciation opportunities provided by wetlands would be lost through the partial or total destruction of the resource.

3. Environmental

All the conflicting uses identified can negatively impact wetlands through disruption of the natural hydrology and ecology. The eventual result would be the destruction of the wetland's inherent ability to improve water quality and provide valuable wildlife habitat. The utilization of these areas as an educational and scientific resource would also be lost.

4. Energy

Reclamation measures (i.e. restoration of wetland vegetation) used to mitigate the results of disturbances to wetland areas would require energy.

GOAL: To Preserve And Protect Significant Wetlands, And to Mitigate Potential Impacts On These Areas Due To Development And Conflicting Uses.

POLICIES

1. Evaluate the quantity and quality of wetland resources inside the City Limits and within the Urban Growth Boundary through the compilation of an inventory of significant wetlands.
2. Develop site review procedures and performance standards, using buffering techniques, setbacks, and mitigation measures, to reduce the impacts of development on significant wetland areas.
3. The City should actively pursue the use of Transfer of Development Rights, dedications, direct-lease arrangements, and purchase or other acquisition strategies as viable methods for preserving and insuring public access to significant wetland areas.

4. Examine the Physical and Environmental Constraints chapter of Ashland's Land Ordinance concerning wetland and riparian areas, and insure that existing zoning regulations maintain these valuable areas in a natural state.
5. Utilize local resources to form a technical advisory committee to identify potential plants and animals, which rely on wetland habitat for their continued existence. Retaining these areas a natural state should be of high priority, and development should consider and accommodate the habitat utilized by these plants and animals.

Section 4.17 Flood Plains & Stream Flooding

The floodplain is the geomorphologic feature that defines the areas subject to periodic inundation. In Ashland, floodplain is distinguished by low bluffs at its edge, and by alluvial depositions between the bluffs. In an un-managed stream, the natural channel eventually becomes clogged with debris and vegetation, and during a flood a new channel is often established. In this way the stream meanders from bluff to bluff over time. While the flood plain is usually safe, cataclysmic changes can occur during floods. Substantial hazards exist for construction in an active geologic area.

Before the federal government's entry in the regulation issue, Ashland did not directly regulate floodplain development and builders generally shunned the obvious floodplains.

In 1977, the Federal Emergency Management Agency (FEMA) asked if Ashland wished to participate in the national flood insurance program. Continuing drains on the Federal Treasury from flood disaster relief prompted the government to encourage local bodies to limit or protect development in the nation's floodplains. They established a nationwide program administrated by FEMA.

The City of Ashland participates in the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. The hydrologic and hydraulic analyses for the City's Flood Insurance Study were performed by Stream Engineers, Inc., for the Federal Insurance Administration in July 1978. All significant flooding sources affecting the city were included in this study. The U.S. Geological Survey, Oregon State Highway Department, Jackson County Department of Pubic Works, Jackson County Surveyor, the Jackson County Department of Planning, and the City of Ashland were contacted to provide information pertinent to the Flood Insurance Study.

The main source of flooding in the city is Ashland Creek, with a drainage area of approximately 27.5 square miles. The creek was studied in detail, from upstream of Winburn Way in Lithia Park, downstream to Ashland corporate limits. Bear Creek and Clay Creek were also carefully studied. Hamilton Creek was studied by approximate methods because little development exists in the area, and because stream flows are relatively small.

Ashland Creek originates in the Rogue River National Forest south of the city. The east and west forks of Ashland Creek flow into Reeder Reservoir approximately three miles south of Ashland. From the reservoir the creek flows south-north and cuts through the western part of Ashland before entering Bear Creek.

According to the U.S. Soil Conservation Service, the soils considered to be on the flood plain in the area range from the Camas sandy loam type, with rapid permeability, slow run-off, and slight erosion hazard, to the Cove clay type, which exhibits very slow permeability, very slow runoff, and has slight erosion hazard. Other soil types on the flood plain include Newburg fine sandy loam, Evans loam, and Coher clay.

Clay Creek rises in the hills to the southeast of Ashland, flows south-north at the eastern edge of the city, and enters Bear Creek to the north. Sheet flooding occurs along Clay Creek and Ashland Creek. The channels of these streams have very steep slopes that cause high velocities. Sheet flow exceeds the channel bank of Ashland Creek south of Hersey Street. The major floods in this area are usually caused by a heavy snowfall followed by a sudden warm rain. A freeze on top of the snow, just before the warm rains, can cause very rapid run-off.

The most recent flood in Ashland occurred in 1974. This flood had a peak discharge of 1350 cubic feet per second (cfs) and a return period of approximately 30 years. Significant floods also occurred in 1964, 1955, 1948, 1927, 1890, and 1860.

Flooding sources studied in detail in the community used standard hydrologic and hydraulic study methods to determine the flood hazard data. Flood events of a magnitude which are expected to be equaled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) were selected as having special significance for flood plain management and for flood insurance premium rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10, 2, 1, and 0.2 percent chance, respectively, of being equaled or exceeded during any year. Although the recurrence interval represents the long-term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when in periods greater than one year. For example, the risk of having a flood which equals or exceeds the 100-year flood (one percent chance of annual occurrence) in any 50-year period is approximately 40 percent (four in ten), and, for any 90-year period, the risk increases to approximately 60 percent (six in ten). The risk of a flood the size of the 1974 flood in the next twenty years is approximately 50-50. The analyses reflect flooding potentials based on conditions existing in the community at the time of the study's completion.

Hydrologic analyses established the peak discharge-frequency relationships for floods of the selected recurrence intervals for each stream studied in detail in the community.

The U.S. Geological Survey (USGS) maintains a number of gauging stations in Jackson County. On special request, the USGS did a computerized analysis of flood flows at all gauging stations for which records of sufficient duration to permit meaningful analyses existed. Stations subject to extensive regulation were excluded from these analyses. In conjunction with these analyses, the USGS applied regional skew factors in accordance with the recommendations of the U.S. Water Resources Council. On the basis of the observed peak flows and these regional skew factors, the peak flows were derived. These flows were divided into two groups, large streams and small streams. The dividing line was determined as areas with over or under 100 square miles. A series of drainage area versus peak flow regression equations were derived from the data.

The flows calculated for Ashland and Clay Creeks were based on small drainage area regression equations. The drainage area of Ashland Creek was estimated to be 27.5 square miles, of which approximately 20 square miles are above the dam on Reeder Reservoir and 7.5 square miles are downstream from the dam. Using the regression equation for small drainage areas and a curve-fitting equation to interpolate for a one-in-thirty-year discharge, it was found that a 20 square mile drainage area gives a 30-year discharge of 1331 cubic feet per second (cfs). This value is very close to the 1974 measured discharge of 1350 cfs. The 100-year flood runoff is calculated to be 2300 cfs.

The National Flood Insurance Program encourages State and local governments to adopt sound flood plain management programs and offers a flood boundary map to assist communities in developing sound flood plain management measures.

To provide a national standard without regional discrimination, the 100-year flood has been adopted by the Federal Insurance Administration as the base flood for purposes of flood plain management measures. The 500-year flood is employed to indicate additional areas of flood risk in the community. For each stream studied in detail, the boundaries of the 100- and 500-year floods have been delineated, using the flood elevations determined at each cross-section. Between cross-sections, the boundaries were interpolated using topographic maps at a scale of 1 inch = 1000 feet, with a contour interval of five feet.

Substantial evidence suggests, however, that the FEMA study identification of flood hazard areas was not accurate, that the study bypassed areas of significant risk, and that the basic FEMA regulations reducing

or eliminating risk of flooding are inadequate, especially considering Ashland's flood history. The existing evidence follows:

The FEMA maps were drawn to identify the elevations above mean sea level of the 100-year flood. They relied on 1" = 400' and 1" = 1,000' maps of Ashland based on air photography. The elevations supplied, therefore, are often inaccurate by a factor of 2 or more. A survey completed by Everett Swain shows that the 100-year flood is only 1.6 feet above the flowline of Ashland Creek, while the FEMA flood is supposed to be four feet above the creek at this point. The FEMA data does not accurately establish the flooding level. In addition, many 100-year flood plain levels on Clay Creek are at or below the surface of the ground when they are located on the site.

The FEMA study relies on "best case" assumptions in modeling the flood situation. The FEMA study used a computer to model the flood levels, beginning with flow assumptions. Since only eighteen years of data existed when the study was done, FEMA extrapolated from this and other area data, including the Applegate River and Butte Creek. The oldest data was a 55-year record of Bear Creek at Medford. The only flood used to calibrate the Ashland Creek model was the 1974 flood -- a thirty-year flood. The flow data, therefore, could vary considerably from the actual flood conditions.

FEMA also assumed that the stream would remain confined to its natural channel during flooding, that there would be no culvert obstructions, and if a culvert could not accommodate the 100-year flood, that the excess water would flow over the top of the street and back in the channel. The study stated that "In the last few years many culverts have been replaced or enlarged, and a general channel cleanup has been undertaken to reduce debris and allow streams to flow properly". While two culverts were enlarged in the city, most are the same size as in 1974. The vegetation and debris in the channel would clog culverts if a severe flood occurs.

Meandering occurs when a stream cuts a new channel after an old one is blocked. The 1974 flood showed that mechanism at work, both in areas where there were no culverts, and at the Hersey Street Culvert. Ashland Creek, during a 100-year flood, flows at a rate of about 2300 cubic feet per second (about 1,000,000 gallons per minute), and at speeds between ten and twenty miles per hour. The velocity and volume allow the creek to cut a new channel with surprising speed and force.

The main assumptions of the FEMA study apparently do not represent a realistic flood situation. In every case of severe flooding in Ashland and Bear Creek, large amounts of debris in the floodwaters blocked culverts. New channels were cut due both to natural debris dams and blocked culverts. The FEMA 100-year floodplain does not cover known areas of flooding as recent as 1974.

Eyewitness accounts placed the 1974 flood on Ashland Creek far outside the FEMA 100-year floodplain. The City investigated Ashland, Bear, and Clay Creek floodplains in 1988. The study was conducted by mapping the flood plain areas using 1" = 100' maps with a five-foot contour interval, and by using photographs of past floods to map the approximate extent of flooding.

The Planning Commission and the Citizen Planning Advisory Commission met to review data from July to November 1988. The city planning staff, assisted by Rogue Council of Government staff Eric Dittmer and Wes Reynolds gathered available data and photographs of floods, conducted field work, and established base maps for the new flood maps. Historian Kay Atwood compiled all journalistic records of flooding in historic times. After the last meeting, final maps and ordinance proposals were produced.

The study resulted in the definition of a floodplain corridor larger than the FEMA 100-year floodplain on Ashland and Clay Creeks. The ordinance prohibits division of land, and restricts new construction and fill-in for all defined floodplains in the city. Key provisions are:

1. It prohibits filling in the floodplain beyond a minimal amount.
2. It limits culverting and bridging of important creeks to a perpendicular crossing of minimal size.

3. It creates a new definition of buildable land. This land must he out of the floodplain and less than 40% slope. No new lots could be created unless they have a buildable area of sufficient size to accommodate building. This prohibits subdivisions from occurring in the floodplain.
4. It limits residential construction to land in the floodplain to one house per lot. Lands zoned multi-family mostly in the floodplain would be restricted for the number of dwelling units they could sustain. Cluster housing could not be developed on land out of the floodplain on land zoned single family.
5. Building habitable structures is not permitted in the floodplain unless 50% of the lot is in the floodplain.
6. No new habitable basements lower than two feet below the floodplain corridor elevations would be permitted for commercial structures, except in the Historic District
7. Developers can transfer lost density from floodplain lands to land out of the floodplain, up to twice the base density. They still must meet all other requirements of the zone. This permits clusters of higher density in exchange for restricted development on the floodplain.

The study did not amass any data to indicate that Bear Creek FEMA floodplain was inaccurate. Further study and mapping of the flood areas should be undertaken to insure that the floodplain corridors are as accurately defined as possible.

Encroachment on flood plains, such as artificial fill, reduces the flood-carrying capacity and increases flood heights, thus increasing flood hazards in areas beyond the encroachment. Fill limitation is an essential ingredient of a successful floodplain management program.

A copy of the FEMA Flood Insurance Study, the FEMA Flood zone Maps, and the City's Floodplain Corridor Maps are available at both the City Planning and Building Departments. The areas, which are subject to the flood zone regulations, are shown as open-space areas in the Comprehensive Plan Map. This indicates that they will not be urbanized, not that they are all to be acquired for publicly owned open space.

GOAL: To Protect Life And Property From Flooding And Flood Hazards, And Manage the Areas Subject to Flooding to Protect the Public's Interest.

POLICIES

1. The City shall continue to participate in the National Flood Insurance Program, complying with all applicable standards.
2. In flood prone areas; allow alternatives to urban development, such as agriculture, open space, parks, wildlife habitat, natural areas and recreational uses through the physical and environmental regulations in the City code.
3. Development in any flood prone area is not a guaranteed right, but depends upon whether the benefits to the public outweigh problems which would be caused by development, especially problems which may occur upstream or downstream during flooding.
4. New development (including fill) shall be allowed in floodways only upon the finding that obstruction of floodwaters is minimized. Non-structural solutions to flooding are preferable to structural solutions.
5. Fill of flood fringe areas shall require a permit as specified in the physical and environmental constraints regulations and fill shall be engineered and compacted to City standards. Fills shall be kept to the minimum necessary to achieve project purposes.
6. Apply special physical and environmental restrictions to all areas of Ashland, which are identified as flood-prone, streams in the federal study, and other significant drainage ways.
7. All existing natural drainage ways as identified on the physical and environmental constraints map shall be left in a natural state or modified only after City approval.
8. As proposed with active streambeds, an analysis of potential runoff from upstream hard-surface areas shall be conducted, and streambed profiles shall be adapted to accommodate the flow to prevent flooding of adjacent residences. The City shall acquire easements to maintain the carrying capacity of said streambeds.

Section 4.18 Forest Lands

Forestlands in and around Ashland offer many community benefits. The forested hillsides within the southern fringes of the city provide wildlife habitat, scenic views, and recreational opportunities. Pressure exists to convert some of this property to residential uses. Any development creates problems of utility service, road development, slope, and fire hazards. Forestlands south of Ashland's city limits are especially important because the city's water supply and other streams originating in that area flow through Ashland. These lands have high scenic, recreation, and wildlife habitat values and contribute richly to the quality of Ashland's living environment.

Most forest lands in Ashland are of marginal suitability for commercial logging. Southern Oregon Regional Services Institute (SORSI) investigated the Ashland urban area to determine the forest site class of the soils. They measured the size of the trees and their age. In determining these factors, all of the lands on the mountains in the south of Ashland are site class 5, or the poorest site class available. The lands of the Bear Creek flood plain are site class 4, but contain no marketable timber. It is apparent that limited potential exists within the city limits for commercial logging.

Nevertheless, there are some areas along drainages that have commercially valuable timber. As the timber resource becomes smaller and restrictions on harvesting the National Forest increase, pressure will come to bear on even the smallest tract.

Ashland should regulate this timber harvest to insure that the practice of clear-cutting is not employed in the land under City control, and that there are strong controls of the visual effect of the cutting system used.

ASSUMPTION: The importance of forest areas in and around Ashland will increase, especially their recreational and scenic values.

GOAL: Preserve Forest Areas Within And Around The City For Their Visual, Environmental, Wildlife Habitat, And Water Quality Values.

POLICIES

1. Require that commercial logging of forestlands within Ashland's City limits be subject to a special permit.
2. Emphasize the preservation of forest vegetation to the extent feasible as forested areas of the City are converted to urban uses.
3. Use low-density zoning to ensure that development of the forested hillsides is kept at a level that maintains the forested integrity of the areas.

Section 4.19 Areas of Steep Slopes

Southwest Ashland has areas of very steep slopes, part of the lower elevations of the Siskiyou Mountains. These areas, shown in Map IV-I, contain 192 acres over 40% slope, and 221 over 50% slope. The areas over 50% slope represent severe constraints to development and are unsuitable for urban development. The areas between 40 % and 50 % slope are marginally suitable for very low density of development, however the problems of building roads on this slope makes areas with this degree of slope a very low priority for development. Areas over 30% dope present moderate development problems, and should be allowed to develop only at low densities of two dwelling units per acre or less.

GOAL: Direct Development To Areas That Are Less Than 40% Slope. Allow Only Low Density Development At Less Than Two Dwelling Units Per Acre On Areas of Greater Than 30% Slope. Permit Only Low Density Development Of Lands, With Strict Erosion Control And Slope Stabilizing Measures.

POLICIES

1. Develop erosion control standards to ensure that development of these forested areas will not cause erosion problems.

2. Restrict creation of new lots on land that is greater than 40% slope, unless a buildable area of less than 40% slope is available on each lot.
3. Zone all lands which have a slope generally greater than 30% for development that will have no more than 2 dwelling units per acre or 20% lot coverage by impervious surfaces.

Section 4.20 Fish & Wildlife Resources

There is very little data on fish and wildlife resources that specifically addresses the Ashland planning area, but generalized county data contributes to our knowledge. The county's environment is very diverse and varied and a wide variety of animal and plant species exists. The Oregon Department of Fish and Wildlife's report, Wildlife Resources in Jackson County by Gary Hostick, October 1976, is used as a basis for this inventory material.

Section 4.21 Big Game

Black-tailed deer are abundant in Jackson County. In 1970 their number was estimated at 81,000. These deer live in brushy and timbered areas, as well as in lowland valleys and suburban areas. Evidence of deer population exists throughout Ashland, especially in the timbered hills on the southern fringes of the city and in Bear Creek's floodplain. No critical deer winter ranges or habitats are located within the Ashland city limits or Urban Growth Boundary, however their continued presence is important to the city's rural environment.

Black bear exist in substantial numbers in the county, with the 1970 population estimated at 2500. Bear are present in nearly all unpopulated, forested or brushy, mountainous terrain areas and bear sign is often seen in Ashland's forested areas.

Mountain lion were estimated at 250 in the County in 1970. They prefer unpopulated, mountainous terrain, and a single lion requires 20-75 square miles of habitat. Mountain lions are timid and avoid human contact. Rare sightings of mountain lions have been reported in the city limits in the recent past.

Section 4.22 Upland Game and Waterfowl

Ringed-neck pheasant are abundant in the County near the Medford and Ashland areas. Populations in 1970 were estimated at 23,500. Their habitat is agricultural grain crop areas, along with watering, nesting, and roosting areas. Habitat loss is occurring due to urbanization of agricultural land in the county, resulting in a decline of total pheasant populations. Pheasant populations are known to occur both within the Ashland city limits and Urban Growth Boundary areas.

Mourning doves are the most abundant upland game bird in the County, with 1970 populations of 1,625,500 birds. Doves require small grain or grass seeds for feed, and utilize orchards and other trees for nesting. Most doves migrate south during the first rainy period of the fall season and return in the spring to nest, although there is a small winter resident population. Doves are common within the Ashland Urban Growth Boundary.

Valley quail numbered 27,500 in 1970. They utilize small grain, grass seeds, and insects for food, and they require heavy brush for roosting and escape cover. Quail also occur frequently within the Ashland Urban Growth Boundary. Blue grouse (15,300) ruffled grouse (1500), mountain quail (48,800), and band-tailed pigeon (100,000) are also present within the county and in the Ashland planning area.

Waterfowl exist in substantial numbers in the county -- 5500 ducks and 100 geese. Coots and snipes are also present, but no estimates of populations are available. Ducks and coots utilize small irrigation ponds, streams, and rivers for habitat. Geese populations are limited to Howard Prairie and Hyatt Reservoir. Both are seen occasionally in the Ashland city limits, especially in Lithia Park, and in ponds and wetlands in the planning area.

Section 4.23 Furbearers and Nongame Wildlife

Beaver (2000), muskrat (3000), river otter (200), mink (1600), coyote (17,000), red fox (50), gray fox (1600), and bobcats (1600) are all present in the county. Significant amounts of any of these are not located in the Ashland Urban Growth Boundary, but muskrat, fox, beaver and coyote and bobcat are occasionally seen and residents of the forested areas of Ashland report frequent gray fox sightings.

Two common wild animals in Ashland are raccoon and skunks. Both adapt well to urban development if brush and trees are near. While occasionally annoying, the presence of raccoons and skunks enhance Ashland's rural quality. We will lose our interaction with these wild animals if we do not maintaining these habitat areas throughout the city.

Section 4.24 Fish

Jackson County's rivers and streams provide habitat for summer and winter steelhead, spring and fall Chinook salmon, Coho salmon, sea-run cutthroat trout, and rainbow trout. The County's reservoirs and ponds provide habitat for largemouth bass, bluegill, green sunfish, brown bullhead, and other warm water game fish. Ashland Creek and Bear Creek are areas of fish habitat within the Ashland Urban Growth Boundary.

Recently, Coho salmon have been observed spawning in Ashland Creek adjacent to Calle Guanajuato. Bear Creek also contains spawning steelhead and salmon. Both Ashland and Bear Creek are healthy trout fisheries.

GOAL: To Preserve Existing Wildlife Habitats and Natural Areas Within the City Wherever Possible.

POLICIES

1. Encourage educational programs documenting the value of Ashland's environmental resources and current trends in their quality.
2. As a means to provide habitat, implement an open space programs that will: 1) ensure open space, 2) protect scenic and natural resources for future generations and 3) promote a healthy and visually attractive environment in harmony with the natural landscape.
3. Continue to strengthen the site review process to assess accurately the environmental impact and ensure that changes in land use acknowledges limitations and opportunities of the site and have as little detrimental impact as possible.
4. Some areas in the City limits cannot be urbanized. Those areas, mostly flood-prone areas and steep hillsides in the southwest area of the City, should be protected by low-density and open-space zoning. This low-density zoning designation would also provide suitable buffers between urbanized land in City and adjacent forestlands in the County.

Section 4.25 Wildfire Hazard

Wildfire hazard presents an unusually high threat to very important area environmental resources in Ashland, particularly the forested areas south of town. A wildfire in that area would adversely affect soils and slope stability and lead to increased erosion. If wildfire reached the Ashland watershed, resulting erosion would affect drinking water quality. Vegetation loss during a wildfire would increase precipitation runoff, thereby increasing flood potential. It would reduce shade and increase stream temperatures -- a condition that would adversely affect fish resources. Air quality would suffer during the wildfire burn, especially if the valley was experiencing an air inversion -- a frequent event during the local wildfire season.

Catastrophic wildfire risk in Southern Oregon is potentially as severe as in Southern California where very similar weather conditions, vegetation characteristics and topography exist. The Southern Oregon summer is dry with hot temperatures and low relative humidities. These characteristics result in reduced fuel moisture and make lower elevation vegetation more susceptible to wildfire. The chaparral brush evident south of town in the 1959 Ashland Burn area is similar to that in Southern California. Chaparral is fire-dependent and within ten to twenty years after burning, enough standing, dead and down fuel has

accumulated to burn hot, fast fires. Arithmetic quickly shows that the 1959 Ashland Burn is susceptible to a new conflagration. Part of this area lies along Ashland Creek and leads up a steep canyon into Ashland's municipal watershed, thus threatening area residents and the entire city. Like Southern California, the area has steep slopes and narrow canyons.

Steep slopes intensify wildfire in two ways. They increase precipitation runoff, decrease soil moisture and create dry vegetation. Vegetation moisture stress was particularly evident in the summer of 1981 when Fall seemed to come early to the hills south of town. This leaf color change was not "fall color," but drying caused by a lack of moisture. Wildfire also burns more intensely and faster on a steep slope by pre-heating the vegetation ahead of the actual fire front. Narrow, steep canyons act very much like a chimney during a wildfire, funneling heat and fire upward.

During the past decade many people have declared their intention to "get back to nature." Many people are leaving metropolitan areas, building houses in forested natural settings, and leaving vegetation right up to the sides of their dwelling. Although no guarantee can protect a house in such a setting from wildfire, preventive measures can be taken to reduce the hazard. Recent land use policies have put added development pressure for on hillsides and valley lands are now being preserved for agricultural purposes. The Ashland city limits abut National Forest land in these hillside areas which lead immediately into the Ashland Watershed.

GOAL: Protect Life, Property and Environmental Resources in Ashland's Suburban/Wildland Interface Area From the Devastating Effects of Wildfire. Lessen the Possibility of Wildfire Spreading to the Ashland Watershed from the Urban/Wildland Interface Area.

POLICIES

1. Require installation and maintenance of a 40-foot fuel break around each dwelling unit or structure.
2. Require multi-dwelling unit developments to install and maintain a perimeter fuel break to prevent fire from entering the development, or to prevent a fire spreading from the development and threatening the Ashland Watershed. (Width of break is dependent on topography, aspect, vegetation, types, and steepness of slopes.)
3. Where vegetation needs to be maintained for slope stability in a fuel break area, require plantings of fire-resistant or slow-burning plants. The City shall make a list of such plants available to the public. (See "Wildfire Hazard Management in the Urban/Wildland Interface in Southern Oregon," by Claude Curran - May, 1978.)
4. Require more than one ingress/egress route or road widths wide enough to accommodate incoming fire apparatus and evacuating residents simultaneously in an emergency situation.
5. Require roofs to be constructed of fire-resistant materials. Wood shake or shingle roofs would not be allowed.
6. Encourage road placement to function as fire breaks in urban/wildland interface developments.
7. Require chimneys of wood-burning devices to be equipped with spark arrester caps and/or screens.
8. Install all new electrical distribution circuits in the urban/wildland interface underground if technically feasible.
9. The City shall encourage and support education/information programs dealing with wildfire hazards in the urban/wildland interface. Information shall be made available through the City Building and Planning Departments to developers and builders wishing to build in the urban/wildland interface.

Section 4.26 Noise

Exposure to noise has detrimental effects on people, and, like most communities, Ashland has a number of noise sources. Besides miscellaneous sources such as individual vehicles or noisy parties, there are a number of point or line sources, such as the Ashland airport, some industries, the railroad, and major traffic ways.

Fixed sources can often be reduced to acceptable levels. Others, such as the railroad and I-5 freeway, cannot realistically be reduced, and mitigation must take place with structural solutions that buffer sensitive uses adjacent to them. Structural solutions include sound attenuating fences and masonry walls,

berms, and special structural modification in buildings placed close to the sound source, such as additional insulation, and limited window sizes.

Airport associated noise could potentially cause problems as the size of the Airport increases and areas around the Airport are developed. Two solutions exist. First, land within the area that would be most highly impacted by the Airport noise should be zoned for other than residential uses. Secondly, buyers of residential uses that develop close to the Airport should be aware that noise may increase, and should waive the right to file nuisance lawsuits against airport operations when it is within expected levels.

The best method of enforcing noise standards is with a decibel standard. The State of Oregon has adopted a decibel standard for fixed point sources. The City of Ashland has also adopted a decibel noise standard that is 5 decibels more strict than the State standard.

Noise from the railroad and freeway pose special problems. The best standard to use is, for residential structures, a standard of a noise level of no greater than 40 dB in the sleeping quarters of the home. This will permit uninterrupted sleep. Outdoor areas should also be considered. Occasional noise sources, such as the railroad, should produce a noise level of no more than 70dB in the outdoor spaces used for recreation, such as rear yards. Continuous noise sources, such as the freeway, should attain a level of noise that does not exceed 55dB for 50% of the time (L50) in outdoor spaces.

GOAL: Make a Continuing Effort to Reduce Noise Levels, and Insure That New Development is Developed in a Way to Minimize Noise Impacts.

POLICIES

1. Establish a noise decibel standard both for enforcement of noise complaints from existing noise sources, and for evaluating the potential for new noise pollution.
2. Insure that residential development is kept away from the maximum noise area around that Ashland Airport, and that new residential development near the Airport is aware of the potential for noise, and waives the right to file nuisance suits in the future.
3. Discourage new residential areas near the Railroad and I- 5 freeway, and where it occurs, insure that new development meets that following standards: 40dB in the sleeping quarters, 45dB in the rest of the home, 55 dB for no more than 50% of the time in the outdoor spaces, and a maximum of 70dB for occasional noise sources such as the Railroad.
4. Use the Site Review process to insure that new development will meet the City's noise standards.

Chapter 5

Population Projections and Growth

Sections:

Section 5.01 Introduction

A community's population change constitutes an important part of a comprehensive plan. Housing, economic growth, public services, and land requirement projections are based on population size and characteristics. Unfortunately, the projection of population changes for a small community is difficult. Factors that influence growth or decline, notably migration, are unpredictable, and outside local government control. A reasonably accurate growth range in Ashland can be projected, however, and our community's plans built around this projection.

This chapter examines Ashland's historic population growth and discusses the changes that have occurred, primarily during the last 30 years. Four projections, covering four different sets of assumptions for future growth will be discussed. The projections will address population numbers and age composition. Community income and ethnic aspects will be examined, and finally, policies relating to population changes will be defined.

Section 5.02 Historic Growth, 1850 to 1940

Ashland began in 1851 with the settlement of pioneers in the area now occupied by the Plaza, at the site of what had been a Shasta Indian village. By 1860 the population was 327, with men outnumbering women 2 to 1. By 1880 Ashland had 842 people and was one of the region's larger communities. The railroad's arrival in 1887 created the town's first growth boom, and by 1890 the population had more than doubled to 1,784. It continued to grow to 2,634 by 1900. Between 1900 and 1910 the city and region prospered and the population almost doubled to 5,020 by 1910. Ashland's population then declined as

Medford became the largest regional city and the railroad routed their main lines through Klamath Falls in the 1920's. In 1920 Ashland's population had fallen to 4283, but grew slightly to 4,554 by 1930, and to 4,774 by 1940. The population, therefore, hovered between 4,000 and 5000 for 40 years, from 1905, through two world wars and the Great Depression, until 1945.

[See graph titled "Ashland's population, 1860 to 1940" on Comp. Plan page V-1]

Section 5.03 Population Growth 1950 to 1970

The post war years and the timber industry's emergence as southern Oregon's economical mainstay stimulated Ashland's growth and the population almost doubled in 20 years from 7,739 in 1950 to 9,119 in 1960, reaching 12,342 in 1970. In the 1950's the town contained a number of lumber mills, and the tourist industry began to slowly develop around the Shakespeare Festival. Also during this period, Ashland acquired a characteristic it retains today, an unusually large percentage of young persons between the ages of 18 and 25, a result of Southern Oregon State College's rapid expansion during this period. The increase in college age persons due to the "baby boom," and an increased emphasis on college education expanded SOSC's enrollment from 1,294 in 1960 to 4,230 in 1970.

This increase was accompanied by a shift in the community age profile. Of the 4,600 population increase from 1950 to 1970, 52% was between the ages of 15 and 25. The total population percentage between 15 and 25 was 16% in 1950, and by 1970 it was 29% of the population. The approximately 3,000 students who attend SOSC and live in the city limits gives Ashland its characteristic age profile, and will continue to influence the city in the future.

[See graph titled "1950 and 1970 Population: The population changes from 1950 to 1970 were largely caused by an increase in the student aged population of the City." on Comp. Plan page V-2]

Section 5.04 Growth from 1970 to 1980

The 1970's saw heavy migration to Oregon from other states. Oregon's population grew by 25%, an increase of nearly 600,000 persons -- about 375,000 of that number due to migration. Migrants between 25 and 40 years of age, who accounted for 48% of the influx, and persons 0 to 15 (probably the adult migrant's children) compromising another 28%. The 'baby boom' generation migrants and their children accounted for 76% of migration to Oregon and about 50% of the total population increase during the 1970's.

Ashland's population grew in an even more exaggerated pattern than the State's. Of the approximately 2,600 population increase during the 1970's, over 1900 (75%) were between the ages 25 to 40. There was little change, however, in the children's age group. The freshman college student age category (15 to 19) declined by 152. Young students' large influx into Ashland in the 1960's and young adults in the 1970's gave Ashland a decidedly different community character than surrounding southern Oregon areas.

[See graph titled "1970 and 1980 Population: Population changes from 1970 to 1980 reflect the heavy migration of 'baby boom' adults to Ashland during this time." on Comp. Plan page V-3]

Section 5.05 Growth Since 1980

The recession that struck Oregon in 1980 affected growth in Ashland. The population of the community grew little from 1980 to 1985, compared with the previous three decades. However, a recovering state and national economy has attracted new migrants. As in the past, each new wave of migrants has unique characteristics, and the current group appears older and wealthier, choosing the community for its quality of life. The City projects that the population at the end of 1989 will be 16,702.

[See graph titled "1980 and 1989 Population: The 1980's have brought more persons over 65, but most migration is still from people born between 1940 and 1955, and their children." on Comp. Plan page V-3]

While the 1,780 new residents had the smallest increase since the decade of the 1930's, there have been significant changes to the population makeup. The number of children aged 0 to 14 increased by about 300, implying both that migrants of the 1960's and 1970's are having children later in life, and that the new migrants are bringing children to Ashland. The number of people aged 15 to 29, the college age sector in the population profile, decreased by about 680, reflecting the trend for older students to attend the college. (The median student age is now 28.) The group from 35 to 50 in age increased by almost 1,200. Persons over 60 increased by about 780. These shifts reflect the aging resident population of the "baby boom" population and the migration of persons aged 65 and over. Presumably coming to Ashland to retire, this last age group's number is significant, but often over-estimated. The group responsible for the largest population increases since the decade of the 1960's were born between 1940 and 1955.

Section 5.06 SOSC's Student Population

SOSC's population comes largely from the Southern Oregon area. In 1988, 58% of the students were from Jackson County, 76% were from the seven county Southern Oregon area, and 88% were from Oregon. We assume that SOSC enrollment will continue to grow proportionately to the 15 to 30 year old population group -- the group most likely to attend the institution.

[See chart titled "SOSC's student population, by county of origin." on Comp Plan page V-4]

Section 5.07 Population Projections

The methodology used in population projections greatly affects their outcomes. The least accurate methods simply use trend analysis on past population change and project the past tendencies into the future. Although this method is quick it does not consider the various factors affecting population changes. Because unusual short-range changes are influenced by factors not continuously present, it is wiser to base projection on factors that influence population growth, rather than on gross, aggregate numerical shifts over time.

Sophisticated and accurate methods for projections use the basic factors affecting population change. The problem in using this method for Ashland is that population changes tend to be more volatile in a small city, and forecasts less reliable because of the small sample size. Migration to Jackson County would be clearly based on economic assumptions, while the location where people settled in the county would be based on factors more difficult to predict, such as price and availability of housing.

Detailed city population data is often unavailable, and national projects are usually done for larger regions than Ashland. One option open to the City of Ashland is to use population projections for Jackson County and to assume that Ashland will retain its relative size to the county in the future. There appears to be some consistency to Ashland's percentage of county population. From 1900 to 1920 Ashland accounted for 20% of county population. In 1930 it dropped to 14% of county population and remained at about 13% from 1940 to 1970. In 1980 it fell again to 11.5 %. Ashland has remained at this percentage through the 1980's. It appears that Ashland will remain at about 11.5 % of county population projections.

Section 5.08 Past Projections

Ashland's 1982 comprehensive plan used a projection based on the growth experienced from 1940 through 1980. A straight-line projection was made of this growth pattern, yielding an estimated population of 18,000 in 1990 and 21,000 in 2000. This figure was used for many of the city's public facilities plans and for determining the size of the Urban Growth Boundary (UGB). While it appears that the projected growth rate was too high, this projection has an unexpected benefit -- these plans and the UGB will be valid a few more years than was expected.

Section 5.09 Population Projection Methods

The population projections discussed in this plan use a methodology called cohort component analysis. This method makes estimates based on the three main factors affecting population change: birth rate, death rate, and migration rate. The most stable of these is the death rate, which is based on the long-term

health of a community. This rate changes slowly, mostly due to medical advances, increased public sanitation, and amount of environmental pollution. Short-range changes can also occur due to natural disaster, epidemics, and wars or civil unrest, rare in the United States and unpredictable in any case. The birth rate is more volatile, especially since the advent of convenient and reliable birth control methods. While birth rates in the 1960's and the 1980's have changed, the rates appear to have stabilized recently, and may indicate a long-range stability.

Migration is the most unpredictable component and the most important for Ashland. Analysis of Ashland's historical population data indicates that major population changes in Ashland have always been caused by migration, from pioneer days to the recent migration of "baby boomers." Most migration predictions are economically based -- assumed to happen in response to the availability or lack of local jobs. Ashland has not always followed this pattern. A significant migration in recent years has been attracted to the community for education, theater and the existing quality of life, instead of economic opportunity. Migration assumptions are always the most important part of a projection and may radically affect the estimate.

Most important to remember is that forecasts are not predictions of the future. They are analyses of historic data, and explain future conditions based on certain assumptions. They are reliable only to the point that their assumptions about the future are correct. Although the future can rarely be predicted, the land use planning process can both guide the future and flexibly respond to changes we cannot control.

Section 5.10 Jackson County and Ashland Demographics

As indicated above, the population projections used in this plan were actually made for Jackson County. Projections for Ashland assume that Ashland will remain 11.5 % of Jackson County population and that we will retain current SOSC student population levels. The student population results in a disproportionate amount of people in the age groups 15 to 19, 20 to 24 and 25 to 29. With this student population number removed, Ashland's remaining population age distribution is similar to that of Jackson County.

[See graph titled "Differences: Ashland vs. Jackson County in 1980" on Comp. Plan page V6]

Section 5.11 Four Projections to the year 2005

The following four projections are made using four different models. Based on various assumptions, each model yields disparate results. However, the planning process requires that one population projection method is consistently used to determine the plan requirements, and the rest indicate only other possible directions the city may take.

Section 5.12 Natural Increase

The first projection is for illustrative purposes only. It represents what would happen if Ashland were a closed system, that is, if there were no migration in or out of the community. The birth and death rates are those of Jackson County in 1986. If this continued Ashland's population would increase from the current 16,310 to 17,705 by 2005. Ashland's population would level off about 2008 and begin a gradual decline. The major demographic changes include a distinct aging of the population, with a population shift from those aged 35 to 50 to those 45 to 60. This projection is a theoretical reference point to compare other population forecasts. Differences in the age groups between this and other projections will indicate migration. If only natural increases were to influence the population growth, Ashland would increase to 17,705 by the year 2005.

Section 5.13 Center for Population Research and Census, Portland State University

In 1984 The Center for Population Research at Portland State University published projections for all Oregon counties through the year 2000. In this document the projections have been extended to the year 2005. The Portland State birth and death rate assumptions were similar to those used in the projection for natural increase only, while the migration assumptions were based on Oregon in the 1970's. The

projections assumed that Oregon would experience effects of the early 1980's recession until 1985, when migration would then resume at the rates and the population profile of the 1970's.

This projection has been close to actual data in terms of a population increase as of 1988, however the Portland State population projection has been slightly lower than the actual amount now estimated for 1988 in Jackson County. This is because of two assumptions made by the Portland State projections -- the migration group age profile, and the economic recession effects of the 1980's.

[See graph titled "1989 Population and 2005 Natural Increase Projection" on Comp. Plan page V-7]

As indicated above, the Portland State projection assumed that migration would continue as it had in the 1970's. While in the 1970's 76% of the migration was by persons aged 25 to 39, and their children aged 0 to 14, this group's migration to Jackson County had dropped to 62% in the 1980's. Twenty six percent of all migrants to the area in the 1980's were over 65 years of age. Currently 11% of the west coast population is over 65. In 1980 Ashland's over-65 population was 13% and rose to almost 15% by 1988. The Portland State projection tends to overestimate the migration of younger groups. Because the error is in a population segment that continues to have children, the resulting disparity compounds in future years as newly arrived migrants continue to add new children to the population.

The projections also overestimated the effects of the 1981-1982 recession and underestimated Jackson County population through 1989. While the county's 1985 population was to have been 135,170 in 1985 due to a lack of job opportunity, it actually reached 137,900 that year. The projections assumed a rapid growth from 1985 to 1988 with a population increase of almost 6,800. Actual population increase was 5,700. The projection's rate of growth, because of these two errors, is greater than actually experienced in the 1980's and the population profile overestimates migration of persons 25 to 40, and underestimates migration of persons over 65. If these projections were to prove accurate, Ashland population would increase to 21,772 by 2005.

[See graph titled "1989 Population and 2005 Portland State Projection" on Comp. Plan page V-7]

Section 5.14 Woods & Poole Economics

Woods & Poole Economics, Inc. is a Washington, D.C. firm that has developed a large computer model for the United States. The model contains historic census data, and makes projections to the year 2010. The method used is to model population growth on natural increase, and migration based on job creation. Job creation is estimated by several factors such as industry type, past success at creating new jobs, and others. The model contains 42 million numbers in its matrix and balances the projections across the country, so that changes in one region are reflected in another.

This sophisticated model projects a slower rate of growth for Jackson County and Ashland. Population in Ashland would be little larger than by natural increase in the year 2005 -- 17,906. However, Jackson County is already exceeding the Woods & Poole Economics growth rate. The projection, based on 1986 data, forecasted 142,760 in 1988, while the current estimate is 143,000. While this is not a large discrepancy, Woods & Poole Economics forecast a relatively slow growth rate in the 1990's and into the first few years of the new century. New job creation in Jackson County is expected to climb slowly, from about 67,000 today to 80,000 in 2005 -- an increase of less than 20%. Of the new jobs, 67% would be in retail trade and services and only 14% in manufacturing.

[See graph titled "1989 Population and 2005 Woods & Poole Projection" on Comp. Plan page V-8]

The Woods & Poole Economics projections exhibit some weaknesses. Population increase is low, even when compared with the relatively low job creation. In fact they are almost equal. For Jackson County, Woods & Poole Economics forecast an increase of 13,863 in population between 1988 and 2005, while there would be 13,420 net new jobs. The Woods & Poole Economics forecast, compared with natural increase, would predict a substantial net immigration of persons aged 15 to 34, traditionally the highest group of immigrants to the area.

Section 5.15 Fregonese & Reid

The final projection was developed by John Fregonese and Rebecca Reid. This projection is not based on a large-scale model and does not use economic modeling as its base, as did the Woods & Poole Economics and Portland State models. It assumes that the current birth and death rates in Jackson County will be constant, and that immigration will remain at the same number and demographic profile of the period 1983 to 1988. Using these assumptions, Ashland's population would increase to 19,995 by the year 2005. The demographic profile shows current trends continuing. While this projection appears to match our most recent experience, it lacks the other two models' sophistication. However, it is more tailored to local conditions as it is based on Jackson County trends, rather than state or national trends. It is a middle ground between the high Portland State projection and the lower Woods & Poole Economics models.

[See graph titled "1989 Population and 2005 Fregonese & Reid Projection" on Comp. Plan page V-9]

Section 5.16 Official Projection

As indicated above, the comprehensive plan requires an official projection for the city -- a consistent base for other plan elements to estimate land and service requirements. Because it is based on recent local conditions, the Fregonese and Reid projections will be used in the plan as the official projections. Periodic projection reviews will be needed, however, to accommodate changing conditions, particularly after the 1990 federal census data is available for Ashland.

Section 5.17 The Tourist Population

One component of Ashland's population that is often overlooked is the tourist population. While in 1970 Ashland had less than 200 rooms to accommodate travelers, and occupancy rates were below 50% annually, the success of Ashland's tourist economy has added to the local population a group of people that are here simply to enjoy the City's attractions. This population consists of constantly changing individuals, but now constitutes a significant proportion of the resident population. This population cannot be estimated exactly, but several available statistics allow us to make a reasonably close guess.

The easiest statistic to gather is the number of rooms available for traveler's accommodations. This amount grew from 474 in 1980 to 873 in 1989. In addition occupancy rates grew from 42% annual occupancy rate in 1980 to a 63% annual occupancy rate in 1988. The Economic Element contains a through analysis of the visitor population, however for the purposes of this element we need only determine the additional population that is resident in hotel rooms in Ashland. A reliable statistic on number of persons per room is derived from a 1985 study conducted for the Oregon Shakespearean Festival that revealed an average party size of 2.8 for non-tour groups visiting the Shakespeare Festival.

Putting these numbers together, the average daily tourist population of transients in Ashland increased from 557 in 1980 (3.7% of the total population) to 1,476 (9% of the total population) in 1988, an increase of 165% in nine years. The annual variation is also quite great, with annual occupancy peaking in August at 92% (2,248 persons) and hitting a low of 35% in January (855 persons).

As a resident population, they are unique, as they have large disposable incomes, but live in tiny quarters at high densities, and only have one car per "household". When developing plans for providing services such as sewer and water, their consumption is accounted for by their accommodations such as motels, hotels, and bed and breakfast inns. Yet in other types of planning, such as for parks, their population is "invisible". It is important to remember to account for them, as they in fact form a part of the permanent population of the City.

Another issue this raises is proportion. Ashland had a practically nonexistent population of transients in 1970, but by 1980 they accounted for 3.7% of the total, and for 8.4% of the total today. As this affects the character of the City and the local economic health of the community, this proportion is a good gauge to measure how much of a "tourist town" Ashland wishes to become.

[See graph titled "Actual population growth from 1970 to 1989, and the three projections to 2005" on Comp. Plan page V-10.]

Section 5.18 The Population of Ashland's Environs

Another population group that affects Ashland is the population of the rural area surrounding Ashland. This group does not consume services such as sewer or water, but affect the capacity of transportation, parks, school, and also enlarge the market population served by Ashland businesses. It is best measured by the population living within the 97520 zip code area. In 1988 this figure was estimated to be 18,210, while Ashland's population was 16,310. This means that there were 1,900 living in the rural area surrounding Ashland. The combination of Ashland's urban growth boundary and current county zoning seem to indicate that the population increases in this area will be modest in nature.

Section 5.19 School Enrollment

[See graph titled "School Enrollment Historic and Projected: School Enrollment 1978 to 1990, with projections to 2005" on Comp. Plan page V-11.]

School enrollment can be approximated using the age groups 5 to 9 and 10 to 14. The projections all indicate different conditions for the Ashland School District. The natural increase projection predicts a 6% decline in school enrollment. Woods & Poole Economics figures indicate a steady population of school age children. The Portland State model predicts an increase of 20% in school enrollment. The Fregonese and Reid projection predicts a 8% increase in enrollment. Using the official population forecast, Ashland School District can expect a modest increase in school population, with an increase of 269 students by the year 2005. However, most of this increase will come between the present and 1995, with 219 more students by that date. This growth is due to the aging "baby boom" generation and their continued fertility. The enrollment will peak by the year 2000, with 289 more students than in 1988, then decline gradually as the lower birthrates of the 1960's, 1970's and 1980's result in a smaller population of child-bearing adults.

Section 5.20 Ethnic Background of Ashland

[See graph titled "Ethnic Background of Ashland, 1970, 1980, and projections for 2005." on Comp. Plan page V-11.]

Jackson County and Ashland have historically had small minority populations, with most residents of northern European descent. This ethnic mix is changing and is expected to continue to change. The largest minority group migrating to Jackson County in the future will be of Hispanic background, that is persons of Latin American descent, regardless of race.

In 1970, Jackson County's population was 97% of European descent and Hispanics constituted about 1.8% of the population. By 1980 the ethnic minority population was about 4.5% with the Hispanic number almost doubling to 3% of the total. In 1988 by Woods & Poole Economics's estimate, ethnic minorities constitute about 7% of the population, and Hispanics about 5% of the total. Woods & Poole Economics predict that Hispanic migration to this area will continue, dispersing from the historical concentration of Hispanic population in southern California and the Southwest, where most Ashland immigrants come from, regardless of race. The Asian ethnic group, also concentrated on the West Coast, will migrate to Ashland in smaller numbers. By 2005 minorities will constitute 14% of Jackson County's population, and Hispanics will be 10% of the total -- most of these of Mexican descent.

Another sizeable population in Jackson County is the Native American population. According to the 1980 Census, there were 1,182 Native Americans in Jackson County, however this population is often under represented in Census tabulations. Almost none of the local native tribes remain, so the Native American population is the product of migration to this area. While there is no hard data, individuals active in the local population indicate that it is increasing at a greater rate than the general population.

This ethnic change will significantly affect Ashland. The city once had a sizeable Chinese population who came to work on the railroad. Some would have undoubtedly settled here, but racial hostility forced them out. While Ashland and Jackson County had significant barriers to ethnic minority migration until the civil rights laws of the 1960's, public policy and social norms can now be said to disregard color, although unfortunately some ethnic bigotry remains in the area.

Ashland's Hispanic population has closely paralleled that of Jackson County in 1970 and 1980, and can be expected to have a similar percentage of Hispanics and other ethnic groups as Jackson County in the future. If this is correct, the city can expect to have a population of about 2,000 Hispanics, mostly of Mexican descent, and about 800 of other minorities, mostly Asians, by 2005. While the city has had excellent relations with its sister city, Guanajuato, Mexico, since 1969, these cultural contacts will become even more important to foster understanding and appreciation of all our ethnic backgrounds. As have past and present residents of European descent, our future citizens of Hispanic and Asian background will make their impact on Ashland in the areas of housing, art, food and education.

Section 5.21 Income Levels

[See chart titled "Income levels for Ashland Households, 1988" on Comp. Plan page V-12.]

When household income is considered, Ashland is a relatively poor community in Oregon. While the State's mean household income in 1988 was $27,053, and Jackson County's was $25,508, Ashland's was $24,485. Ashland's median household income, $19,687, is in the state's 26th percentile. This means that almost three-quarters of cities in Oregon have a higher median household income. About 39% of Ashland's households have an income of' $15,000 or less compared with 33% in Jackson County and 31% in Oregon. While Ashland is similar to the state and county in household percentages that earn $50,000 or more (about 10%), it is lower in households that earn $25,000 to $50,000 (27% in Ashland, 33 % in Jackson County, and 35% for Oregon). The large percentage of households in the lower income categories may be a result of the disproportionate numbers of persons aged 20 to 30 in Ashland's age profile.

Section 5.22 Conclusions

All population forecasts indicate that Ashland's rate of growth will be slower for the remainder of the century than it has been in the decades from 1940 to 1980. Ashland will grow to about 20,000 by the year 2005. The new population will come in three areas: persons aged 35 to 54, children younger than 14 and persons over 65. Persons ages 15 to 29 will decrease in number. Jackson County will have an increasing proportion of ethnic minorities, and this will be reflected in Ashland. While the rate of growth will slow, changes will continue to occur. The most significant will be the aging population due to three factors: a decline in the birth rate compared to the 1940's and 1950's, the aging of the population born during that time, and the migration of persons over 65 to this area.

Section 5.23 Growth and Carrying Capacity

Generally considered, positive aspects of a relatively consistent growth rate are a healthy and robust economy, a more cosmopolitan population, a larger variety of housing types, more cultural opportunities, more alternative sources of employment and education, and greater availability of professional services, specialized shops and repair services.

Population growth, however, also may result in urban sprawl, traffic congestion, a loss of sense of community, overcrowding, deterioration of environmental quality and higher housing prices.

Quality of living, not a particular city size, is the most important element to be preserved. However, it is generally con- ceded that both change in the amount of people living size and growth rate will continue to have an effect on the quality of the living environment. One of the major reasons Ashland places a great deal of effort in planning is to mitigate the effects of growth, maintaining the quality of life while accommodating an increasing population.

The city's carrying capacity is frequently discussed. Limitations to growth include the quantity of water available, the Rogue Valley airshed's capacity to adsorb and disperse pollution. These two limitations assume that future water consumption and driving habits of people will not change. If water consumption per capita lowers, wood stove pollution controlled, or automotive transportation is replaced by pedestrian, bicycle, and public transit. Ashland's carrying capacity would dramatically increase and the quality of life would benefit, regardless of population changes. Some amount of growth will inevitably occur, for Ashland will probably grow in proportion to the region.

Section 5.24 Assumptions

Ashland will grow to about 20,000 people by the year 2005. Ashland's desirability as a place to live will tend to make housing choices expensive and limited. If corrective measures are not taken, Ashland's character could change as lower income groups are forced to live elsewhere. Many of these groups are responsible for the enviable city Ashland is today.

Ashland's residents will continue to desire relatively high standards of environmental and community values. State planning law will continue to require each city and county to provide adequate land, housing economic support and services for its expected population growth, provided that such growth does not violate other state planning goals.

Section 5.25 Goal

To Provide For the Needs of the Expected Population Growth in Ashland to the Year 2005, and Maintain a Diversity of Income, Cultural, and Age Groups in Ashland's Population, Consistent with Other Plan Goals.

Section 5.26 Policies

1. Develop a growth management strategy that will monitor Ashland's size and rate of growth. If needed, develop methods to keep the growth within the expected population projection, while accommodating the cyclical nature of growth.
2. All other plans and projections by the City should use the same population projection, for consistency of planning, unless compelling reasons exist for using alternative projections.
3. Review, and revise if necessary, the population projections after data from the 1990 Census is available.
4. Strive to maintain a diversity of population groups in Ashland, especially if increased growth pressure leads to more expensive housing. Concentrate on population groups that are important to Ashland's character, such as students, artists and actors, employees of the city, school district, and college, service personnel who work in the tourism industry, hourly wage earners in local industries, and local residents who have now retired and live on fixed incomes.
5. Strive for an equal proportion of cultural minorities as a whole in both the City's population and in municipal employment.
6. Develop a system that derives the revenue needed to pay for growth related costs from the development that is most directly responsible for the growth. Only derive the revenue from the growth that can be justified as the incremental cost that can be identified with the growth. Revenues received should only be spent on projects that will alleviate the problems associated with the growth. Take steps to reduce financial hardships caused by the growth taxing system where it adversely impacts targeted low-income groups or needed economic development.
7. Monitor the proportion of tourist population to local population.

Section 5.27 Tables

See Comp. Plan Pages V-15 through V-19 for the following tables:

1990 POPULATION PROJECTIONS
1995 POPULATION PROJECTIONS
2000 POPULATION PROJECTIONS
2005 POPULATION PROJECTIONS
POPULATION GROWTH 1860 TO 1988 ASHLAND, JACKSON COUNTY, AND OREGON
ASHLAND, POPULATION BY AGE
ETHNIC BACKGROUND JACKSON COUNTY
1988 INCOME LEVELS
ASHLAND SCHOOL ENROLLMENT

Chapter 6

Housing Element

Sections:

Section 6.01 Introduction

The City's Housing Element is an important part of the overall Comprehensive Plan, as housing makes up the vast majority of land use in an urban area. Cities have taken various roles in housing, ranging from the very active role of being a housing provider and landlord to one of simply allowing the housing market to freely determine what should occur in a given area with very little regulation. The role Ashland has chosen is more toward the latter than the former, although certainly Ashland has not adopted an entirely laissez-faire housing policy.

While Ashland does not see itself as a provider or major developer of housing, its policy and land development ordinances will have an impact on land availability, development sites, and housing types which will be used to meet the City's housing needs.

In addition, LCDC Goal 10 requires that:

Buildable lands for residential use shall be inventoried, and plans shall encourage the availability of adequate numbers of housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type, and density.

Because of this, the City has a responsibility to inventory its land and ensure that the proper amounts of land are set aside to accommodate the various housing needs in the City, and that its land development ordinances are broad enough to allow for variation in housing type and density.

Section 6.02 Historical Trends

Table VI-1 shows that Ashland has grown from 4774 persons in 1940 to 14,922 in 1980. The City's housing stock has grown from 1785 in 1940 to 6312 in 1980. The number of persons per household increased steadily from 1940 to 1960, reaching a high of almost 3 persons per household in the 1960 Census. Since that time, it has declined dramatically, dropping from 2.84 persons per household in 1970 to 2.36 in 1980.

This dramatic drop in persons per household unit has a very significant impact on Ashland. While population growth will be rather moderate in the future, growth in housing units will continue to escalate, as the number of persons per household drops and levels off at about 2.3 or 2.2 persons per household. Also interesting are the ownership patterns, which are changing in the City. Table VI-1 shows that the percent of owner-occupied housing has dropped steadily from 1950 to 1970, and the trend is expected to continue, leveling out in the 1980s at about 50%. This is because the increased cost of financing and

purchasing new housing has put the goal of owning a home beyond the reach of many citizens in Ashland.

[See "TABLE VI-1 - Housing and Population Data 1940-1980, U.S. Dept. of Census" on Comp. Plan page VI-2.]

Table VI-2 shows the difference in the housing mix in Ashland over the last decade. In 1970, single-family detached units accounted for almost 77% of all the units in Ashland. In 1980, they accounted for only 64%. Multi-family units rose from 21% to 33% in the same period. Mobile homes account for an insignificant amount of Ashland' s housing stock, from a little less than 2% in 1970 to 3% in 1980. These figures indicate that much of the growth in Ashland is in higher-density housing types, with smaller-sized units. This corresponds to the decrease in the number of persons per household, which has occurred over the last decade and the increase in non-owner-occupied housing units in the City.

Housing quality in Ashland is fairly good compared to the rest of the state. Ashland, in 1975, rated 182nd in all the cities in the state in the percentage of substandard units. The City had only 233 substandard units lacking adequate plumbing facilities in 1975. The City also has a relatively old housing stock. Out of the 1785 housing units existing in 1940, 1526 still exist today and are still used for housing. This represents a demolition rate of about 0.36% of the housing stock per year, about one-third lower than the national average of about 1% per year.

Undoubtedly, this accounts for the large numbers of older homes in Ashland, which have become more valuable in the past decade, as an appreciation for their uniqueness increases.

Section 6.03 Income and Housing

The major determinant of the housing types that will be desired in the City of Ashland is the income range of existing and new occupants of Ashland between 1980 and the year 2000. The income groups estimated in the City for 1977 are shown in Table VI-3. This is an update of the income ranges from 1970 Census data, assuming that increases in personal income in Ashland were the same as increases in personal income in the State of Oregon. Given this assumption, Ashland shows a profile typical of many Oregon cities.

[See "Figure VI-1 Income and Affordable Housing Types", and Tables VI-2 - Housing Mix and VI-3 - Income of Households in Ashland, 1977 on Comp. Plan page VI-3.]

The severity of the problem resulting from the high cost of housing is shown in Figure VI-1. Several housing types have been graphed to indicate the income ranges, which normally occupy such units. For rental units, it was assumed that 25% of the monthly gross income would be applied towards rent. For purchase units, it was assumed that 28% of the monthly gross income would be used to make payments, assuming 12% mortgage interest rates and a 10% down-payment. The cost of the units in this case and the estimated rent levels are in 1977 dollars.

As can be seen, a large proportion of Ashland's population falls in the range of apartment rentals, subsidized housing and mobile homes in parks. In the very low range of income are persons who can only be helped through subsidized housing, either through subsidized mortgages or direct subsidies to the persons occupying the household. This will be an activity not carried out directly by the City, but rather one in which the City can simply support and indirectly participate in the placement of such housing units.

As mobile homes in parks are not a very efficient use of higher density land, and, as they have significant problems in locating in Ashland, as will be explained later, they are not expected to form a very significant portion of the lower-cost housing for the City. Therefore, the major contributor to housing for the lower income households in Ashland will be apartments that have been built expressly for the purpose of rentals, as well as some townhouse condominiums and single-family attached and detached homes held as rental properties.

For persons with incomes ranging from between $14,000 and $20,000 (in 1977 dollars), there are four options in the City for purchase, in addition to renting. These four options are condominium or townhouse purchases, used home purchases, new attached unit purchases, or mobile homes in subdivisions. In these ranges are the majority of persons in Ashland that would be purchasing new homes for the first time -- young families and other groups which contribute to the lower population per household figures which have been mentioned above.

Unfortunately, the group able to purchase single-family detached homes is much smaller than even a decade ago. As the graph indicates, it is the highest cost option available. Undoubtedly, persons in this category will also consider all of the other options available to persons of lower income, especially condominiums, townhouses, used houses, and new attached unit purchases.

While it is important to discuss housing types in Ashland, it is impossible to accurately predict how the marketplace will allocate housing units. Therefore, it is necessary for the City simply to set aside amounts of land that are correctly zoned so that the housing needs of Ashland can be met. The marketplace will then be the major determinant of which type of housing will be built in the various zones, within limits imposed by the City based on density, aesthetics, and neighborhood compatibility.

Section 6.04 Estimating Housing Demand

[See "TABLE VI-4 - Estimated Housing Demand for New Migrants" on Comp. Plan page VI-5.]

For the purposes of estimating demand for various housing categories, four general types of housing demand are assumed. These are summarized in Table VI-4. The first demand type is for households with extremely low incomes. This would be the "subsidized" housing type. As mentioned before, this housing type would not be impacted directly by the City, as we would not directly participate in the development of this housing type. However, the City could cooperate with the implementation of low-cost housing. A majority of the persons in the low-income, subsidized group are college students who have a very low income but also very limited housing needs, as they typically do not have families and often share more expensive housing forms with other students. As the College is not expected to grow significantly in enrollment, Table VI-4 shows that our estimated housing demand in Ashland for this category would be only 5% of the population increase, rather than the 9.5% of the population presently represented in Ashland. If the College enrollment were to increase significantly, this figure would have to be increased.

The second group is those persons most likely to rent. Based on past trends and existing income levels in the City, we estimate that 38% of the population increase expected in Ashland will be in the market for rental housing units.

The third category is the broadest--moderate-income purchase homes. These homes would be ranging in monthly payments from $250 to $630 per month (1977 dollars). This accommodates the broadest section of the City and ranges from relatively low-cost attached housing and condominium units to the traditional single-family home on a large lot.

Approximately 14% of the increase in population will be in the market for high-income purchase. These are homes that would require, with the above criteria of 10% down-payment and 12% mortgage money, greater than $630 per month payments for a home. Approximately 14% of all the new households are estimated to be in this category called high-income purchase. Table VI-4 summarizes the various housing demands estimated above.

Housing Demand in Different Zones

Assuming that each type of housing would be provided in several zones, an estimate must be made of the percentage of total housing demand in each zone. We estimate the following to be the types of housing and the zones in which the housing will be provided:

Subsidized or Shared Housing - Subsidized housing depends primarily on the type of assistance which will form the subsidy. Most subsidized housing is higher-density apartments and, therefore, the majority of this housing type would be met in the R-2, or Urban Low Residential zone.

Rental - Rental housing types form a large cross-section in the City. In Ashland there are single-family homes which have been built primarily for the purpose of renting. About 27% of the single-family housing stock was rental in 1970. Assuming that this practice will continue in the single-family detached housing market, and in the attached townhouse and condominium markets, then we estimate that about 4O% of this demand would be met in the R-2, or Urban Low Residential zone, 30% in the townhouse zone (R-l-3), and another 30% in the R-l-5 Planned Unit Development areas, specifically by smaller, inexpensive housing units, and duplexes with the owner occupying one unit and renting the second unit.

Moderate Cost Purchase - The moderate cost purchase units will also be spread across several zones. We estimate that 20% of it will be met in the R-l-3, or townhouse, zone, and 80% in the single-family residential areas in the R-l-5, R-1-7.5, and R-l-10 zones.

High Cost Purchase - Most of the high cost housing would involve relatively large lot sizes and correspondingly low densities. As such, we would expect that 50% of this demand would be met in the single-family residential areas and 50% in the low-density residential areas.

Section 6.05 Housing Types

Various housing types each have a place in Ashland in providing for housing demand. However, it should be recognized that some of these are more compatible than others with the City and with the neighborhoods in which they would locate, so that care must be exercised in allowing some housing types.

Multi-family, multi-unit apartments

Multi-unit apartments refer to those units in which one individual living quarter is placed above another, also commonly referred to as flats or garden apartments. These have the advantage of relatively low cost per unit and relatively high density without a great deal of lot coverage. Densities in this type of garden apartment usually range from 15-22 dwelling units per acre in Ashland. However, they are most successful in the range of 15-20 dwelling units per acre. Because of this, Ashland will use the R-2, or Multi-Family Residential, zone to meets its new housing needs for this type of housing. The user and income groups in multi-family apartments would include households ranging from subsidized housing up through the $15,000 to $20,000 per year income groups.

Townhouses

Townhouses differ from multi-unit apartments in that each individual living unit is contained in a separate structure, attached by common walls to other structures. These units are usually grouped in clusters of four or more and are associated with higher density developments. They have the advantage of providing greater privacy and sometimes an opportunity for individual ownership. Densities can range from 7 to 8 dwelling units per acre up over 20 dwelling units per acre. However, as these units typically have a larger lot coverage per square foot of interior living space than multi-family, multi-unit apartments, the lower densities are preferable for townhouse developments. Very attractive and desirable homes can be built with this housing type. It is used for moderate to high cost rental units, and low to moderate cost purchase units in Planned Unit Developments or condominium developments.

Mobile or manufactured homes

This housing type forms an insignificant part of Ashland's housing stock at present, and is expected to continue to be a small percentage in the future. Presently, all mobile homes are situated in mobile home parks. In other communities around Ashland, mobile home subdivisions have grown to be increasingly popular. But mobile or manufactured housing has certain disadvantages in locating in Ashland, limiting its usage to certain areas of the City. The disadvantages are:

a. Because of the uniformity of design, they are incompatible for difficult siting or development choices, especially any siting on hillsides or siting on properties, which have unusual features or are irregularly shaped. This typifies all of Ashland south of Siskiyou Boulevard, and much of the area set aside for single-family development north of Siskiyou Boulevard.

b. They are incompatible with existing neighborhoods. While great progress has been made in making mobile homes resemble site-built housing, they possess certain design features which immediately tell the observer that they are indeed manufactured housing. The general rectangular shape, low-pitched roof, and window orientations form a monotonous and undesirable appearance. Because of this and the materials used in exterior siding, they were almost unanimously rejected during the citizen involvement phase of the Comprehensive Plan development as a major provider of new, low-cost housing in Ashland.

c. They are usually energy-inefficient. While additional insulation in newer units has increased the thermal performance of mobile homes, they are still less thermally efficient than a comparable site-built house. As they are constructed mostly of kiln- dried wood and aluminum, they also have a large amount of embodied energy compared to a site-built home. Some experimental solar units have been constructed, but passive design techniques cannot be successfully implemented in a lightweight structure.

d. They have a limited life span of twenty years or so, and are meant to be disposed of after this fairly short time. Ashland considers it better to have housing types, which make a permanent contribution to the built environment of the City, as homes have in the past.

However, realizing that the marketplace may demand these, even if cost-competitive alternatives are provided, there should be land set aside for mobile home developments at densities relatively consistent with their needs. The R-2 and R-1-3.5 zones are the areas which can most easily accept mobile or manufactured housing.

The new lands within the Urban Growth Boundary which have these zoning designations are relatively flat and have large, regularly shaped parcels available. Also, these areas have little existing development so that neighborhood compatibility is not a problem. Thus, they are the most suitable location for mobile home development.

Attached single-family homes

Ashland considers the attached single-family home to be a more suitable low-cost alternative. Since they are attached by one or two walls, there are some savings over the same square footage built as detached units. They are also more energy-efficient than either mobile homes or detached single-family housing, and can be easily adapted to passive solar applications. Therefore, attached single-family houses are one of the major components of Ashland's housing strategy. They should be allowed in most undeveloped portions of the City as an out-right permitted use, along with single-family detached housing.

Detached single-family homes

Detached single-family homes, which include the vast majority of the existing housing units in Ashland, will unfortunately only be available to persons of relatively high income. However, changes in development standards may alter this situation, as discussed below. Single-family homes will continue to be built and are encouraged in conjunction with other housing types, especially in Planned Unit Developments. Alternatives to the conventional subdivision home, such as lot-line homes, or small cottages on small lots in developments with common open space, should help reduce the cost of some units. They typically work best in relatively low-density situations of less than 5 dwelling units per acre.

Section 6.06 Estimating Land Needs

Future availability of housing in Ashland will be heavily influenced by the availability of land for development. The City should therefore ensure that there is sufficient land set aside for the development of housing. In general, there should be at least a five years' supply of land for each of the Comprehensive Plan designations shown in Figure VI-2 vacant and available for development.

Figure VI-2 shows how the City has estimated its land needs, based on the number of housing units we believe will be necessary between 1980 and the year 2000. The bottom line shows that approximately 54 acres of multi-family residential land, 83 acres of townhouse residential, 388 acres of single-family residential, and 127 acres of low-density residential land will be needed to meet the City's housing demand.

Section 6.07 Development Standards

The City's development standards also have an impact on the provisions of housing and on the expense of each house. In the past, conventional subdivision development has resulted in attractive but sometimes monotonous neighborhoods. The attractiveness decreases as the density increases. At the present time, the cost of developing land is usually too high for moderate-cost housing to be located in areas that are zoned for 7500-10,000 square feet lot size. Also, because of the changes in housing patterns and market perceptions, conventional subdivision regulations no longer can accommodate the full range of housing types and residential environments desired in the marketplace. As a result, Ashland has adopted a performance standards approach, which will govern development on most new land. The performance standards approach will be used in the future to guide residential development. It emphasizes quality of life, overall density, and the residential environment created in each neighborhood, and compatibility with surrounding neighborhoods, with less emphasis on the type of housing to be built on the site, within the guidelines established by the City. Several different housing types may be compatible with an existing neighborhood. Subdivision standards should continue to be used where development occurs in neighborhoods, which have largely been developed under subdivision standards and for minor land partitioning needs.

Section 6.08 Energy and Housing

The residential sector uses more energy than any other in Ashland. The detailed analysis of this use is contained in the Energy Element of this Plan. Older houses use between 10 and 20 therqs* of energy, new homes from 6 to 8 therqs, as do older apartments. New, passive solar homes can be constructed which use from 1 to 3 therqs, and can be built for about the same cost as conventional units. This form of space heating is obviously one of the best from the City's perspective of energy conservation. One therq (thermal requirement) is equal to one BTU per degree day per square foot.

[See Figure VI-2 "Estimated Land Need" on Comp. Plan page VI-10.]

Residential neighborhoods can also contribute to a reduction in energy use by providing solar access and encouraging trips by bicycle and foot. The more functions of day-to-day life that can occur at the neighborhood level, the greater the savings in energy. This type of development shall be encouraged.

Section 6.09 Assumption

Ashland will continue to increase in the number of housing units. Existing, older residential neighborhoods will be preserved and will experience relatively few shifts in housing types and styles. New housing areas will contain housing types other than single-family residential detached units, and much of the City's new housing demands will be met by single-family detached units in unconventional Planned Unit Developments, attached units in Planned Unit Developments, and housing in higher densities than experienced in the past, such as townhouse developments and garden apartments. Rising new home construction costs and smaller households will result in housing units with relatively small living spaces in each unit compared to past housing.

Section 6.10 Goal

Ensure A Variety Of Dwelling Types And Provide Housing Opportunities For The Total Cross-Section Of Ashland's Population, Consistent With Preserving The Character And Appearance Of the City.

Section 6.11 Policies

1. Given the scarcity and cost of land as a limited resource, conserve land and reduce the impact of land prices on housing to the maximum extent possible, using the following techniques:

a. Use the absolute minimum street widths that will accommodate traffic adequately in order to reduce aesthetic impacts and lot coverage by impervious surfaces.

b. Allow a wide variation in site-built housing types through the use of the City's Performance Standards Ordinance. The use of attached housing, small lots, and common open spaces shall be used where possible to develop more moderate cost housing and still retain the quality of life consistent with Ashland's character.

c. Consistent with policies relating to growth form, City policy should encourage development of vacant available lots within the urban area, while providing sufficient new land to avoid an undue increase in land prices. This shall be accomplished with specific annexation policies.

d. Zone lands in the single-family designation consistent with the surrounding neighborhood if the area is mostly developed. Generally, lands south of Siskiyou Boulevard-North Main should be R-1-7.5 and R-l-10, and lands south of the Boulevard should be R-l-5.

2. Using the following techniques, protect existing neighborhoods from incompatible development and encourage upgrading:

a. Do not allow deterioration of residential areas by incompatible uses and developments. Where such uses are planned for, clear findings of intent shall be made in advance of the area designation. Such findings shall give a clear rationale, explaining the relationship of the area to housing needs, transportation, open space, and any other pertinent Plan topics. Mixed uses often create a more interesting and exciting urban environment and should be considered as a development option wherever they will not disrupt an existing residential area.

b. Prevent inconsistent and disruptive designs in residential areas through use of a limited design review concept, in addition to using Historic Commission review as part of the site review, conditional use permit, or variance approval process.

c. Develop programs and efforts for rehabilitation and preservation of existing neighborhoods, and prevent development, which is incompatible and destructive.

3. Regulation of residential uses shall be designed to complement, conserve, and continue the aesthetic character of Ashland through use of the following techniques:

a. Slope protection and lot coverage performance standards shall be used to fit development to topography, generally following the concept that density should decrease with an increase in slope to avoid excessive erosion and hillside cuts. This objective shall be used consistent with the desire to preserve land by using the smallest lot coverage possible.

b. Site and design review shall be used to ensure compatible multiple-family structures. Density incentives shall be used to encourage innovative, non-standardized design in single-family areas.

c. Performance standards shall be used to regulate new development in Ashland so that a variety of housing types built for the site and imaginative residential environments may be used to reduce cost and improve the aesthetic character of new developments and decrease the use of traditional zoning and subdivision standards.

d. Street design and construction standards shall promote energy efficiency, air quality, and minimal use of land. To this end, the City shall:

1. Adopt a master conceptual plan of future streets by size and use category.
2. Adopt minimum street width standards which provide only what is needed for adequate traffic flow and parking.
3. Incorporate bicycle and pedestrian traffic planning in street design.
4. Limit street slopes, requiring curvilinear streets along contours in steeper areas.

4. Create and maintain administrative systems that will assist in all phases of housing and neighborhood planning through use of the following techniques:

a. Establish and maintain a data base system, which includes measurement of vacant land and land consumption; housing conditions; land use, land values, and any other pertinent information. Simplify and strengthen the processing approval mechanism so that the intent of state and local laws is fulfilled with the greatest possible thoroughness and efficiency.

b. Cooperate fully with the Jackson County Housing Authority in locating low-income units in Ashland when this can be done in low-impact, relatively small developments, or through funding of individual home-owner loans or rental assistance.

5. The residential sector is the major user of energy in Ashland. Consistent with other housing goals, the City shall strive to promote, encourage or require energy- efficiency design in all new residential developments.

[Additional policies relating to housing are in Chapter XI - Energy.]

Chapter 7

The Economy

Parts:

Part 7.01

General

Sections:

Section 7.01.01 Introduction

The purpose of this chapter is to assure that the comprehensive plan and updated land-use code provide adequate opportunities for a variety of economic activities in the City, while continuing to reaffirm the goal of Ashland's citizens. This goal, articulated in the 1982 Ashland Comprehensive Plan, is that economic development should serve the purpose of maintaining or improving the local quality of life rather than become, of itself, the purpose of land-use planning1. The challenge for the years ahead is to furnish the City with adequate resources of land, educated and skilled people, and finance for development of an appropriately large and diverse economic base. This base will provide the necessary tax and income sources to maintain the city's civic, social and environmental character and stability. At the same time, the community's quality of life must be maintained. Ashland's quality of life, those factors which provide for a safe, non-polluted, comfortable and affordable environment, and its people are its greatest economic assets.

This chapter will examine Ashland's economy, and using local, state, and national trends, project the most likely areas of economic growth. Using these projections, it will determine the quantity and quality of land necessary to sustain this economy. The existing vacant land resource will be examined, and sufficient land will be identified to meet the land needs of the City. Finally, policies that will guide the City's economic plans will be developed.

Section 7.01.02 Public Attitudes and Concerns

The Future-Plan Festival hosted by the Ashland Citizens' Planning Advisory Commission and held on Saturday, June 10, 1989 identified several issues of top concern to Ashland residents. Those issues of greatest concern were as follows: water supply and quality, air quality, housing affordability, open space, traffic flow and congestion, jobs and the economy, preserving the small town feeling of Ashland, and a number of other concerns.2

A poll of citizens selected at random from the list of registered voters revealed similar concerns, although in different order of importance3. Significantly, results of the random survey placed concern with growth management and jobs and the economy, ahead of water quality. This result is important, as it is more likely to reflect the concerns of the population at large. As almost all of these concerns are directly affected by the quality and quantity of economic growth in Ashland, they are all addressed either directly or in passing in this chapter of the comprehensive plan.

Section 7.01.03 Development of Ashland's Economy Since 1980

Table VII-1 reports the number of firms and total employment in major business sectors as a percentage of 1980 for Oregon and Jackson County. The table demonstrates that Oregon's economy has recovered from the recession it was entering when the last Ashland Comprehensive Plan was written, and that Jackson County's economy has grown more rapidly than the Oregon economy as a whole. In all sectors the recovery was accompanied by a more rapid increase in the number of firms than in employment. This means that firms in both Oregon and Jackson County are smaller, more efficient in their use of labor, and

more specialized than they were before the recession of the early 1980's. The bulk of this growth has been in retail trade, transportation and utilities, and services. The extraordinary growth of transportation and utilities and of retail trade explain most of the excess in Jackson County's growth relative to the State.

The growth of services in Jackson County has been essentially identical to the State pattern. Some of Jackson County's relative strength has also come from non-timber manufacturing and real estate and financial services. The number of firms and employees in the timber industry has stagnated since 1980.

[See Table VII-1 "Indices of Change, Oregon and Jackson County Major Business Divisions, Oregon and Jackson County (1980 = 100)" on Comp. Plan page VII-2.]

Section 7.01.04 Ashland's Economy and State and National Trends

Reflecting a national trend, Ashland's rising share of employment is tied to increased numbers of small, innovative firms. While a significant proportion of this employment has shifted to the retail and service sectors, the economy has become more diverse over the last decade. While on the one hand this implies successful adjustment to a changing economy, it also implies that a larger share of the workforce is taking greater personal risk in setting up businesses than was the case in 1980. These risks include, for example, the loss of health care and retirement benefits formerly provided by large employers.

Section 7.01.05 Ashland's Principal Economic Resources

Ashland has built its economy on a resource base of timber, favorable climate, attractive landscape, cultural attractions, a well-educated labor force, and education. In addition, Ashland's location on Interstate 5 and the Southern Pacific Railroad, and its proximity to the Medford Airport give it market access that is more favorable than usual for a rural town.

The timber resource is expected to decrease in importance in the future, thus Ashland's remaining resources for growth are its people and quality of life. These factors have been identified by economic geographers as essential to attracting the small, relatively non-polluting, "footloose" industries that are expected to provide the motor of growth for the future. (Footloose industries are businesses that, because the raw material required is small, and the product is of high value and light weight, are not constrained by either resources or markets to a location, but are free to locate in many areas.) Quality of life is a major factor in attracting Ashland's tourists who provide the "export" market for its services and retail businesses.

[See Table VII-2 "Ashland Employment by Business Size" on Comp. Plan page VII-3.]

Section 7.01.06 Economic Make Up

The attempt to predict the future growth needs of Ashland's economy is seated in two assumptions: that the future economy will, for the most part, grow organically from the present economy and that the local economy will inevitably respond to external trends. Consequently, an accurate description of the kind of businesses that provide employment in Ashland is one of two essential footings for understanding the City's economy; the second is knowledge of the internal and external trends affecting the city.

Employment in Ashland's businesses is described by size and kind in Tables VII-2 and VII-3. This table was compiled from data gathered in July 1989, in a special inventory of Ashland businesses, based on records from the State Employment Division, Ashland Business Licenses, and the local Polk's and U.S. West directories.

[See Table VII-3 "Number of Firms and Employment by Industrial Divisions Ashland, 1989" on Comp. Plan page VII-4.]

Total employment in the City in 1989 was 6,049, a 7.7% increase from 1980, when the employment total reported in the 1982 Economic Element, was 5,619. During the same period, population increased in

Ashland by 12%. The goal of the 1982 plan was for the increase in jobs to be slightly higher than the population increase. The employment goal of the 1982 plan was missed by about 300 jobs.

Part 7.02

The Major Economic Sectors

Sections:

Section 7.02.01 Retail Trade

Ashland's retail trade consists of local sales to the resident population; retail sales made to the regional shopper, and retail sales to the tourist population. The percentage of retail sales to tourists is difficult to determine, and varied by business type, time of year, and location in the city. However, it can be estimated by sector, as was done in Table VII4, below. The 1987 Census of Retail Trade and estimates of tourist trade in the various segments indicate that about 19% of all retail trade is tourist based.

Ashland lacks sales of relatively expensive items, such as furniture, and major appliances. These tend to be located in Medford, as its location provides an advantage to this market segment. The exception is in auto sales. Ashland's auto sales area north of the City limits is in the Urban Growth Boundary, and is part of Ashland's commercial enterprises. It forms a strong regional retailing center in its own right, with total gross sales of $50 million in 1989 (It was about $35 million in 1987 when the last economic Census was taken.). 4

[See Table VII-4 "Composition of Retail Trade Percentage that is Tourism Based" on Comp. Plan page VII-5.]

While auto sales was not reported as Ashland sales in the 1987 Census data because these areas are outside the City limits, some auto sale data may have been erroneously included as there was one firm listed as auto sales. The amount is unknown because of disclosure rules.

Using data from the 1987 Census of Retail Trade and comparing Ashland to other Oregon cities of similar size, Ashland's total retail gross seems low, even when accounting for the unreported auto sales. According to the Census, Ashland has only $75 million in retail sales and a population 16,740 or about $4,500 dollars per capita, and about $110 million when accounting for the auto sales that are a part of our local market area. Grants Pass, on the other hand, has gross sales of $302 million, Roseburg has $301 million, and Klamath Falls has $223 million. All are of a similar size to Ashland, but have larger market areas. Other cities that have retail sales that are similar in size to Ashland's are Redmond ($81 million, population 7,000), Hood River ($72 million, population 4,640), Cottage Grove ($67 million, population 6,945), Lebanon ($77 million, population 10,485) and Forest Grove ($72 million, population 12,180). Ashland's total sales are similar to cities with smaller populations. Compared to the 1977 Census, Ashland's percentage of retail sales in Jackson County has fallen from 7.9% of total sales to 7.2%, while Ashland's total sales in proportion to retail sales in Medford, Grants Pass, Roseburg, Redmond, and Klamath Falls has risen.

The City's inventory accounted for 2,081 retail employees, and the Census reports only 1,278. While our survey also counted businesses that are within the Urban Growth Boundary but outside the City Limits, this does not account for the entire difference. There are other problems with the Census Data as well. For example, the Census reports that Ashland has a total gross of $12 million dollars for Ashland's 61 restaurants, or less than $200,000 annual gross average per restaurant. A City like Woodburn, that has only 27 restaurants and no tourism, reports a gross of $10 million, or almost $400,000 per restaurant average. This leads us to believe that there is significant under-reporting of Ashland's retail economy in the Census figures. However, this under-reporting probably takes place in small businesses because the Census directly surveys only large employers, and only samples small employers. As 35% of Ashland

retail businesses employ less than 10 people, this may account for some of the difference between Ashland and other cities.

The conclusions that one could draw from this is that either the Census is erroneous, or that Ashland's retail trade is unusually low for a city our size. Probably there is some truth to both conclusions. Ashland appears to lack the type of retail trade that is characterized by high volume and discount pricing. While the Census appears suspect, Ashland has experienced very little new construction of retail buildings in the 1980's, the last major construction occurring in the late 1970's. One may conclude that there is room for growth of Ashland's retail sector.

Section 7.02.02 Service Sector

Ashland's services have grown considerably in the past decade. Using Census figures, total sales in the service sector increased from $4.7 million in 1977 ($8.3 million when adjusted for inflation to 1987 dollars) to $30 million annually in 1987. Even in this Census of Service Industries there appears to be under reporting of data. The 1982 figure for lodging services was $5.2 million, and the 1987 figure was little more, only $5.5 million. During the same period, Ashland lodging units increased from 669 to 943 units. Income from the 6% lodging tax charged by the City increased from $200,000 annually to $300,000. As this five-year period saw an increase of 50% in tax receipts and units in Ashland, it stands to reason that the lodging sector is under reported in the Census figures because, again, small businesses, like bed and breakfasts, are not well represented. This leads us to believe that the entire services sector is under reported. However, Ashland's provides a greater proportion of County services than retail trade. While in 1987 Ashland accounted for about 7.2% of County retail trade, it accounts for 11.6% of County service trade, according to the Bureau of the Census.

[See Table VII-5 "Ashland Manufacturing Firms" on Comp. Plan page VII-6.]

Section 7.02.03 Manufacturing

The composition of Ashland's manufacturing sector is displayed in Table VII-5. Ashland has some 65-70 firms engaged in manufacturing. About 70% of these firms engage in non-timber manufacturing; most are small and quite young. One-seventh produce food or related products, one-quarter produces wood products other than plywood or lumber and another quarter is engaged in publishing in printed or electronic media. The remainder is divided up among steel fabricators (3 firms), industrial supply, textile, medical supply manufactures and manufacturers of toys and consumer novelties. In addition, several firms, who manufacture computer software or peripheral equipment, have moved to Ashland in recent years. Together, these firms employ roughly 300 people, and have provided the major growth in Ashland's manufacturing sector, offsetting the loss of jobs in the wood products sector since 1980.

In 1980, Ashland's manufacturing sector employed 500 persons, 80% in wood products manufacturing. In 1989, the manufacturing sector employed 550 persons, or 10% more, but the wood products sector had dropped to 285, or only 55%. While the wood products employment in the City has shrunk by 115 jobs, non-wood products manufacturing has expanded by 165 jobs.

Of special note is that most of the City's manufacturing growth occurred on land that was set aside in 1980, and zoned "Employment". The two areas where this growth has provided the most employment developed with City stimulation. It is probable that with an indifferent or passive City role, there would have been much less growth in this area.

Part 7.03

Ashland's Employment

Sections:

Section 7.03.01 Employment by Business Size

[See Table VII-2 "Ashland Employment 1989 by Size of Firm" on Comp. Plan page VII-7.]

Table VII-2 illustrates Ashland's employment by business size. Exclusive of the education sector and employees of the City government, 28% of Ashland's employment is in firms of fewer than six employees, 16% in firms of six to ten employees, 22% in firms of 11 to 25, 17% in firms of 26 to 50, and 13% in firms of over 50 employees; fully two-thirds of employment is in firms of 25 or fewer employees. Southern Oregon State College (SOSC) employs some 539 people, Oregon Shakespeare Festival (OSF) employs over 400, public schools employ some 200, the Community Hospital employs 148, and the City government, 1597. The ten largest employers that are privately owned are fairly representative of Ashland's business variety: two in wood products other than furniture, a motel, two car dealerships, two grocery stores, a newspaper, a restaurant and a commercial bakery. Three of the ten largest private sector employers are locally owned. Except for the wood-products firms and the motel, these businesses cater primarily to local clients.

Section 7.03.02 Employment by Business Type

[See Table VII-3 "Ashland Employment 1989 by Economic Sector" on Comp. Plan page VII-8.]

Table VII-3, which is compiled from City inventory data, describes the proportion of Ashland's employment in each business sector. Ashland had a total employment of 6,049 in 1989, compared to 51,670 for Jackson County (Total wage and salary, March 1989). Ashland accounts for about 11.7% of County employment, slightly above our percentage of County population (11.5%). According to this inventory, three-quarters of Ashland's employment come from the services and retailing sector, with services at 40% and retail trade at 34%. This proportion is high compared to both the State and the County pattern, where in 1986 (the most recent year for which the statistics are available) these sectors represented 26.7% (services) and 23.2% (retail) for the State, and 25% (services) and 29% (retail) for the County.

Normally, such high percentages of employment in these sectors would be a source of concern because these businesses sell relatively small proportions of their products outside the region. Consequently they stimulate few imports and thus limit the variety of goods in the region. However, the situation in Ashland is not average, as the College accounts for 12% of total employment in the City or about one third of the service sector employment. The non-college service sector employment, 28%, is close to both State and County norms. The college employment can be considered export employment, since most of the money for the college comes from outside the region, and is similar in its economic effect to a manufacturing facility that markets its product outside the region.

Section 7.03.03 Seasonality of Employment in Ashland

Ashland's employment figures were checked for annual variation using State of Oregon Employment Division figures. Ashland's overall employment varies throughout the year, with peak employment

occurring in September and the lowest levels of employment in January. The lowest month was 11% less than that of the peak month. Jackson County shows a greater seasonal variation, with the lowest month being 21% less than the peak month. Therefore, while some tourist related jobs are seasonal, the City's total employment picture is fairly stable year round, and is more stable than Jackson County as a whole.

Section 7.03.04 Residency of Ashland Employees

In 1980, 64% of persons in the workforce who lived in Ashland worked in Ashland. Most of the rest worked in Jackson County. This seems to have changed little by 1990. While the 1990 Census will give the definitive answer as to whether Ashland employment has moved out of the City, two recent surveys of homeowners by Southern Oregon Regional Services Institute (SORSI) indicate that the percentage of persons who both live and work in Ashland has not changed dramatically. The first survey, of persons who purchased homes in Ashland in 1987 and 1988, showed that 64% worked in Ashland. The second survey, a random sample of all homeowners in Ashland, again showed that 64% worked in Ashland. While the fact that the percentages are exactly the same in all three data sources is coincidental, the data suggest that new residents, Ashland homeowners, and the population at large are similar in the location of their employment.

Section 7.03.05 Mode of Travel to Work by Ashland Employees

One fact that is unusual about Ashland is the method of travel to work by Ashland workers. Table VII-5 shows Ashland workers compared to Medford workers. It shows that fewer Ashland workers drive to work alone, and many more carpool, walk, bike, or work at home. This is significant, as this factor contributes to a host of related subjects, such as traffic density, air pollution, and the importance of pedestrian and bikeways to the local population.

The pattern of metropolitan areas developing suburbs, which provide housing but little employment, and central cities, which provide jobs but house only the poorest residents, and the pattern of choosing to travel to work in a single-occupancy vehicle, is the cause of many urban and national problems ranging from pollution, dependence on foreign oil, and the balance of trade deficit. Ashland has largely avoided this pattern, and the trend of employees choosing to travel to work by means other than private, unshared cars should be encouraged. In fact, if the 36% who commute is removed from the data, 30% of the people who live and work in the City either walk or bike to work.

[See Table VII-6 "Mode of Travel to Work Ashland & Medford, 1980" on Comp. Plan page VII-9.]

We believe this is the result of three major factors. First, Ashland is compact in form, with residences and places of employment closely juxtaposed in much of the City. Second, it is hard to find parking downtown and at the College, two of Ashland's major sources of employment. For many, it is simply quicker and less expensive to walk or bike to work. Third, many Ashland citizens are environmentally conscious and are willing to change to a less energy consuming and polluting lifestyle when it is made reasonably convenient. Therefore, the City should pursue policies that make these alternatives convenient.

Part 7.04

Land Use and the Economy

Sections:

Section 7.04.01 Location of Ashland's Economic Sectors

Ashland enjoys a diversity of locations for economic activity. The Downtown area, the first and most important area of economic activity for the City, is the heart of the City. It provides a variety of retail goods and services, and also serves as the center of tourist activity in the City. The Ashland Downtown Plan, adopted by the City in 1988, provides a guiding document for development of this area.

Adjacent to this area is the Railroad District, another historic commercial center that has declined with the railroad's importance. The commercial area along A Street has had a resurgence of activity in recent years, as this area offers the same convenient location as downtown, but substantially lower land costs and rents. It is a mixed use area, providing a variety of retail, service, industrial, warehouse, and residential uses, sometimes in the same building!

North of the railroad district is the Hersey Street industrial area, which extends from Laurel Street to Ann Street. This area features mostly manufacturing and service related industries. Hersey Street here forms a border between a residential area and a manufacturing and commercial area, so uses at the edges sometimes cause conflicts, such as complaints of noise and dust. New uses should be encouraged to be relatively quiet, and this border is a favorable location for mixed uses to ease the transition between the commercial and residential uses.

North Main, from the downtown to the north City limits, is an area of mixed development. Some commercial development has occurred and additional commercially zoned land exists. Restrictive zoning has prevented contiguous strip commercial development from occurring along Main Street, but older buildings have been renovated and new structures built under conditional use permits. Further north, the Valley View commercial area provides important retail activity. It is outside the City limits, but inside the Urban Growth Boundary. The strongest activity in this area is automobile sales. This area is well located for its market, convenient to the freeway, away from the downtown, and allows a land intensive use in an area which does not disrupt the rest of the City. Because of its location on County land, site review standards similar to Ashland's are enforced by the County, and the appearance of developments in this area has improved in the past 10 years. This area has one of the largest retail grosses in Ashland, reportedly accounting for $50 million in sales in 1989.8

Siskiyou Boulevard has scattered commercial and institutional development from the City limits to the downtown. Like North Main, the mix of residential use with limited commercial development enhance the community's appearance. A major center of activity is the College and associated motel and retail development across the street. South of Ashland Street extending to Walker Street is a commercial retail area. South of Walker a mixture of neighborhood retail and residential development dominate the landscape.

Ashland Street is Ashland's "other" commercial area. Once just the highway to Klamath Falls, the road began developing in earnest with the completion of the I-5 freeway and the interchange at the intersection of Highway 66 and I-5. This area has continued to develop, and now represents much of the newer commercial area of the City. Located here are small commercial businesses interspersed with three small shopping centers, some office uses, a major convention center in this corridor, and traveler's services

clustered around the freeway interchange. The major employers are traveler's accommodations, restaurants, and retailers.

The City's largest area of manufacturing employment is the Mistletoe-Washington Street area. This large area bounded by the freeway on the east, the Railroad tracks and Tolman Creek Road on the west, Ashland Street on the north, and Siskiyou Boulevard on the south is the largest area of private sector non-retail employment in the City. In addition, it contains ample land to support development of this kind for the foreseeable future. Major employers in the area are Croman Corp., Ashland's largest manufacturing employer and the only remaining sawmill, the Forest Service's Ashland Ranger District, and a variety of small specialty firms.

In addition, significant economic activity occurs in the form of home occupations throughout the City. Many of Ashland's most successful firms began as home occupations, and when they outgrew their homes, moved to larger facilities. Others are content to remain at a size that is appropriate to the residential districts within which they are located. The policy of permitting home occupations provides an important opportunity for small businesses to start up with a minimum of cost and risk, and can be thought of as an incubator for new ideas and concepts in Ashland's economic life.

Section 7.04.02 Survey of Commercial, Employment and Manufacturing Lands

Jackson County Tax Assessor records were examined to provide information on the size and value of Ashland's economic areas. Ashland presently has three zones mostly devoted to economic enterprises. They are Commercial, used mostly for retail and services, Manufacturing, for industrial uses, and Employment, a combination of the two that allows for a wide variety of uses while providing for site review to ensure neighborhood compatibility and aesthetic design.

The 72 acres of developed commercial land contain the largest amount of building improvements and building value. There are 1,156,000 square feet of commercial buildings in Ashland in 1989, according to the Jackson County Assessor. The improvements are valued at $39 million and the land at $17 million. As of July, 1990, there were 31 acres of vacant land zoned C-1, and 0.4 acres of vacant land zoned C1-D, which is a special downtown overlay zone. Twelve of the vacant C-1 acres are contained on hilly land north of Ashland Hills Inn, which has limited potential for many retail and service uses. All the vacant land has access to adequate public services.

The City has 45 acres of developed Manufacturing areas, but only 61,000 square feet of buildings are reported in the Jackson County Assessor's office. There are many special purpose structures, such as wood kilns and some manufacturing buildings which are not included in these totals. Manufacturing lands are assessed at $8.6 million, and the improvements at $1 million. The only area of vacant land zoned M-1 is a 21-acre parcel of land south of Hersey Street, which is owned by the Southern Pacific Railroad, but is currently for sale. The property has access to services but has limited transportation access at present.

While 79 acres have been developed in Employment uses, the total building square footage is only 400,000 square feet. The buildings are valued at $9.5 million, and the land at $7 million. As of July 1990, 90 acres zoned E-1 remained vacant within the City limits. Fifty-two acres have immediate access to services, 16 acres can be provided services within one year, and 22 acres are associated with the Ashland Airport and have development potential only for airport specialized uses.

Details of the City's vacant land survey are contained in the report "Vacant Land in Ashland, July 1990".

Section 7.04.03 General Land Use Philosophy

Zoning should encourage a heterogeneous mixture of uses, including, where appropriate, residential uses. While residential uses are appropriate in some areas, those areas reserved for heavier industrial uses should be identified exclusively for economic activities. In addition to the existing centers of economic activity, small, neighborhood scale retail areas, and small employment uses should be permitted to mix with high-density residential uses in areas that are impacted with heavy traffic.

It is important for the City's overall economic health that a high standard of architectural design, sign control, and landscaping be required of new developments. While this is most important in areas that are highly visible or in buffer residential areas, it can also be applied to industrial parks and similar areas.

Finally, Ashland's private-sector functions best when there are clearly defined rules stating what can and cannot be done. The City's regulations should strive to provide clear guidance, and assure that most decisions are predictable, clear, and based on objective, measurable criteria.

Ashland's current regulations can be characterized as rigorous, and the public process for achieving approval can be daunting. While most would agree that Ashland's land use regulations should protect the public interest and assure quality development, the current process is in need of reform. What is needed is clearer, more objective standards that involve less discretion, especially in the realm of land use approvals in the planning process. The uncertainty of the planning process is more harmful to economic development than even a rigorous set of definitive regulations. Entrepreneurs are already beset with a large risk in starting or moving a business, and uncertainty in the City's process will chill the expansion of business in the City. The City should revise its regulations and develop standards, which clearly delineate the proper realm for public regulation, and to provide a predictable outcome to the approval process when standards are met.

What is needed to encourage the location of new firms or the expansion of existing firms is the availability of reasonably priced fully serviced lots with flexible zoning regulations. A quick and relatively certain approval process assures that projects can develop rapidly, taking advantage of market opportunities in a timely fashion. This can be accomplished without compromising Ashland's high standards for development. Therefore, the continued annexation, subdivision, and development of Commercial and Employment land is essential to the continued health of the local economy. The City can do much to assist in this process.

Part 7.05

The Future

Sections:

Section 7.05.01 Ashland's Future Population and the Labor Force

Changes in Ashland's population structure projected in Chapter Five of the Comprehensive Plan indicate that between now and 2005, the greatest proportionate population increase will occur in the 35-65 year old age group, that is, the mature work force. This increase of about 1,200 people among that segment of the population in its' most productive years could, of itself, raise Ashland's income levels. This is especially likely if they are encouraged to take advantage of the economic opportunities presented by the changing national and regional economy as these become more internationalized and more dependent upon the rapid flow of reliable information and its timely interpretation and analysis.

A large percentage of Ashland's population has long been college students aged 18-22 years. Over the next several years college enrollments are expected to grow less rapidly than the city's population, both because of enrollment caps and because of a declining number of high school graduates in the college's traditional service area9. The student population is also expected to include an increasing share of mature students returning to college after a period of time in the workforce. Therefore, student population can be expected to depress average earnings less in the future than has been the case in the past. Because the student population is likely to be a smaller proportion of the total and because more students will be earning family wages, Ashland's mean household income should rise over the next few years due to demographic changes alone. Failure to observe such a rise in the future should be a matter of concern.

The increase in numbers of mature workers (ages 35-65) implies that the economy will need to offer both a variety of satisfying jobs and a continued high quality of life in order to retain its workforce. One of the most important things that the community can do, both to assure the retention of its mature workers and to enhance their productivity and earnings, is to foster communication and innovations that take advantage of developing economic opportunities. In this process, SOSC could be an invaluable asset, and so will the best possible facilities for transportation and communications, both within the region and to other parts of the world.

Table VII-10 projects Ashland's retiree population and compares expectations for Ashland to those of Medford and the rest of the county. There are three reasons not to expect retirees to become a major force in Ashland's economy over the next fifteen years. First, over the last thirty years, the percentage of Ashland residents who are retired has not increased, but remained constant; or perhaps even decreased10. Second, the cohort that appears to be responsible for most of Ashland's growth in the past ten years, the "baby boomers", will not yet be entering retirement age by the end of this planning period. Third, the erosion of Ashland's retirement population relative to Medford and the rest of Jackson county can be expected to continue in light of the rapid increases in real-estate values expected for Ashland, especially if these increases continue to be greater than the increases in the rest of the county.

Section 7.05.02 Future Employment Distribution

If there were to be no change in Ashland's employment structure between now and 2005, additional jobs would be distributed in the same proportion as currently, with three-quarters of the growth in Services and Retail trade.

This appears to be the inevitable case. The Bonneville Power Administration 1990 Coordination Agreement Forecast has projected that in the Pacific Northwest Region, total job growth will be 21% between 1988 and 1998 -- somewhat faster than what Ashland has projected for our local economy (16%

in the same period). Only 7% of the regional job growth was projected to come from manufacturing. 3.1% was to come from construction, 33% from services, 32% from wholesale and retail, and 25% from other non-manufacturing. Therefore, it seems likely that in the year 2005, Ashland will have the same or even greater proportion of jobs in services and retail.

[See Table VII-6 "SORSl/SOVA Tourism Data and Model, Accommodation Type for those who stayed In Ashland" on Comp. Plan page VII-14.]

Part 7.06

Future Growth and Development of Ashland's Economic Bases

Sections:

Section 7.06.01 General

While Ashland has qualities that make it attractive to many businesses, it is not a suitable location for some industries. Businesses, such as fruit packing plants, which consume large quantities of water, plants which produce large amounts of air pollution, or petrochemical plants which produce toxic wastes, would not be welcome, and could cause disruption of public services.

With the exception of these types of industries, Ashland can provide for the lands set-aside for commercial and industrial development, all key public facilities. All of Ashland's commercial and industrial land resource either has or has access to adequate sewer, water, transportation, and storm drainage.

Section 7.06.02 Tourism

Ashland has a large number of visitors every year. Some of these are tourists, but not all. Visitors include tourists, persons attending conventions held in the City, business travelers here on business activity, persons visiting relatives, and travelers simply spending the night before heading on their way. The tourist industry, therefore, may concentrate on the tourist as many people assume they are, but also serve the other visitors in varying degrees.

From 1981 to 1989, OSF increased attendance by 30%, from 264,000 in 1980 to 344,000 in 1990. During the same period, total hotel rooms sold in Ashland increased by 173% -- from 90,753 in 1981 to 247,624 in 1989. The increase in hotel rooms was much greater than the increase in attendance at OSF. Some of the possible reasons that this occurred were that many patrons for OSF were previously staying in other accommodations in Jackson County, and also, a growing percentage of tourism is independent of OSF.

In 1990, the Southern Oregon Visitor's Association (SOVA) contracted with the Southern Oregon Regional Services Institute (SORSI) to conduct research on tourism in Jackson County. Rebecca Reid was the primary researcher for this project. The results shed some new light on the nature of tourism in Jackson County and Ashland.

Extensive interviews were conducted with 434 visitors to the area in Lithia Park from the period from June through September in 1990. Of the persons interviewed, only 227, or 52%, were staying the night in Ashland. Off these, 15% stayed with friends or relatives, 7% were camping, 9% stayed at other accommodations (such as the youth hostel), 13% stayed at a bed and breakfast inn, and 56% were in motel or hotel lodging.

Using this data and other data gathered from the survey, Reid built a model of visitor census in Ashland. The model's results are contained in Table VII-6. It shows that Ashland has a total visitor population of 258,670, with about one-half occurring during the summer months.

For the past 20 years, increases in the annual sales of tickets to OSF performances has been considered the primary reason more tourists were coming to Ashland. However, as the tourism industry and OSF matured, this correlation has become looser. In the plan period, OSF plans only minor increases in total annual sales, on the order of 5% or less. In addition, other attractions in the area have increased, and will continue to cause the tourist census to increase, albeit at a slower rate than the last 20 years. Richards and Pirsadeth11, in their study of the Ashland economy, estimated that Ashland tourism would increase by 42% by the year 2005 independent of increases in ticket sales at OSF. Therefore, total tourist census projected in the year 2005 would be 310,000 annually.

Actual tourist activity will depend equally on what is done in Ashland to attract and accommodate tourists. Inevitably, programs implemented successfully to maintain the local quality of life will also attract tourists, but independent of policies designed for the benefit of residents, the city's community and government can act both to promote tourism and to maintain adequate city services and resources. Projects such as the proposed Pacific Institute of Natural Sciences or "off-Shakespeare" theater productions will go a long way toward supplying the tourist attraction required to meet the projected demand.

Since they are almost 1,000 rooms in Ashland and the immediately surrounding area, an additional 420 rooms would be needed to meet this demand, if no steps are undertaken to expand the length of the tourist season or otherwise alter today's occupancy rates. At about 950 square feet of gross land area per room, including amenities such as laundry and parking, this implies an additional 9.5 acres for hotels and motels. Different densities of land use resulting from different architectural design in the industry would, of course, lead to different land requirements.

The tourist sector, unlike other divisions of the economy, is defined not by product, but by market. Consequently, a large variety of activities cater, at least in part, to tourists. The tourist proportion of a community's trade is significant because it allows the community to "import" goods and services from beyond its boundaries. Tourism can also be beneficial because tourists patronize a wide variety of establishments and consequently contribute to diversification of the goods and products produced locally. Tourism thus promotes specialization in production and consumption of a greater variety of goods than the community itself can efficiently produce. When businesses that cater substantially to tourists are examined, it is immediately apparent that the proportion of an establishment's trade that is due to tourism varies significantly both with business type and with individual establishments in a given trade.

Among establishments associated with the tourist trade, those that cater most nearly exclusively to tourists are the hotels, motels and inns. There are no exact figures, but it is likely that 85% or more of their business can be classified as tourist trade. This proportion can be expected to be lower, but still substantial in the entertainment, restaurant and retail trades.

To test the popular notion that Ashland, due to heavy tourist traffic, has more than its share of restaurants, Table VII-7 compares the number of restaurants in Ashland to the number in other Oregon cities of comparable size. In fact, Ashland has fewer restaurants per resident than Grants Pass, Roseburg, or Klamath Falls. Cities of comparable size with equal or fewer restaurants per person are the suburban towns in the Portland metropolitan area, Milwaulkie and Oregon City. The reasons for Ashland's position in this comparison should be investigated, as the logical conclusion, that Ashland residents eat out less often than people elsewhere, invites explanation. This could be explained by the large proportion of relatively expensive restaurants, which could invite opportunities for inexpensive restaurants directed at the local resident.

[See Table VII-7 "Restaurants in Ashland and Comparable Cities" on Comp. Plan page VII-16.]

Restaurant managers were also asked to calculate or estimate the percentage of their total receipts earned in each month of the year. The difference between the minimum month and each of the other months was then calculated and summed, to derive the total seasonality of demand. Seasonal demand was derived in the same way using national statistics for restaurant sales.

The difference between national seasonal variation and local seasonal variation was then calculated and assumed to be attributable exclusively to tourism. This yielded the result that about half of total restaurant sales are due to tourists. Because only 13 of 60 questionnaires were returned, the survey was unable to prove that the importance of tourists to restaurants varies according to the restaurants' location. However, questionnaires were coded according to area and it appears that downtown restaurants and those north of downtown get about half their business from tourists, those on Siskiyou Boulevard south of the library or near the College depend on tourists for only a tenth of their business, and those on Highway 66 beyond the freeway are even more heavily dependent upon the tourist trade than those downtown.

Section 7.06.03 Education

Although the State Board of Higher Education has placed a cap on enrollments at Southern Oregon State College, it is likely that this institution will remain a motor of economic growth for the city through generation of payroll, local purchases by employees and students, enhancement of student abilities to find or make jobs for themselves in Ashland, and as an incubator for innovations and as a favorable attraction for education-intensive firms that may, be considering the move to Ashland. If the College is to become an active force in attracting new industry from outside the region, it needs to develop greater capacity for post-graduate education and research, but only a few such developments can be anticipated in the near future because of limited state resources.

Section 7.06.04 Retail Sales and Services

Research by John Richards and Hassan Pirsedeth, projected retail sales as a function of population, personal income of residents and tourist census. The results indicate that there could be an increase in retail sales volume of 31% between 1987 and 1992. For every $1000 increase in gross income, Ashland residents increase their retail spending by $249 in Ashland. The average tourist spends $237 in Ashland. Increases in the number of tourists, personal income and the non-student population contribute more to retail sales than do increases in college enrollments.

Based on the 1987 Census figures for Retail trade, and the lack of retail construction during the 1980's it appears that Ashland may experience an increase of retailing activity in the next few years, especially retailing directed at the local population. If this happens, it will increase the turnover of local dollars earned from such sources as tourism or manufacturing. Without a significant retail market aimed at local residents, any beneficial growth in manufacturing, for example, will primarily benefit the external retail markets where Ashlanders go to shop. The lack of availability of a sufficient quantity and quality of goods locally has adverse affects in local employment, and increases transportation problems, both locally and regionally. While it is unrealistic to expect that Ashland will capture all local retail sale demand, the example of other, similarity sized cities in close proximity to major retailing centers indicate that Ashland could expand its local retail market.

Services are well represented in Ashland. While some are low paying, such as the hotel industry, others, such as software services, offer better pay and increasing demand. Many services, such as software development, have markets out of the area, and are essentially exporting their commodities. The future economy will rely on information services as much as raw and finished materials, and Ashland, with its highly educated work force, will be in an excellent position to capitalize on this expanding market. Information essentially has no bulk, transportation costs of the product are insignificant, and it is feasible to conduct a national or international business from a small, rural city. This has as much potential for export based job creation, as has light manufacturing.

Another basic need for local retailing is to form traditional retailing centers for neighborhoods. One way to reduce traffic flows on major arterials is to provide local stores oriented to specific neighborhoods. These small centers provide basic goods and services, and also form the focus of neighborhood development. An analysis of Ashland's neighborhoods indicates that three are without neighborhood retailing within convenient walking distance, Quiet Village, North Main/Wimer, and East Main/North Wightman. The Plan and Zoning map should be modified to accommodate more local retail services at locations that are convenient to these neighborhoods.

Section 7.06.05 Manufacturing

There is one mill remaining in Ashland, Crowman Corporation, which produces primary timber products such as lumber. It employs about 130 people. A second mill, Parson's Pine, specializes in re-manufacturing odd-cuts of lumber and employs some 90 people. Ashland timber-based manufacturing appears largely to have stabilized since the shake-outs of the early part of the decade. The trend now appears to be for the large resident firms to continue to diversify their product lines and markets without growing rapidly. At the same time, the number of small firms using wood as the basic raw material has been slowly increasing in Ashland over the last ten years.

This information indicates that Ashland-based wood products manufacturers are using inputs more efficiently, diversifying their product lines, adding more value to the products sold, and perhaps reaching broader markets. All of these are healthy trends, which should help insulate the local economy from economic shocks in the future. In addition, these trends should allow moderate growth to continue in the wood products industry, despite gradual timber harvest decline, due to product and process innovations.

Non-timber manufacturing, on the other hand, is one of the few areas where job creation can occur with wages above the county average. For this sector to expand, Ashland needs to encourage the development of flat, inexpensive land that is fully serviced, and to ensure that regulatory involvement is kept simple and predictable in these areas, as business decisions often must be made quickly. The best way to encourage the growth of this sector is by ensuring a high quality of life, and good and efficient provision of city services.

Section 7.06.06 Future Land Needs and Employment Distribution

Estimating future land needs is both necessary for a Comprehensive Plan, and somewhat risky. The land needs estimate is usually based on the number of employees per acre, and this varies greatly among uses. In addition, there is no standardized database to use for projections, and planners have relied on rules of thumb based on limited surveys. With the knowledge that the land-needs can only be estimated, a projection can however be based on future employment.

In the 1982 Comprehensive plan, a figure of 10 employees per acre was used, and it appears to have reasonably served the City as a method of projecting gross land needs. It is similar to figures used by other Oregon cities for industrial needs, as Roseburg uses 8.5 employees per acre, and Albany uses 9.5 in their land needs projections. Commercial land needs are often projected using population, and again, Roseburg uses 1.3 acres per 100 persons, and Albany 1 acre per 100 persons.

Ashland's land use appears to be more intensive than these two cities. Ashland has a total land area of 196 acres developed for commercial and industrial use. This is land solely in private ownership, and an adjustment needs to be made for public roads, easements, and parking lots. As this is about 40% of land use in commercial areas, the total land used by Ashland's economy is 274 acres. This land supports about 4500 employees -- Ashland's employment total, not including public sector, non-profit, and Valley View Road employees. The resulting ratio is about 16 employees per acre. While this is higher than the projection estimate, it includes areas such as the downtown, which has taken years to develop to its current intensity. Therefore, using 10 employees per acre is a prudent projection assumption.

By applying the present proportion of employed people in Ashland to the projected population in 2005, we can get a general idea of the number of jobs that will be needed by 2005. Two estimates can be derived for this proportion, one from State Employment figures for Jackson County, and one from the comprehensive employment data bank compiled for this study. For Ashland, City figures yield 37%, and countywide, the ratio is 39%. Applying these proportions to the expected population of 19,995 for 2005 predicts that employment in Ashland will grow by between 1,350 and 1,750 additional jobs over the next 16 years, representing a yearly growth of less than 2% of the 1989 base. For the projections for land use in the City, the assumption is that Ashland will be close to the countywide employment to population ratios.

An additional 1,750 new jobs translates into a need for about 175 acres of new land area for all commercial, employment, and industrial needs. In addition, 9.5 acres of land would be needed to accommodate tourism needs in the planning period, for a total of 185 acres. However, the employment densities vary tremendously. Retail employment can be from 20 employees an acre in shopping centers to 200 an acre in an employment intensive, downtown use. Industrial needs can range from a high of 35 to 40 employees an acre for labor intensive uses to 1 employee an acre or less for land intensive activities, such as warehousing or transportation related activities. The exact mix of retailing services, wholesaling, and manufacturing is impossible to predict and difficult to control, so forecasting should err on the side of allowing ample, rather than restrictive policies for land availability. The City should ensure that the Comprehensive plan includes at least 184 acres of land, and also that it include land that is suitable for a range of economic activities, such as retailing, office uses, warehousing, and manufacturing.

Currently the City has 31 acres of Commercial land; 101 acres of land zoned Employment, and 21 acres of vacant Manufacturing land, for a total of 152 acres. This leaves a deficit of 32 acres of land to be provided in the Urban Growth Boundary. With a few minor exceptions, the major area of vacant land is the area bounded by the railroad and the freeway, between Ashland Street (Highway 66) and Crowson Road. This area contains 66 vacant acres. In addition there are another 10 acres vacant in the Urban Growth Boundary (UGB), mostly in the vicinity of Ashland Street and the 1-5 freeway. The total of vacant land in the Urban Growth Boundary, is 106, more than the required 32. Therefore, there is ample land in Ashland's UGB to sustain the local economic expansion anticipated.

While the "extra" 74 acres of land is not needed in an absolute sense, it is all committed to urbanization by the existing land use pattern and the extension of services. For example, most of the vacant land is in the area bounded by Siskiyou, Crowson, East Main, and Ashland Street. Most of the rest is in the Valley View area. Specific uses will need to locate on these lands, and annexations should occur not only because other land is not available in the City, but also because land proposed for annexation meets the specific site requirements of the proposed new use.

Section 7.06.07 Economic Diversification and Wage Trends

Economic diversification is considered essential for the general economic health of a community as it insulates the workforce from cyclical trends in the national economy while helping to maintain a broad base for egalitarian access to amenities.

A review of the sectoral allocation of employment in Ashland (Table VII-3), as stated earlier, demonstrates that the retail trades and services employ an unusually high percentage of job holders in Ashland, at 34% and 40%, respectively. While these are the sectors that have been growing fastest throughout the county, state and country over the last decade or more, they are the lowest paying sectors outside of agriculture at 64% and 91% of average wage respectively. However, these sectors also contain employment categories that are relatively high on the wage scale, such as the financial, insurance, medical and legal fields, or that provide a fairly good wage and good benefits, such as employment at Southern Oregon State College or a general merchandise department store.

Also, while the retail and service sectors do not always provide a high wage rate, it is beneficial to the community to encourage local retail and service spending, both from an economic and an overall planning perspective. While Ashland has room for growth in this area, these sectors should not be depended upon to provide large numbers of high wage jobs, but rather to provide a few highly paid jobs and a large number of middle to lower income jobs, beneficial to entry level workers, second income earners, students and others who need part time work.

It is evident from wage trends in Jackson County that the services sector enjoyed a slow but steady rise in wages relative to other sectors from 1980 to 1987, and that the wage rate may have stabilized at approximately 90% of average. This has occurred despite the fact that wages in the lodging industry have remained near 40% of the average and it suggests that the service sector has itself been evolving towards higher-value activities. This impression is reinforced by a review of wage growth in finance, insurance

and real estate (the "business services" sector), where there has been a generally constant increase in relative wages from below average in 1980 to roughly 10% above average today.

The major employment sectors offering above-average wages are contract construction, manufacturing including wood products, wholesale trade, and transportation, communications and public utilities, in declining order of total employment. Manufacturing wages dropped from 144% of average in 1980, remaining at roughly 130% since 1982, largely as a result of a similar but somewhat more pronounced drop in wood-products wages. The difference between wood products wages and total manufacturing wages has declined considerably over the decade.

Wages have been less stable in the construction industry over the decade than in any other sector outside of agriculture or mining. While employment in the construction industry is currently high, this is a very volatile sector, and depends largely on increased immigration for expansion. Thus construction cannot be considered as a target sector for economic development except to the extent that local firms can compete for jobs elsewhere or replace non-local firms in local construction.

It appears that the City's best strategy is to anticipate that the majority of job creation will be in the services and retail sector. Ashland should work to encourage job creation in the manufacturing sector as well. However, there will not be many of these jobs available in the planning period, and there will be a lot of competition from other communities for them. The best strategy is to encourage service and retail jobs, as well as manufacturing jobs, which pay wages equal to or higher than the County average.

It is important to note, however, that little economic change can occur by discouraging economic activity that is not as desirable as others. While the City may not wish to encourage or give incentives to businesses with low paying jobs, it is counter productive to actively discourage the enterprises that do not desire City help. If such jobs are created, the market place should decide the wage rate. Land use policies that discourage low wage jobs will have little impact, and may prevent start-up operations that eventually would contribute a great deal to the local economy.

Section 7.06.08 Suitability of Vacant Land for Anticipated Uses

Considering where the job creation is projected to occur, the City's land inventory needs to be analyzed to determine if sufficient land, with the right characteristics, exists for the projected uses. Ashland's vacant land inventory show that the following three general categories exist:

1. Flat land (less than 10% slopes), existing or suitable for creation of large parcels, (greater than 1 acre). Total acreage that fits this category is 133 acres in the city limits, and 103 acres in the urban growth boundary. Of the land in the city limits, 15 acres are zoned commercial, 97 acres are zoned employment, and 21 acres are zoned for manufacturing. Of the land in the urban growth boundary, 103 acres are designated for employment uses, and 4 acres are designated for commercial uses. This type of land is suitable for manufacturing, large office, services, retail, and large scale tourism, with mixed residential uses as an ancillary use.

Some of the large parcels in specific locations should not be permitted to develop for tourism use, as they are more suitable for higher wage service and retail uses. An example would be that the downtown area and the freeway zones are well suited to tourism development, but the Ashland Street Corridor from Washington Street to Siskiyou Boulevard should be reserved for retail, service, and mixed uses. This should be specifically outlined in the zoning for the sites.

2. Flat land, (less than 10% slopes), small parcels (less than 1 acre). Total acreage is 6 acres in 18 sites, all in the city limits. Of these, 2.25 acres are zoned commercial, 0.4 is zoned C1-D, and 3.52 acres are zoned employment. These are suitable for the location of Service and Retail needs, as well as some tourism.

3. Sloping land (greater than 10% slope). Total acreage is 17 in three sites; 13 acres zoned commercial and 4 acres in employment. This land is generally unsuitable for manufacturing, large-scale

retail, and large scale service sector development. It is better suited to office use, tourism, and mixed commercial and residential uses, where a variety of small-scale buildings can be accommodated on the slope without large-scale cutting and filling.

4. There also exists a need to permit some conversion of residential land surrounding Ashland Community Hospital to take the best advantage of medically related jobs. Such businesses, such as doctors and other medical specialists, and specialty sales such as pharmacies are best located in proximity to the Hospital. This not only encourages the growth of these well paying service sector jobs, it also enhances medical services in the community, and reduces traffic by placing similar facilities within walking distance of each other. This area already has a commitment to the Hospital, as a conversion from residential to commercial has taken place over the last 20 years. The needs of the medical community to expand in this area must be evaluated, and an area designated with zoning that will allow medical uses outright, retaining a higher degree of landscaping than commercial areas, and facilitating the pedestrian communication between uses in this area and the hospital.

Part 7.07

Conclusion

Sections:

Section 7.07.01 General

Ashland will see as many as 1750 new jobs created by the year 2005, mostly in the services and retail sector. Up to 184 acres of land will be needed to accommodate this expansion, but this could vary significantly due to variations in employment needs within the different economic sectors.

Ashland's economy is more specialized in services and retail sales than is either the State or Jackson County. Part of the local specialization is due to SOSC, which accounts for, one-quarter of Service industry employment, and part is due to the tourist trade. In the past nine years, Ashland appears to have conformed to the national, state and county trends of adding more small businesses, especially in the services and retail sectors. However, this trend is very pronounced in Ashland and a large number of these firms employ only one or two people, indicating that they are not entrepreneurial but merely self-supportive in nature.

Tourist counts could increase by nearly 50% by 2005 if adequate levels of services, accommodations and entertainment facilities are supplied. This projection is largely independent of short-term fluctuations in the national economy. This change will require an expansion of public facilities, especially parks, streets, and parking, or innovative programs to reduce traffic through non-structural alternatives such as the provision of mass transit services for both local residents and visitors.

More hotel-motel accommodations can be supported by the additional tourists. If no additional rooms are built, more people will stay in nearby communities and come to Ashland by car, causing additional traffic and parking problems. Building motels and hotels in Ashland will allow the city to encourage the use of public transport or shuttle services in town, and will provide additional employment and tax base. At present occupancy rates, however, it would take an additional nine and one half acres to provide the number of rooms that will be demanded at the peak month in the year 2005.

The City should encourage those tourism-related facilities that increase the variety of services offered and wages paid, such as new theaters and scientific exhibits. The City should accommodate new hotel rooms sufficient to allow tourists whose primary destination is Ashland to stay in the City limits.

The major focus for diversification of Ashland's economy over the present planning period should be diversification of markets. There is such a risk in depending upon any one economic sector, such as tourism, as the major export market for locally produced goods and services. Establishment of light manufacturing firms with high value-added components should be especially encouraged. Sophisticated services catering to a geographically dispersed clientele and retailing targeted to local residents should be encouraged as well.

Demand for real estate in Ashland may continue to drive prices up. This may make it more difficult to attract independent small business people to Ashland, and more difficult to attract highly educated personnel to Southern Oregon State College. Either of these circumstances could reduce Ashland's ability to diversify its economy. However, it is apparent that nationwide, quality-of-life factors tend to outweigh cost factors in the establishment of new, "footloose" enterprises, as long as business costs are not prohibitive. Therefore, an aggressive affordable housing policy will be a key to Ashland's long term

economic health, as the economy can diversify only as long as it is supplied by a local labor market. It is not realistic to assume that Ashland wages can be raised to the level required for the average worker in Ashland to be able to afford the average new home in Ashland in 1990.

Retirees are not expected to be a major influence in Ashland's economy over the next fifteen years. In fact, relative to Medford and the rest of Jackson County, Ashland's retirement population is expected to decrease due to rising real-estate values. These rising costs appear to have discouraged nearby non-locals from retiring to Ashland. Ashland residents seem able to retire here, but are concerned with rising property taxes once incomes are fixed.

Southern Oregon State College will continue to be an economic force in the community, but until it develops a stronger research capacity and graduate offerings, it is unlikely to increase its impact on the City's economy. A stronger educational component could serve both product diversification through a basic sciences component, and market diversification through the business and social sciences components.

These components could attract knowledge-intensive manufacturing such as computer software and medical specialty businesses to Ashland. Educational facilities and professional services are other types of businesses that could be expected to locate and flourish in Ashland. Establishment of an Asian Studies center, affiliated with the College or independent, is an important step toward educational enhancement of marketing potential.

The bulk of Ashland's manufacturing remains in the wood products sector, but several small firms are adding new lines of products in this sector. Overall, Ashland's manufacturing base has diversified somewhat over the last five years, but its diversity rests in large part on very small firms. The city might do well to consider the tenuous nature of the first few years for such firms, and to especially encourage entrepreneurial firms (those that provide employment for more than the owning household). While some of these can capitalize on the tourist market, a wiser strategy may be to encourage access to broader markets.

The city needs to develop policy options, which strike a balance between the growth of tourism and the growth of population and markets. One possible option is to explore new markets for the City's manufacturers. Policies to attract businesses of 10-50 employees or to encourage existing manufacturers to grow to that size, might enable individual firms to expand the city's market area by penetrating more distant markets.

The City should encourage local businesses to concentrate on increasing the value added in manufacturing, while encouraging new firms with high-value-added products to settle here. Markets should be the primary target of economic diversification efforts in Ashland over the present planning period. While marketing cooperatives may be an avenue to pursue, every attempt should be made to utilize the State's marketing resources available through the Oregon Department of Economic Development and the Federal resources available through the Small Business Administration and Foreign Trade Administration. The City and SORSI might cooperate to help make these resources more readily available to local entrepreneurs.

Section 7.07.02 Assumptions

The employment to total population ratio within the City will approximately equal 39% by the year 2005. Ashland will add approximately 1,750 jobs during this time. Most of these jobs will be in the service and retail sectors. An additional 175 acres of land will be developed during this time to accommodate the increase in job creation.

Unemployment rates within the City will remain relatively constant throughout the planning period due to continued immigration.

Commercial and industrial activities are generally urban uses and, as such, shall occur within the urban growth boundary.

Non-urban, resource-based employment (i.e., forestry, fishing, mining and agriculture) will not provide significant employment growth in the future.

New development will consume about one acre of land for every 10 new jobs added to Ashland, although there will be a wide range on individual projects, from 0.1 jobs per acre to 100 jobs per acre and more.

There will be a need to accommodate substantial increase in tourism, which will require the addition of 420 hotel rooms over the planning period, and this will create a need for about 9.5 acres of development of hotel and motels.

The role of the City in economic development is to encourage, but not lead nor to overly regulate the marketplace.

Section 7.07.03 Goal

To Ensure that the Local Economy Increases in its Health, and Diversifies in the Number, Type, and Size of Businesses Consistent with the Local Social Needs, Public Service Capabilities, and the Retention of a High Quality Environment.

1. Policy - The City shall zone and designate within the Plan Map sufficient quantity of lands for commercial and industrial uses to provide for the employment needs of its residents and a portion of rural residents consistent with the population projection for the urban area.

2. Policy - The City shall design the Land Use Ordinance to provide for:

    a. Land division and development within employment and manufacturing districts, and continue the employment zoning district which will provide for service, retail, and light industrial uses consistent with specific performance standards relative to heavy truck traffic, noise, dust, vibration, and single-passenger vehicle trips.
    b. Controlled access along Ashland Street to ensure limited points of common access to businesses that are developing or undergoing development in this area.
    c. Specific development guidelines which will ensure that:
        i. New development or redevelopment in the Historic District will be compatible with the character of the district.
        ii. Development along Siskiyou Boulevard and Ashland Street will not primarily be automobile-oriented, but will also include attractive landscaping and designs that encourage pedestrian, bicycle, and mass transit forms of travel.
        iii. Strong sign regulations exist which ensure that the number, size and placement of signs are the minimum required for recognition by the public of the business at the site.
    d. Retail, office, traveler's accommodations and neighborhood shopping in residential areas, at development intensities that are appropriate to the area.
    e. Commercial or employment zones where business and residential uses are mixed. This is especially appropriate as buffers between residential and employment or commercial areas, and in the Downtown.
    f. Medical uses as permitted uses in a designated, zoned area surrounding the Hospital and Maple Street.
    g. Clear and objective standards for development reviews that provide for a quick and predictable approval process with a reduced amount of uncertainty.

3. Policy - The City shall develop and implement an economic development program which will attempt to increase the number, variety and size of retail, service, and light industrial activity employers within the urban area, with particular emphasis on employers who pay wages at or above the median

County wage and employ from 5 to 100 people, or who are locally owned. The City shall work with regional economic development agencies on coordinating regional economic development activities.

4. Policy - In accordance with policies VII-2 and VII-3 above, the City shall take such actions as are necessary to ensure that economic development can occur in a timely and efficient manner. Such actions may include the following:

   a. Use of the Local Improvement District process to reconstruct or install public facilities to commercial, employment, and manufacturing zoned lands. Land and buildings should be suitable for use by small service and manufacturing industries of about 10 to 50 employees. Two areas of the City that would benefit from this policy are those lands designated Employment served by Exit 14 of the I-5 freeway and Hersey Street and "A" Street.
   b. Utilization of available grants and loans to finance the extension of public facilities to lands zoned or planned for commercial or industrial use.
   c. Inclusion within the Capital Improvement programs facilities improvements, which will help achieve long-range development goals and policies.
   d. Creation of incentives for the private sector to develop and divide Employment and Manufacturing lands, making them available for commercial and manufacturing uses.

5. The City shall encourage economic development of the local resources and enhance employment opportunities for existing residents. The City's policy is that economic development shall always have as its primary purpose the enhancement of the community's economic health.

6. The City shall work with the College to encourage the growth of research and graduate programs. The City shall encourage the establishment of the Asian Studies facility, and other such facilities that provide a bridge to the international marketplace.

7. The City is clearly unsuitable for the following types of businesses:

   a. Businesses, which use large amounts of water, especially when Ashland's water needs peak.
   b. Businesses that emit significant amounts of air pollution.
   c. Businesses that create toxic wastes that require specialized disposal techniques not available locally.
   d. The City shall include in the Land Use Ordinance specific list of businesses that are prohibited from operations in the City Limits, or specific performance standards that would define uses that are unacceptable because they meet one or more of the above criteria.

Section 7.07.04 Notations

1. City of Ashland, City Plan, 1980, pVII-9.
2. Future Plan Festival final report, October, 1989.
3. Don Laws, Public Opinion Survey, Southern Oregon State College, Spring, 1989.
4. Personal conversation with Chuck Butler, January, 1990
5. Ashland Comprehensive Plan, Chapter VII, Table 2
6. These figures are calculated from a list of employers and employment figures compiled from data supplied by City Business Licenses, the Oregon State Employment Division, and cross-checked against Polk's Ashland City Directory and the US West Yellow Pages. Employment data not supplied in government records were estimated and spot checked by telephone survey.
7. City Government employment is as reported in the City's Comprehensive Financial Report for the fiscal year ending June 30, 1988, p132. The number given here combines Parks and Recreation Department personnel with other Municipal employees.
8. Personal Conversation with Chuck Butler, January, 1990

9. Oregon State System of Higher Education. Projections of High School Graduates, 1990-2005, Eugene, OR.
10. Bureau of the Census, United States Census, 1960, 1970, 1980.
11. Richards and Pirsedeth Study
12. Mr. Paul Nicholson, Executive Director, OSF, Personal Interview, June 1989.
13. Reid, Rebecca. "Projections of Attendance and Selected Revenues and Expenses" Exhibit 9 of the Pacific Institute of Natural Sciences' request for a conditional land use permit submitted to the Ashland City Council, 14 Nov, 1988.
14. While retail sales have grown at an increasing rate over the last forty years, student enrollments have grown only linearly, and actually declined from 1972 to 1982, so that the relationship between student enrollments and retail sales appears to be negative overall. This is most likely an anomaly of the years for which data are available and should not be interpreted to mean that increasing enrollments lead to a reduction of retail sales.

Chapter 8

Parks, Open Space, and Aesthetics

Sections:

Section 8.01 Introduction

Ashland's character is intimately linked to its aesthetic resources, including its vistas, trees, parks and open space lands. Early settlers appreciated the natural beauty of Ashland's setting, and local scenic sites evolved as community gathering places. As the town grew, traditional use of these sites was gradually formalized. Roper's Grove, a popular 19th century recreation area in the Ashland Creek Canyon, was absorbed into Lithia Park when community ownership of that resource evolved. As Ashland developed, its formal park lands expanded as well.

Because cities are inherently crowded places, park planning has long been a traditional and essential part of urban planning. Landmarks of American city planning such as William Penn's 1680 Philadelphia town plan, Fredrick Law Olmstead's New York City's 1856 Central Park plan, and Daniel Burnham's 1909 Chicago plan, all used parks and open spaces as central elements to alleviate the pressures of urban life. Parks are not a luxury, but a necessary ingredient in a successful urban environment. One of the reasons Ashland is such a beautiful and unique city is because of past efforts at park planning.

Today, Ashland park planning faces new challenges. Many traditional uses of private, vacant lands have been lost in the past few decades. More will soon be lost without a program to acquire and preserve significant lands for both traditional parks and open space. Ashland's urban forest, comprised of both native and imported species, must also be preserved and enhanced.

Successful city planning reflects people's values in the changes that take place over time. In considering Ashland's future, our plans must include both traditional parks and preserved natural areas, and reflect what most citizens's treasure: a community at the base of the Siskiyou Mountains, that works with rather than fights with nature. Preserving this value challenges us to develop a program that will preserve important open space and parkland, while accommodating Ashland's continuing urbanization.

This element of Ashland's Comprehensive Plan presents four programs (Parks, Open Space, Urban Forestry, and Visual Resources), introduces implementation strategy, and defines policies.

Section 8.02 Parks

Ashland has an elected, five-member Parks and Recreation Commission which controls all lands owned by the City of Ashland that have been dedicated for park or open space purposes. This commission is created by city charter and is empowered to levy tax funds for park maintenance and improvements from an annual budget. While they can use the levy to maintain lands the Parks and Recreation Commission has no authority to purchase or acquire new land. This must be accomplished by the City Council, and the lands then dedicated to the Parks Commission by mutual agreement.

Ashland now has 176 acres of parkland, another 1.30 acres of City owned land that is in open space use, such as cemeteries and the golf course, and an additional 58 acres of land used by the community as open space but owned by other public agencies such as the School District or Southern Oregon State College. Fifty-seven acres of City owned land are in the city-owned Lithia Springs property outside the city limits. This currently is leased to the Ashland Gun Club and, serving no other public use, should be discounted in an analysis of park land.

Of the 122 acres of developed parkland, 95 acres are in Lithia Park. There are 17.5 acres in developed active parks, 9 acres at Hunter Park, and 8.5 acres at YMCA park. Two small urban parks Calle Guanajuato, and Bluebird Park, total a little more than an acre. Five neighborhood parks range in size from one-half acre to two-and-one-half acres, with a total acreage of seven-and-one half-acres. There are currently thirteen acres of undeveloped parkland in two sites.

Fifteen acres of land at Southern Oregon State College are used by the community for active recreation, and another 43 acres of land in six school sites are used for neighborhood recreation--a total of 58 acres.

In addition to fulfilling its primary function, the municipally owned 58acre Oak Knoll Golf Course provides a large open space area for the surrounding neighborhood.

Lithia Park is used partly as a regional park -- a fact not clearly reflected in acreage comparisons. A 1981 park usage study concluded that in the summer, one-half of park users were tourists, one-sixth were regional users, that is, from Jackson County other than Ashland, and one-third were Ashland residents. A 1989 Parks Department survey confirmed that these numbers remain applicable today.

Section 8.03 Ashland and Other Cities

In 1989 Rick Landt of the Citizen's Advisory Planning Commit- tee (CPAC) conducted a survey of 23 other cities in Oregon to determine how Ashland ranked in available park land relative to these other cities. Interestingly, Ashland's parkland inventory at 10.5 acres per 1,000 population was below the average of the cities surveyed, which was 12.3 acres per 1,000. While Ashland ranked ahead of some suburban cities such as Gresham (1.8 acres per 1,000) and Hillsboro (2.7 acres per 1,000), it ranked far behind our neighboring cities of Medford (46.3 acres per 1,000) and Klamath Falls (31.3 acres per 1,000). In the latter cases, the cities have purchased large areas that include a significant natural feature, such as Medford's Roxy Ann Mountain. Less urbanized areas like southern Oregon, have more opportunities to find an acquire parkland, due to the availability of undeveloped land and generally lower land values. This fact helps explain the large amount of parkland found in Medford, Roseburg and Klamath Falls.

The conclusion that can be drawn is that while Ashland is slightly below average in all the cities in this survey, the City also would have a very long way to go to preserve as much land as our southern Oregon neighbors. Since cities with significant natural features and a high degree of community amen/ties tend to have more parkland than cities, which are located in homogenous environments, Ashland should be near the top of the list. However, we find ourselves below average.

Section 8.04 New Parks Since 1980

During the 1980's Ashland has been active in purchasing new land for parks Three sites, totaling 56 acres; have been acquired. One, the Bear Creek Greenway Park is a natural park and is not planned for further development except for the extension of the Bear Creek Greenway. The other two sites have not been

developed. In addition, the YMCA Park and two neighborhood parks, Clay Street and Glenwood have been developed. In 1984 a public pool was added at Hunter Park. The development of school-park sites in cooperation with the Ashland School Board has increased the amount .of effective parkland. The development of fifteen acres of community playing fields at Southern Oregon State College has greatly enhanced .the city's ability to provide an active recreation site.

Section 8.05 Types of Parks

Park types can be classified as follows: regional, urban, community, neighborhood, pocket, and open space. A regional park serves a county area, emphasizes an outdoor setting, and usually has facilities for activities such as picnicking, swimming. Emigrant Lake Park is a regional park and is heavily used by county residents.

An urban park emphasizes passive recreation, may have picnic and zoo areas, and serves a population of 10,000 to 30,000 people. Lithia Park is an urban park, but use by people outside Ashland lends it a regional character. A community park emphasizes active recreation, sport fields and tennis courts, and should be within three miles of the area it serves. Hunter Park is a community park.

Neighborhood parks are designed to be within a one-quarter- mile radius of the area they serve, and are related to the neighborhood's character. Neighborhood parks include school parks, which utilize facilities in off-hours. The school parks have advantages. They may be used during summer months and non-school hours; they provide facilities for all age groups, thus eliminating duplication of facilities, and they cut operating and maintenance costs for both the Parks Department and School District.

Pocket parks and special areas axe small areas which satisfy special needs--a place for relaxation in a dense urban area; a spot for a specific recreational activity; an outdoor urban space; or they simply afford visual pleasure. Triangle Park is a pocket park; the Plaza is a special area.

Section 8.06 New Park Areas

The survey conducted of cities around the state indicated that Ashland has 10.5 acres of parkland per 1000 people substantially less than the national ideal of fifteen acres per 1000 population. The simple comparison of acreage and population, how- ever, does not reveal the entire situation. Population demands, local values, and the unique attributes of the local setting are more important than per capita targets. Per capita land needs, therefore, should be used only in assessing the need for city- wide facilities such as community parks.

Need for new parks

As Ashland grows, it will need to add parkland to accommodate new population and to increase recreational opportunities to the existing population. This section deals with the community parks and neighborhood parks that are to be developed.

These parks are generally known as active parks. They differ from open space parks because they involve a significant amount of development. Grading, removal of native vegetation, installation of irrigation and parking, and construction of tennis courts and restrooms have a significant impact on the environment and neighborhood. Active parks can be prodigious traffic generators and can create high parking demands. While necessary for a successful city, they are relatively expensive to develop and maintain.

Ashland now has two active community parks, Hunter Park and YMCA Park. Nine acres and 8.5 respectively, in sum they total 17.5 acres. The city and Southern Oregon State College have developed jointly 15 acres of ball fields that are used both by the college and the community. Several Ashland School District properties are occasionally used as community parks, most notably Walker School and Ashland Junior High School.

Ashland has four neighborhood parks, Clay Street, Garden Way, Glenwood, and Sherwood Parks, totaling over seven acres. Triangle Park, about one-half acre in size and an attractive open space, functions as a pocket park. In addition, the five Ashland elementary schools function as neighborhood

parks. The Parks Commission and the Ashland School District have developed community school-park sites at each of the elementary schools. The area acquired by the City on East Main and California Streets will also be developed as a neighborhood park.

The following criteria have been used in assessing the need for future active parks:

Community parks

1. There should be 2.5 acres per 1,000 population of citywide active community parks.
2. Every neighborhood should have a park within one-quarter mile of most homes, i.e., within easy walking distance and accessible to most children.
3. The park sites must be relatively flat, without significant natural features requiring preservation.
4. The park sites should be located so that traffic flow and parking can be accommodated by using arterial, collector, and through streets whenever possible.
5. The parks should be easily accessible by foot and by bicycle.
6. In addition to filling the need for community parks, they should also function as neighborhood parks where they are located.
7. The City should not rely on land it does not own for long-term park needs.

Based on these criteria, the city will need 50 acres of land in community parks by the year 2005, when the population will reach 20,000 people. Today, the city has seventeen acres of land in Hunter Park and YMCA park, and also uses fifteen acres of land from SOSC, for about 2 acres per 1,000 capita. The use of SOSC land, however, is based on a lease agreement, and when the lease expires 1995, SOSC may choose not to renew the lease.

This plan identifies two areas for potential new community parks. One, Clay Street Park, is an extensions of the existing YMCA Park and would add 15 acres to the 8.5 acres existing, and provide an open space connection between Clay Street and Tolman Creek Road. The second are two parcels of vacant pasture in the Bear' Creek floodplain, adjacent to Mountain Street. These two parcels would provide an additional 24 acres of active park with excellent access. This would give the city slightly more than 2.5 acres per 1,000 when the population reaches 20,000.

Neighborhood Parks

Consideration of both existing and proposed park areas reveals that several neighborhoods will be more than one-quarter mile from any park. All but four areas will be served either by the new large proposed active parks 0r by new open space parks. Four parks are planned to accommodate the remaining neighborhoods that would need park for casual, pedestrian use. The new parks are small, from one-half to one acre in size, and located on currently vacant parcels. The neighborhoods are the Oak Knoll area, the Guthrie Street area, the Railroad District, and the Wimer Street area.

Section 8.07 Open Space

Open space provides buffers between development, preserves important riparian areas and wildlife habitat, creates scenic vistas, and contributes to Ashland's character. They may be owned by the City, by community groups such as homeowner's associations, may be preserved through easements, or may be held in private ownership.

Ashland has preserved a major open space in Lithia Park. While some of the park is developed, much of it is an open space preserve. The park's creation did little to affect buildable land, as much of it is steep or in floodplain, but it has greatly enhanced Ashland's environment. Although Ashland's population has almost doubled since 1960 we have had no program to preserve and develop open spaces. Thus we have experienced the irretrievable loss of important open spaces, for example, the many small creeks which once ran through the city. In many cases the entire creek has been removed and culverted, leaving not a trace of the original environment. Other city natural areas will suffer a similar fate unless a comprehensive effort is made to identify, protect, preserve, and, when appropriate, acquire important open spaces.

Open space includes parks, natural and undeveloped resource areas, agriculture and forestlands, and unused vacant lands. Open space buffers incompatible land uses, helps create efficient land use patterns, provides aesthetic experiences and diversity in built-up areas, and preserves recreation, agricultural and forest lands.

Open space can be preserved by zoning and subdivision regulations, by purchasing or trading for land or easements, by incentives, or by voluntary contributions. Many of these methods do not require new City funding, but depend on identification and development standards. Any successful open space program must include a program to acquire some key pieces for the public, so they may be managed to preserve the open space's character.

Open space programs benefit the preservation of lands that are either unbuildable or difficult to develop. Flood plains, ravines, wetlands, and steep slopes are all undesirable for urban development, but lend character that make the land desirable for open space.

Section 8.08 Conflicting Uses

1. Residential and commercial development
2. Road construction
3. Intensive recreational developments

Section 8.09 Economic, Environmental, Social, and Energy Consequences

Economic

1. Alterations to the land to accommodate conflicting uses could compromise the quality' of an open space area and potentially decrease surrounding property values.
2. Street design and construction costs would be higher due to the physical constraints of these areas, such as steep, densely wooded topography, ravines and high water tables.
3. A portion of the costs for acquisition and maintenance of open space lands would be paid for by local taxes.
4. The construction of homes within open space areas would require higher construction standards to avoid property damage resulting from a hillside slumping, erosion or flooding.

Social

1. Allowing conflicting uses may reduce the quality of open space areas where people gravitate towards to enjoy visual and auditory solitude; Intrusion into these areas for the purpose of accommodating residential development and road construction may jeopardize the potential recreation value for passive uses such as picnicking, walking, jogging, hiking, bicycling or bird watching.
2. The total open space proposal includes almost 730 acres of land. It is important, when deciding to set aside this amount of land for open space uses, to determine the impact this would have on the Housing Element.

Most of the open space proposal has been designed to utilize land that is of marginal or useless for housing. The project will only have a small effect on Employment land, as the only area proposed to be used for open space that is zoned for employment is along the railroad and "A" Street.

The City has compiled an analysis of the housing impact of the development of the open space plan, contained in a memorandum by the Planning Director dated Feb. 21, 1990.

The total impact on housing would be a loss of land on which 331 housing units could be developed. By far the largest impact is from the two active parks, which are located on areas that were designed for affordable housing at relatively high densities. These two parks would occupy land that could provide 231 housing units.

In the current urban growth boundary, there was a need for 127 acres of land for high cost housing ($110,000 and up in 1990 dollars). There was a large surplus of this type of land already in the City

limits, as the 1982 plan shows 256 vacant and available. Therefore, the loss of the parcels zoned RR-.5 and Rl-10 are insignificant, as there are already more than sufficient lands in the urban growth boundary to provide housing in large lot, low density zones with correspondingly high prices.

However, the land available for moderate cost housing was in a tighter supply. While there was a need for 388 acres of moderate cost housing, only 342 were available in the City limits. 160 acres were provided in the urban growth boundary. Therefore, the loss of the two parcels that would be developed for active parks would not need to be replaced, as there is a surplus of over 100 acres even with these two areas removed.

Environmental

1. Physical and aesthetic consequences to open space areas resulting from road construction could be mitigated through proper design.
2. All conflicting uses could disturb and destroy wildlife habitat and fragile ecosystems. Sensitive areas may become susceptible to increases in erosion, which in turn may 'impact the water quality of streams and wetlands.
3. Disruption of open space corridors, which act to link the region's wilderness areas to the city, would result in .a decline in urban wildlife.

Energy

1. Urbanization of sensitive open spaces involves infrastructure improvements, which can be complex, costly and energy intensive.
2. Techniques (i.e. erosion control measures) used to mitigate the impacts caused by conflicting uses may have higher energy requirements.

Section 8.10 Criteria for Open Space

The preceding analysis suggests that many of Ashland's natural areas be retained as open space, or developed into natural parks. Many desirable land parcels suggest themselves for an open space program. In order to design a unified system, rather than a collection of interesting yet unrelated parcels, a selection philosophy must be developed. Criteria for open space follows:

1. Lands that preserve wildlife habitat and fragile ecosystems, such as wooded areas, ravines, and wetlands.
2. Lands that preserve unique scenic features, such as wooded views from urbanized areas.
3. Lands that contain potential recreational value .for passive uses such as picnicking, walking, jogging, hiking, bicycling, bird watching, or simply resting.
4. Areas that contain potential for pathway and trail development and which connect with other existing trails.
5. Areas that can be integrated with existing or proposed community parks.
6. Areas that are interspersed with urban growth so that the open space lands are accessible to the greatest number of urban residents.
7. Areas with productive farm and forest land.
8. Areas that have outstanding visual or auditory solitude.

The Parks and Open Space-map identifies significant open 'space areas in the community. Although some of these lands will be acquired or set aside for preservation during the planning period, there are many forms of open space preservation other than public acquisition. Components of Ashland's Open Space Program follow:

Conservation Areas

Conservation areas are lands owned by private citizens who sell or otherwise release their rights to develop the property. Instead, the land is maintained in an undeveloped or underdeveloped state. The property owner assures the City that the land will be left in an unmodified, open state to retain the qualities that make it desirable for open space. This assurance usually takes the form of a conservation

easement. The City recognizes this agreement with a zoning overlay that prohibits development. The land's value is reduced, possibly lowering property taxes, and qualifying for income tax deductions. While this method is valuable for some areas, it usually does not allow public access to the property. The main advantage is that the City incurs no or minimal direct costs although the value of the taxing base may be slightly reduced. To fully implement this plan, the City should be active in acquiring conservation easements even in areas outside the City limits, such as the Wrights Creek area.

Neighborhood Owned Open Space

As an alternative to the preservation of private open space, a community can acquire and dedicate to common use suitable open space land. The small creek behind properties in the block of Allison, Holly, Idaho, and Iowa Streets is an excellent example. This area is not generally useful to the City because the creek has culverts both above and below. However, with the City's cooperation the neighborhood can acquire the creek area and reserve it for common open space to be managed by a neighborhood group. These lands would be held as an undivided interest by abutting property owners. Acquisition and development could be funded by a local improvement district, which would assess all benefiting property owners and allow the issue of tax free bonds, thereby reducing the property's payment burden.

Dedications during Development

Open space may comprise only a portion of land largely suitable for development. Where no plan exists for integration into a natural park, the area can be integrated into a private development as a common open, space. The City's ordinances reward developers with density bonuses for such inclusions. When a parcel contains land required for the community-owned open space, city ordinances may require dedication and possibly development by the property owner. When this occurs, a credit for the required system development charge may be necessary, and if the permitted number of units is reduced, compensation may be appropriate.

Section 8.11 New Natural Parks

The keystones of the open space plan are the large, contiguous parcels of land, which closely match the open space criteria. They include the following:

Ordsen Todd Woods - Clay Creek

The land designated for acquisition is the Clay' Creek, extending from the City limits to the Ordsen Todd woods, a conservation area owned by the Southern Oregon Land Conservancy. This land would provide public access from the City limits to the Woods, and further preserve the beauty of Clay Creek ravine.

Roca Canyon

This ravine runs from the T.I.D. ditch to SOSC campus, where it disappears into a culvert. The ravine is deep and wooded with abundant wildlife. The eight-acre park at the top of the ravine would connect with a Conservation Area to the north that would preserve the ravine in its present state. Down zoning of this Conservation Area is appropriate to prevent development from crossing the ravine, which would necessitate numerous culverts and fills to accommodate auto access to new lots. A trail would connect through the park and from the park down the ravine to Prospect Street, providing neighborhood pedestrian connections where none now exist. The park would provide trail access to Siskiyou Mountain Park to the south.

Siskiyou Mountain Park

The City of Ashland currently owns 110 acres in the city limits just south of Lithia Park, and 1,000 acres outside the city limits surrounded by the Rogue National Forest. The areas in the city limits were used for granite quarries, and that outside is for the Water Departments use associated with the water filtration plant and Reeder Reservoir. In addition, the City is in the process of acquiring 160 acres currently owned by Superior Lumber Company. The proposal is to tie these parcels together with additional acquisitions, which would allow for a large 1,500-acre natural park that would extend from Clay Creek in the east to' Ashland Creek in the west. Accesses would be developed from the other parks and trails in the City, and access provided through the park to the Forest Service land, which surrounds this area. Also, a trail across Siskiyou Mountain Park would further interconnect this area. These lands also contain several old roads

that provide excellent hiking, equestrian, and mountain biking and panoramic vistas of the City. Access would be available from Ashland Ditch Trail, Lithia Park, Terrace Street Park, Roca Canyon Park, Paradise Lane, and Todd-Ordsen Woods.

One advantage of this park is that the City already owns or is purchasing 1300 of the 1500 acres. An additional 40 acres are owned by the State Division of Higher Education, and the remainder is privately owned. While the area of land is large, the cost of acquisition is small.

Terrace Street
The small valley between Terrace Street and Long Way is a beautiful natural park potentially blending into a neighbor, hood park on Herbert Street. This land can be integrated with other city-owned land adjacent to Crowson Reservoir and the water pumping station, providing access from the neighbor- hoods to the north to the Ashland Loop Road, Siskiyou Mountain Park, and the National Forest to the south.

Scenic Park
The hilltop above Scenic Drive, a backdrop to the Plaza, is one of the most important views in Ashland. This is hilltop will certainly be developed, ruining its scenic quality and wildlife habitat, unless it is acquired by the City. The Hilltop Park acquisition would require forty to forty-five acres of land and would extend from the Ditch Road to the top of the ridge and beyond, and from Strawberry Lane to Grandview Drive. The Ditch Road would be closed to traffic, and would be used only for hiking, equestrian use, and biking.

Bear Creek Greenway and Mountain Avenue Natural Park
Major portions of this countywide facility presently exist. The Jones-Bryant property is already a city park, and an important wetland. The plan would continue the greenway along Bear Creek to Mountain Avenue, acquiring at least a 200-foot wide corridor on Bear Creek. This corridor includes significant riparian areas and associated wetlands, to be retained in a natural state. At Mountain Avenue, the plan would encompass acquisition of an existing 18-acre parcel that was the site of a small sawmill in the 1940's. This property would serve as a trailhead to the Bear Creek Greenway, and the un-vegetated portion of it could be added to the proposed active park to the south. The Bear Creek Greenway bikeway would be extended to Mountain Avenue along the corridor.

Reynolds Ponds
This small farm on Helman Avenue has beautiful ponds and associated vegetation, including cottonwoods and willows. The plan calls for acquisition and retention of approximately two acres of this farm for a picnic area, and for retention and enhancement of the pond and surrounding wetland for wildlife habitat.

Normal Street Wetland
The extension of Normal Street from Hunter Park to East Main Street passes by one of the largest natural Wetlands in the City Limits. As this land would be poorly suited for development and .may contain significant wildlife habitat, the plan calls for acquisition and retention of the wetland. The area should be enhanced as a wetland, with development limited to trails that would provide f6r bird watching and the study of nature.

Section 8.12 Greenbelts

In addition to land in Ashland, the plan calls for acquiring land development rights on properties outside the Urban Growth Boundary currently zoned for exclusive farm use. These parcels, while currently protected from development, are subject to changes in state and county land use laws. The City plans to acquire either the properties in their entirety or to acquire conservation easements on the' three parcels to insure that future development does not threaten Ashland's compact city form. Allowable uses could be either to simply continue the agricultural uses on the property or a recreational use that is compatible with the greenbelt ideal, such as a golf course.

Section 8.13 Connecting Links and Totals

Open space, park, and trail-use are greatly enhanced when they are linked. Linking neighborhoods with convenient, well placed trails that connect areas that cannot be accessed by automobile not only promotes neighborhood interaction, it also encourages travel on foot and by bike, as many times as it is closer to walk on a well designed trail than to go by car. The emphasis in this plan is on short, convenient trails that connect neighborhoods, and on three trails that connect larger areas of the City. These former trails have been in Ashland's Comprehensive Plan since 1982, and are mentioned in plans as early as 1966.

Ashland, like many communities, lacks sufficient linear spaces (parkways, bikeways etc), but has abundant potentially useful areas. Ashland's creek corridors can constitute design element for the community and for individual neighborhood areas. Al- though some areas are presently unfavorable for parkway and bikeway development because of existing residential dwellings, other areas that are relatively undeveloped can serve to form some links and trails.

Ashland has many areas that are criss-crossed with informal trails, some of which have been in use for generations. Most of these trails are not legal easements in any sense, but they still form an important community recreational 'facility. The City and the Parks Commission should work with the private property owners to help alleviate whatever inconvenience this traditional use may cause. In addition, upon development or partition of the land, the trails should be identified and preserved, preferably granting an easement to the public for continued use. Development should also respect the trails and buffer the effects of development from it.

A portion of the proposed Bear Creek Greenway is located within the Ashland city limits in the northern part of town, south of Nevada Street and west of Mountain Avenue. The proposed trail location is within the Ashland Urban Growth Boundary south of the Ashland Airport. Any proposed developments located in these areas should consider the proposed greenway and its completion. Land dedications should be required as conditions of approval for any proposed developments. The greenway project is extremely important for Jackson County, and Ashland should cooperate in its completion.

The following trails are included in the open space program and are to be developed over the planning period.

Bear Creek Trail

The Bear Creek Trail is part of the county trail system, and extends from Mountain Avenue to the Ashland city limits on the western town boundary. The portion of the trail to Nevada Street is currently planned for construction by Jackson County.

Ashland Ditch Corridor-Granite Street Reservoir to Grandview

This is one of the most beautiful, secluded trail sections in the system. A new trail would be created from the upper end of Lithia Park to the Ashland Ditch, and a corridor acquired along the ditch trail. The corridor should be 100 feet wide to prevent development from encroaching on the ditch area. Any development within this corridor should undergo a special review to assure that the quality of the trail are not endangered, and that the residences are adequately screened from the trail, both for the privacy of the residences, and the tranquility of the trail user.

T.I.D. Corridor Ivy Street to Terrace

This unspoiled portion of the ditch trail contains both beautiful views and imposing woods. Recent home construction near the ditch has severely degraded the experience of walking the ditch trail. The corridor, twenty-five to one hundred feet in width, would maintain a buffer along the T.I.D., protecting' vegetation and habitat. The City already has approximately one half of the necessary easements to open the trail to pedestrian use. The trail would generally follow the T.I.D. ditch from Terrace Street to the end of the Park Estates subdivision. From this point the trail would leave the ditch, and slowly climb to meet the terminus of the Ivy Street cul-de-sac. This should be developed so as to be separate from any new roads, and have screening from any new homes in that area, as much as possible. The remaining portions of the Water Line Road and the T.I.D. ditch should be preserved as neighborhood trails that link small areas together.

Neighborhood Trails
Several other short trails are designated on the map. These are to be required at time of development of the property by the implementing ordinances. Other sections will have to be obtained by the consent of the property owner.

As designed, the trail system consists of several segments of trail, most of it surrounded by urban development, but secluded, wooded, and full of wildlife. Many of these trails currently exist within the city but is threatened with extinction. The Open Space Program will preserve these resources for the future.

Section 8.14 Urban Forestry

Ashland's environment and appearance are often noted as important parts of the general livability of the City, and are frequently cited as reasons for' residents remaining in the area and for tourists coming to Ashland. Early pioneers planted trees along the streets and boulevards that have grown into majestic specimens. Many of these trees remain today in the older sections of the City. The maintenance of civic pride and of visitor's favorable impressions depend especially on the scenic quality of major access routes and thoroughfares. Also, the appearance of private property has an effect on one's impression of Ashland.

A significant portion of this impression is created by trees and intact plant communities. Areas such as Winburn Way and Siskiyou Boulevard have greater scenic value due to the presence of large trees and a variety of shrubs. Ashland's backdrop as viewed from the Southeast and Northwest entries and from I-5 is forest covered hills and mountains. This setting, Ashland nestled in among the forested hills creates a strong positive impression. The existing, intact native plant communities in riparian areas and on steep slopes re-enforces this impression.

The Urban Forest Interface at the southern boundary of Ashland presents challenges and opportunities. Its aesthetic value, wildlife habitat and recreational opportunities have been well documented by citizens. This interface also presents problems for fire prevention and control.

Trees, especially large trees, enhance the quality of life in Ashland in many ways, providing shade, protection from wind, erosion control, wildlife habitat, sound barriers, air pollution removal and play areas for children, among other things. Ashland land has a long history of honoring and protecting its trees, including being named a Tree City, USA each year since 1986. Trees are a fragile resource. The proven benefits of trees can only be maintained through favorable consideration in the political process.

Ashland has a Tree Commission. The Commission is charged with the enhancement of the urban forest in Ashland. The commission works with public funds and on public lands, and also advise the city staff and planning commission on landscaping of new projects. This role is extremely valuable and has had a marked improvement on new landscaping quality in developments.

Section 8.15 Visual Resources

As previously mentioned, vegetative cover, particularly mature trees, adds much to the beauty of Ashland and its surroundings, enhancing the views out of the city and from the gateways, like I-5, looking into the city. The forested hills and mountains directly behind the city as seen from the freeway, act as a backdrop and from for the city.

There are a number of prominent features and dramatic vistas visible from the city, in addition to vegetation, that add to the beauty of Ashland's setting. These include, Pompadour Bluff, Grizzly' Peak, Wagner Butte, Mt. Ashland and the Bear Creek Greenway.

Numerous smaller, but no less important features exist within the city. The riparian zones along the many creeks that dissect the city are perhaps the 'most noticeable examples. Steep hillsides with mature conifers are other examples.

Both the privately owned and the City owned granite quarries on upper Granite Street is an example of the consequences of not protecting features within the city. Lithia Park and the Ashland Creek canyon are marred by this development. In the recent past, the proposed clear cutting of the Superior Lumber Co. land above the city, and the proposed development of a gravel pit on upper Nevada Street are the kinds of activities that if accomplished, would be detrimental to the present beautiful views from and around Ashland.

The Ashland's view shed is an irreplaceable asset to the community and deserves protection. Protection will require that the view shed be defined and mapped. Continued and expanded cooperation with other jurisdictions, including the US Forest Service, Bureau of Land Management, and Jackson County, will also be necessary to ensure its protection.

Section 8.16 Implementation

The plan outlined here is an ambitious one. Accomplishing it will require community vision and resolve -- and funding for land acquisition. In contrast to prior comprehensive plans for Ashland, this element requires specific action by the City and the Parks Commission for implementation and demands both a regulatory approach and an acquisition program.

Regulation

Dedication of land during development

Many open space lands constitute only part of a property. They do not contribute greatly to the development potential of a parcel, and often encompass only a particular feature of limited development potential, such as the T.I.D. ditch or a ravine. In this instance, dedication to the public can be required during development. This can be accomplished without compensation if the portion of the property dedicated does not substantially affect the development and if the project will benefit from the open space project.

Preservation of land privately owned

At times, a parcel identified for open space is not required to be in public ownership. Simply preserving the land in a natural state will accomplish the goals of the open space program. When no access by the public is required, simple preservation of the land can be accomplished by dedication of easements. If reasonable use of the land remains with the open space parcel preserved, it is legal to require that the land not be developed until acquisition can occur.

Many major pieces of land required for this project must be acquired by the public during the planning period. While trails and open space corridors, can be acquired by dedications, the development of major parks and open space areas allows no private use of the land. Therefore, when most or all of the useable part of the parcel is to be acquired, or when a physical, public invasion, such as a trail easement is required and no development is proposed, the city should acquire the land or the necessary easement at fair market value.

This program will require a funding source dedicated exclusively to land acquisition needs, as the project will probably take many years to accomplish. The acquisition portion of the plan may not be implemented until the funding source has been secured.

The properties that the City has designated as Parks are to be acquired by the City throughout the planning period. The effect of this designation will not affect the property's ability to develop.

When the property owner wishes to develop the property, and the property is ripe for development (that is, it has all the necessary city services nearby for development) the City should, at that point, offer to purchase the land. The offer should be for the fair market value, without considering any effect that its designation for park would have. If the offer is accepted, the property can be converted to park. If the City can not make the necessary funds available, the property can develop according to the underlying zoning. However, some of the property can be set aside as a Conservation Area in this process, as long as the effect of the reduction in the number of units is no more that 20%.

Obviously, it is in the City's interest to negotiate with the property owner and purchase the land before it is ripe for development. In any case, land shall be purchased without resorting to direct condemnation. The only exception to this rule would be to acquire access to a City owned parcel. The area where this may be necessary would be to gain access to the Siskiyou Mountain Park.

Section 8.17 Goal

To Provide the People of Ashland with a Variety, Quantity and Quality of Parks, Park Facilities, Open Spaces, Trails, and Visual Resources Sufficient for Their Needs.

Section 8.18 Policies

1. Develop a parkland acquisition and development plan in accordance with community growth and projected park demand. Accomplish acquisition according to a plan developed by the City and the Parks and Recreation Commission;

2. Assist in the development of the Bear Creek Greenway, including the Ashland Creek portion of the city park system.

3. Encourage school-park joint developments.

4. Coordinate parkland acquisition and design with other agencies involved with park usage. Agencies should include Jackson County and the public school system.

5. Encourage the development of private, common open-space areas in new residential developments to offset the demand for additional public parks.

6. The City shall adopt an official map that will identify the planned areas for parks, new natural areas, conservation areas and trails. Where only a portion of the property is required for park or open space use, development can occur on the remainder of the property. When only a small portion of the property is required for a public purpose, and the new development will benefit from the public area, dedication may be required. Otherwise, the City will purchase the property, paying fair compensation. When development is possible, if the City does not have the funds available for the intended purchase within a reasonable amount of time, the City shall release the land from the Parks designation and allow the development consistent with other plan policies.

7. Develop the system of corridors, linear park routes and trails outlined in the Park and Open Space map. Encourage interconnections between parks, open spaces, bicycle paths, easements, irrigation ditches, scenic roadway routes, railroad rights-of-way, etc. Require that commonly used trails across private property be preserved when developed.

8. Establish where possible trails along non-urbanized sections of stream corridors, ensuring that stream ecology and any residences are protected. Prohibit development that would prohibit stream corridors from being utilized for trails.

9. Require all new residential, commercial and industrial developments to be designed and landscaped to a high standard to complement the proposed site and the surrounding area.

10. Encourage improvement programs for existing areas with consideration to such items as exterior maintenance, landscaping, signs, and underground placement of utilities.

11. Require high standards of design and landscaping for development adjacent to major arterials, and encourage dividers in any new access routes into Ashland.

12. Require, where possible, that the original vegetation be retained and require the restoration of new vegetation if it is removed.

13. Require street trees in all new residential, commercial and industrial developments.

14. Views of Pompadour Bluff, Van Dyke's Cliffs, Mt. Ashland, Grizzly Peak, and the surrounding ridges are irreplaceable assets to Ashland and should be protected through cooperation with Jackson County.

15. Insure that the Tree Commission has an opportunity to review and comment on all significant landscaping in the city, public or private.

16. Develop an urban forest plan for the City including a street tree and a non-street tree section, a tree resource inventory, a plan for preservation and renewal of trees of stature and native species, long range maintenance plan, a plan to promote the greater use of trees and shrubs on both public and private land, and plan to educate the public regarding benefits of trees on public right-of-ways.

17. Take necessary steps to annually be a Tree City, USA.

18. Establish a Plant Arboretum and/or a directory of notable trees in the City.

19. Increase the portion of the city covered by a tree canopy, especially parking lots and other paved areas

20. Develop an urban forest interface plan to enhance the aesthetic and recreational opportunities created by this resource. The plan will also include wildlife enhancement measures and a fire control plan.

21. Establish criteria and map the visual resources of Ashland, from selected points outside the city looking in, and from strategic points within the city looking out.

22. The City will cooperate and when necessary, negotiate with the county, USFS and BLM concerning activities within the view shed that would impact the visual integrity of the area.

Chapter 9

Public Services

Parts:

Part 9.01

Public Services

Sections:

Section 9.01.01 Introduction

The permanence and stability of urban areas are greatly affected by the quality and extent of public services, improvements and conveniences. Usually a full range of services is eventually required for an area, even if the need is not immediately pressing.

Traditional public services are water, sewer, police, fire, electricity, street lighting, cable television, and others may also be provided.

The cost of services has been increasing at a rate equal to or higher than general inflation figures. Costs are of special concern when continued growth requires new capital expenditures, such as enlarging the sewer treatment plant. Formulas have been developed which attempt to relate the increase in population to the expected increase and cost in services and facilities.

One method of keeping costs down is centralized developments, which reduce the amount of facilities and travel. Where services are available, but no development occurs (as in vacant lots), a public investment is being under-utilized. Another way to lower costs is to have all services provided simultaneously, through coordination between the agencies and departments providing these services. One method of removing some cost burdens from current City residents is to have new developments pay for the extension and provision of their services.

Public services, especially those using poles and above-ground facilities, affect the appearance of an area. Placement underground represents a higher initial cost, but usually lower maintenance costs. Some public services will require sites within a neighborhood (e.g., an electrical substation or fire station).

Section 9.01.02 Assumptions

Residents will continue to demand services similar to those they receive now, while the scarcity and cost of materials, labor, and resources will force re-evaluation of traditional methods of providing service.

There will be increased secondary costs (transportation, energy, etc.) in developing peripheral areas.

Services have a major impact on urban design and on the effect of urbanization on the environment.

Section 9.01.03 Goal

Provide Public Utilities, Services and Facilities in an Orderly, Efficient and Environmentally Sensitive Way and in Sufficient Quantity to Meet City Needs Now and in the Future.

Section 9.01.04 Policies

1. Provide urban areas with the level of services appropriate to the density of settlement and resultant service demand.

2. Provide services in a timely, coordinated, and orderly manner that minimizes costs and inconvenience, and prevents premature, incomplete development.

3. Prevent urban sprawl and "leap-frogging" by providing full services in a staged manner: first to areas within the City limits, then to the area within the Urban Growth Boundary.

4. Encourage the underground placement of utility lines, with any above-ground facilities designed to fit the landscape.

5. Encourage early planning and acquisition of sites for needed public facilities (e.g., fire stations, schools, roads, parks, etc.).

6. In conjunction with studies of housing, land use, downtown policies, etc., identify and implement innovative service techniques in anticipation of major trends, needs, and economic or environmental changes, rather than waiting to react when all options are closed.

7. Use Capital Improvement Planning to ensure that long-term public facility planning be as cost-effective as possible.

8. Consider system development charges to fund large capital costs caused by growth.

Part 9.02

Sanitary Sewer System

Sections:

Section 9.02.01 Introduction

The Ashland sewer system contains approximately 420,000 lineal feet of concrete and clay pipe of which the majority is 6 inches in diameter. The largest size is 18 inches. Sewers were first constructed in the City in 1906, and, until 194l, they were generally made of clay. After 194l, concrete pipe was used. There are no combined storm water and sanitary sewers in the City system. The system serves approximately 3200 of the 3800 acres within the present City boundary. Because of the generally steep slopes and relatively minor infiltration, the system has capacity for additional flow from areas that are yet to be developed.

New development is predominantly on the southeastern side of the City. It can be assumed that the bulk of additional sewage flow in the near future will be generated from this area. As more southeastern area sewers are constructed, the increased flow will begin to tax the capacity of the mains on Siskiyou Boulevard, Wightman Street and Morton Street. These sewers are the main conduits transporting sewage to the collecting trunks (i.e., Bear Creek Trunk, Ashland Creek Trunk, "A" Street Trunk, etc., located on the northern side of town). The trunks, in turn, convey the sewage to the treatment plant. These bottlenecks will have to be corrected in the future.

The recently remodeled sewage treatment plant should accommodate additional population growth beyond the year 2000. The design capacity of the plant is 3.1 million gallons per day, or a population equivalent of 40,600, which still leaves an adequate margin for industrial use. Presently, the plant's average daily flow is 1.4 mgd.

Section 9.02.02 Assumptions

There will be higher standards for effluents, eventually requiring tertiary treatment facilities.
Individual treatment facilities will be improved, but still will not be as reliable as municipal systems.

Section 9.02.03 Goal

Provide Sanitary Sewers that Meet Environmental Standards for all Areas Within the City Limits.

Section 9.02.04 Policies

1. Encourage early planning for new sewage treatment facilities, outlining site requirements, use of sewage treatment by-products, costs and financing.
2. Where feasible, require all development within the City to use Ashland treatment facilities.
3. Encourage productive use of sewage treatment by-products.
4. Consider the modification of the City's sewage treatment facility to a tertiary treatment facility as part of the City's overall Capital Improvement Plan.
5. Require annexation or contract annexation in order to receive sewer service in unincorporated areas.
6. Size future sanitary sewers to provide for projected growth within the Urban Growth Boundary, based upon the City's Comprehensive Plan, and for anticipated future growth for the life of the facility.

Part 9.03

Water Supply and Service

Sections:

Section 9.03.01 Introduction

The City of Ashland owns and operates its own water supply and distribution system. The City's domestic water is primarily obtained from Ashland Creek, although in recent years provisions have been made to treat irrigation water from the Talent Irrigation District (TID) for domestic purposes. The City has acquired rights to 156g acre-feet per year from the TID.

Reeder Reservoir, the primary storage facility for the City's untreated water, is formed by a dam across Ashland Creek. The reservoir stores excess runoff for use during periods of low stream flow and has a capacity of approximately 860 acre-feet. There are two smaller covered reservoirs below it, Crowson and Granite Street Reservoirs, which store treated water.

In 1978, the City's water system supplied water to 15,193 persons. The average daily water production for 1978 was 3.04 million gallons. The City has adequately provided water for the population in past years, but instances of conservation measures being imposed are becoming more frequent. In the year 2000, the daily average of water required is estimated to be 4.44 million gallons. For the City to provide adequate water for the expected population of the year 2000, improvements to the existing water system will be necessary.

[City of Ashland Comprehensive Water Plan," R.W. Beck and Associates, Seattle, 1980, Table IV-3.]

A detailed study of the Ashland water system was prepared by R.W. Beck and Associates and submitted to the City in September 1980. The "City of Ashland Comprehensive Water Plan" thoroughly studies the feasibility and costs of improvements necessary for the City's water system to meet the demands of the year 2000.

According to the Comprehensive Water Plan, the City will require 4,973 acre-feet of water in the year 2000. In a normal run-off year, the present Ashland water system would fall 140 acre-feet short of this supply requirement. During drought conditions, the system would fall 1340 acre-feet short. Storage deficits of this magnitude can be made up through the use of TID water, but this would deplete water available for irrigation purposes within the City and conservation measures would have to be imposed. This shows the need for larger water storage facilities.

The Soil Conservation Service concluded in 1959 that a 100-foot high earth-fill dam was feasible at the Winburn site on the west fork of Ashland Creek. The dam would form a reservoir of approximately 54 acres, with a capacity of about 1600 acre-feet. A dam 80 feet high at the same location would form a reservoir of approximately 38 acres with a capacity of about 850 acre-feet. The lower dam would cost 25% less than the larger dam but would supply little more than half the capacity.

[Water Resources Management Plan and Facility Study, James M. Montgomery, Consulting Engineers, Boise, l977, pp. 7-2 to 7-5.]

Increased water supply for the City could also come from acquiring more water from the Talent Irrigation District. The State of Oregon plans to review the water rights associated with TID reservoirs and to

perform a proof survey of these rights. Once the rights have been vested, the City can possibly purchase an additional 1500 acre-feet per year, according to the TID.

The Comprehensive Water Plan also studied the efficiency of the City's water distribution system. It was found that this system is in need of upgrading and improvement. At present, 28% of the water released from the water treatment plant is lost throughout the distribution system. A normal system in good condition can expect 10% system losses.

Overall, the City's water system is in need of improvement to adequately supply the residents in the years to come. Improvements will be costly and large capital expenditures should be planned for as part of the City's overall Capital Improvement Program.

Section 9.03.02 Assumptions

The City will continue to utilize Ashland Creek water, but will need alternative sources to meet future water demands. There will be continued pressure for more residential development above the gravity-flow system.

Section 9.03.03 Goal

Provide Sufficient Water Supply for Ashland Residents.

Section 9.03.04 Policies

1. The City should continue to acquire priority water rights on Ashland Creek, as they become available.
2. The City should attempt to purchase additional Talent Irrigation District water from confirmed owners.
3. The City should further study the construction of a new impoundment on Ashland Creek at the Winburn site to augment the City's storage capacity in the watershed.
4. The City should prioritize and implement needed water system improvements, as identified by the City Water Plan, as part of the City's overall Capital Improvement Plan.
5. The City should develop water conservation measures, which can be implemented in critical water years.
6. The City should exert pressure on the U.S. Forest Service to manage the watershed in ways, which are compatible and not detrimental to Ashland's future use of the watershed as the City's water supply. Uses of the watershed, which caused increased sedimentation in Reeder Reservoir, should be very strongly opposed by the City.
7. Ensure that the City's efforts to remove sediment from Reeder Reservoir have as little harmful environmental impacts on Ashland and Bear Creeks as possible.

(See Chapter IV, Water Resources.)

Part 9.04

Electric Service

Sections:

Section 9.04.01 Introduction

The City of Ashland owns and operates a municipal electric system, which served approximately 6700 customers in 1980. The system includes a 12.47 kv switching station and overhead and underground distribution facilities. Power is presently bought from Bonneville Power Administration (BPA) and resold to Ashland residents.

The City's Electric System Study, completed in 1976 by R.W. Beck & Associates, indicated that peak demand has been increasing at an average rate of 3.6%, with energy consumption increasing at an average rate of 5.3%. This rate of growth is expected to diminish or reverse due to energy conservation. The system's annual peak typically occurs during December, January or February, with the magnitude of the peak directly related to climatological conditions. Changes in yearly weather patterns have resulted in as much as a 10% difference between successive annual peaks.

The City's service area lies within the City limits. PP&L service area surrounds the City; however, in certain areas, due to lack of PP&L distribution circuits in areas immediately outside the City limits of Ashland, PP&L has constructed lines as extensions to the City's lines to serve its customers. The system provides excellent service to its customers and has a very good operating record.

(See Chapter XI, Energy.)

Part 9.05

Storm Water Drainage

Sections:

Section 9.05.01 Introduction

The City of Ashland has an underground storm water drainage system throughout most of the City. There are no combined sanitary sewer/storm water drainage facilities in the City. All new developments, which create new roads, are required to install storm water drainage facilities in conjunction with the new roads. The City has no overall Master Plan for storm water management at present, so storm water drainage is dealt with on a case-by-case basis by the City' s Public Works Department.

Section 9.05.02 Goal

To Provide An Adequate Storm Water Drainage System Throughout the Entire City of Ashland.

Section 9.05.03 Policies

1. The City should fund and develop an overall storm water management plan for the entire City.
2. Ensure that all new developments include a drainage system, which protects adjoining property as much as possible.
3. Encourage drainage systems that utilize natural drainage-ways and minimize the amount and rate of surface runoff.
4. Consider necessary improvements to the City's storm water system as part of the City's overall Capital Improvement Plan.
5. In all new developments, discourage the pumping of storm water drainage, including the use of sump pumps.

Part 9.06

Solid Waste

Sections:

Section 9.06.01 Introduction

Solid waste disposal is a regional activity, which is regulated by Jackson County (which has been working on a regional solid waste plan) and the State of Oregon (which has established environmental standards). The Ashland site for solid waste disposal meets or exceeds regional and State guidelines.

The City of Ashland franchises the Ashland Sanitary Service for waste collection. Solid waste is disposed at a 120-acre site located approximately five miles from the City center on Valley View Road. The site consists of clay and sandstone formations, which help provide good surface runoff conditions. Two diversion ditches surround the site.

In 1976, the Department of Environmental Quality (DEQ) issued a five-year permit on the solid waste site with the following conditions: blowing paper be controlled; wastes be compacted and covered daily; a caretaker be on duty; fire prevention equipment be available; and a suitable access road be provided. All of these conditions are being fulfilled by the Sanitary Service.

The Sanitary Service attempts some resource recovery operations, dependent on the market value of those resources. Some local groups have attempted resource recovery operations, but have been hampered by the general difficulty of persuading residents to separate waste and by the economic uncertainty of marketability.

Section 9.06.02 Assumption

There will be increasing emphasis on recycling and resource recovery as natural resources are depleted, but there will continue to be a need for landfill sites.

Section 9.06.03 Goal

Provide Systematic Control of the Solid Waste Process from Collection to Storage, Emphasizing Efficiency, Resource Recovery and Environmental Protection.

Section 9.06.04 Policies

1. Encourage opportunities for recycling and resource recovery in all solid waste collection programs.
2. Encourage high environmental and aesthetic standards in the collection, resource recovery and disposal of solid waste.
3. The City shall coordinate with Jackson County on the provision of solid waste disposal sites to meet current and long-range needs.

Part 9.07

Schools

Sections:

Section 9.07.01 Introduction

As in other communities, education programs and the general educational level are valuable resources in Ashland. Educational facilities such as playgrounds, gymnasiums, and meeting rooms are important to the schools, but can be an asset to the whole community after school hours. Conversely, the City of Ashland has some resources, which are useful to the School District. Southern Oregon State College, with its special offerings and opportunities, is a very important asset, as students and faculty contribute their efforts to solving Ashland's problems.

The number of children in the Ashland School System has not changed much despite increases in general population. As has been mentioned before, the demographics of immigrants may account for this trend. (See Table IX-1, Ashland Public Schools Enrollment.)

The location of the student population is shifting toward the areas of newer construction southeast and northwest of the City center. One result of this shift in student population is that the schools located in these areas have almost reached the limit of their capacity. Table IX-2 indicates that Bellview and Helman Schools are already at a critical capacity level. (See Table IX-2, Ashland Public Schools.)

The ability of the existing school sites to accommodate additional enrollment should be gauged by present State and local standards for such educational facilities. For elementary schools, the, Oregon State Board of Education recommends five acres plus one additional acre for each 100 students as a site standard. The Ashland School District uses a standard for future elementary schools of a maximum enrollment of about 500 students, which indicates a site size of ten acres. For junior high and high schools, the Oregon State Board of Education recommends ten acres plus one additional acre for each 100 students. The Ashland School District uses a standard of 1000 student limit for junior high schools and 1500 student limit for high schools. This indicates a site size of 20 acres for junior high schools and 25 acres plus for high schools.

[See Table IX-1 "Ashland Public Schools; Population - School Enrollment" & Table IX-2 "Ashland Public Schools - February, 1977." on Comp. Plan Page IX-8 and Map IX-1"Public Parks and Schools" on Comp. Plan Page IX-9.]

Comparing the above school site standards to anticipated and projected areas of student population indicates expansion and possible acquisition of several school sites will be needed. In the immediate future, for example, Bellview and Helman elementary schools will need to add more classrooms or significantly change district boundaries in order to accommodate anticipated enrollment.

In new areas of development, existing schools will not be able to absorb additional students. Briscoe and Lincoln elementary schools, for example, are already below the recommended site standards. Thus, in order to accommodate even a modest increase in students over the next 23 years, expansion of existing facilities and/or acquisition of new school sites (especially elementary school sites) in the urbanizable area may be necessary. (See Map IX-l, Public Parks and Schools.)

Section 9.07.02 Assumptions

There will be an increased demand for the multiple use of school facilities.

Student population will continue shifting with future annexations. Such shifting will necessitate school district boundary changes.

Continued population growth will eventually increase the student population, creating a demand for additional school facilities in the future.

Section 9.07.03 Goal

Make Maximum Effort Toward Utilization of Present and Future Educational and Recreational Facilities and Resources Through Public, Private, and City Cooperation.

Section 9.07.04 Policies

1. Encourage cooperation between the City and School District when new school facilities are considered or when City action affects the School District.
2. Encourage early acquisition of school sites of sufficient size for school/park facilities.
3. Assess the impact of large-scale proposed developments and their effect on the schools, which they impact.

Part 9.08

Police Service

Sections:

Section 9.08.01 Introduction

The staff of the Ashland Police Department consists of the Chief of Police, Lieutenant, four Sergeants, three Corporals, two detectives, ten Patrol Officers, six Clerk/Dispatchers, and an Executive Secretary.

The Department operates four marked patrol units and four unmarked units, and is responsible for the enforcement of Federal, State and local laws within the incorporated limits of the City of Ashland. At the request of the Jackson County Sheriff or the Oregon State Police, City units will assist their agencies with incidents occurring just outside the City limits.

The City's Dispatch Center is responsible for dispatching of all police and fire/rescue calls. The Dispatch Center is in radio contact with police agencies in Jackson and Josephine Counties through the JO-JAC radio, and, in the new expanded facility, is in radio contact with other fire and ambulance services in the Ashland area. The "911" emergency number was implemented in early 1981 in the 482 and 488 telephone prefixes to ring into the Dispatch Center.

Part 9.09

Fire Service

Sections:

Section 9.09.01 Introduction

The staff of the Ashland Fire Department consists of one Fire Chief and 21 additional paid personnel. The Department instituted a volunteer program for 15 volunteers in September 1981. The Department operates five motorized fire-fighting apparatus with one in reserve. They consist of one 750 gpm pumper, one 1250 gpm pumper, one 1500 gpm pumper, one 2000-gallon tanker, and an ambulance. The total water carried on all apparatus is 5220 gallons. Also, the Department operates two specialized four-wheel-drive grass and brush units. The Department has 15 self-contained breathing apparatus, one breathing air compressor, three portable electric generators, and three smoke ejectors. The Department operates out of two fire stations and provides fire protection service to the Ashland City limits. The Department has also entered into mutual aid agreements with the other fire departments in the area. Fire dispatching is done through the City Dispatch Center.

Chapter 10

Transportation System

Parts:

Part 10.01

Introduction

Sections:

Section 10.01.01 Introduction

This is a planning concept that does not necessarily imply equal financial commitment or equal percentage use of each mode, but rather ensures that we will have the opportunity to conveniently and safely use the transportation mode of our choice, and allow us to move towards a less auto-dependent community.

Ashland has a vision--to retain our small-town character even while we grow. To achieve this vision, we must proactively plan for a transportation system that is integrated into the community and enhances Ashland's livability, character and natural environment. That is the goal of this Transportation Element.

The concept of "modal equity," or the equal opportunity to use all modes of travel, is an integral part of realizing this vision. Whether Ashland residents and visitors travel by foot, bicycle, public transit or automobile, we must have a well-designed, integrated network that is convenient to use. The focus must be on people being able to move easily through the city in all modes of travel. Modal equity then is more than just a phrase.

When people talk about their love of Ashland, being able to walk many places and linger in public parks and plazas inevitably gets discussed. The ability to easily walk and bike is associated with higher levels of livability for communities, and Ashland enjoys a high ranking. But if Ashland is to retain and improve the quality of life, we must rethink our efforts towards transportation planning. Our past focus on accommodating the automobile must now be replaced by concerted efforts toward equally accommodating all modes of travel.

Ashland is a community, which prides itself on innovation and pressing for positive change. The area of transportation has been no exception. In 1990, community leaders formally began discussions involving a need to change our transportation planning policies from auto-oriented to multi-modal, and to clearly recognize the connection between land use and transportation. Shortly thereafter, federal and state legislation passed, which brought forward these same ideals and required states and local governments to plan for multi-modal transportation systems. Specifically, the Oregon Transportation Planning Rule states as its purpose "Through measures designed to reduce reliance on the automobile, the rule is also intended to assure that the planned transportation system supports a pattern of travel and land use in urban areas which will avoid the air pollution, traffic and livability problems faced by other areas of the country."

Indeed, the lessons learned from such cities as Los Angeles and Seattle spearheaded the need for these efforts. However, Oregon, and Ashland itself, has not been immune from the increased impacts of the automobile. The number of vehicle miles traveled (VMT) in Oregon increased eight times faster than the population from 1980to 1990. During the same time period, vehicle miles traveled within Ashland grew over four times faster than the population.

Clearly, the pronounced growth in VMT can be partially attributed to the fact that cities are growing ever larger in area. The density of the urban population in the United States is decreasing as more sprawling development occurs. The trend is clear--people have to make more trips to destinations located far apart.

Ashland has followed a similar path, although to a lesser degree. The private automobile is now the predominant travel choice for city residents, with nearly all work, social and recreational trips using the car. If we fail to alter these patterns, Ashland will experience greatly increased traffic, and greater conflicts between the automobile and other travel choices.

Past transportation planning efforts in Ashland focused much of their attention on the accommodation of the single-occupant automobile, with the main concentration being on creating a convenient automobile environment. It was believed that improved livability would result from easier car movement, but as we have experienced, the opposite has tended to occur. And while minor portions of these plans mentioned travel choices other than the auto, most only considered the option of public transit. Since the automobile figured prominently in these past plans, the implementing measures and improvement plans predictably centered around the car.

Incorporating modal equity in our current planning efforts will allow a change in the way our streets are defined. For too long, streets have exclusively been the realm of the automobile. Pedestrians, bicyclists and public transit users need our streets for their travel just as drivers do. And we must recognize that our streets are also part of our public spaces. Well-designed streets, where people socialize and interact as well as travel, are the key factors in the creation of great neighborhoods.

But our planning efforts must involve more than streets and travel modes. We know that land use and transportation patterns are inextricably linked. Ashland's present and future transportation issues can not be resolved without careful consideration of the spatial relationship of homes, businesses and schools, and how this relationship affects our daily travel needs. While it would be unrealistic to try to rid the city of automobiles, there are ways in which land uses can be modified to improve the impacts on our lives. Different uses such as homes, small businesses and schools should be mixed--a blend which would shorten the distance between destinations and thereby encourage the use of all modes of travel, not just the single occupant automobile. Our land use planning efforts must automatically include recognition of the transportation impacts associated with development, and we must consider all options as we continue to grow as a community.

The purpose of this Transportation Element, then, is to lay the groundwork for a new transportation/land use planning paradigm and establish goals and policies to pave the way for this approach. Clearly, the transportation and land use planning efforts of the City directly affect the way Ashland develops.

As outlined in this element, the basis for Ashland's transportation and land use planning will involve a balanced approach based on the concept of modal equity. Allowing people to move easily through the city by providing multiple, interconnected travel options and retaining Ashland's small-community character and livability must be our goal. The focus of the transportation system will not be limited to the automobile, but in addition, transportation options will be created where the number and length of trips can be reduced, and walking, biking, and transit become viable options for daily travel.

Section 10.01.02 Previous Studies

A review of Ashland's past transportation plans enables us to better understand the current transportation system and it supplies information for future work.

1966 Comprehensive Plan

Developed by the Bureau of Governmental Research and Service, this plan dealt with Ashland's future transportation needs, including increased traffic flows caused by new major streets and a new freeway interchange. This plan was based on a future population of 69,000 people.

While it contained some well thought-out policies, the plan was too broad and omitted cost-effective solutions to the expected population growth. This study is most useful as a historic reference point.

Bear Creek Area Transportation Study (BCATS)
This comprehensive study provided transportation information for the Bear Creek Valley in 1965. It included origin-destination studies, future traffic flow predictions and transportation needs estimates, based on data collected at that time.

Containing solid base data on driver behavior and origin- destination information, this plan provides a base from which to examine the changes in driving habits during the last 30 years.

1978 Comprehensive Plan
Developed by the Ashland Planning Department in accordance with the Land Conservation and Development Commission's (LCDC) goals and guidelines, this plan dealt with improvements of traffic circulation, bicycle and pedestrian traffic, and on and off street parking. It did not project future traffic flows.

1981 Comprehensive Plan
The Transportation Element of this plan was prepared by the Ashland Planning Department in accordance with LCDC goals and guidelines. A relatively unsophisticated computer model predicted future traffic flows through the year 2000.

Until now, this plan worked well within the confines of the automobile-focused approach of the past. Now, however, the limitations of a transportation system that relies on the private automobile are evident and the need to provide other travel options is clear. The new Oregon Transportation Planning Rule requires cities throughout the state to update comprehensive plans and facilities plans to expedite the development of local transportation systems which make alternative modes attractive and decrease private automobile use.

Section 10.01.03 Overview of Ashland's Physical and Transportation Setting

Ashland's location has historically governed local transportation, patterns. A linear city, situated between the Siskiyou Mountains to the south and Bear Creek/Interstate 5 to the north, Ashland has relatively steep terrain to the south of North Main Street- Siskiyou Boulevard and more gentle slopes to the north of this thoroughfare.

Growth
Ashland has grown in a consistent pattern for the last 20 years, with population increases in general agreement with the estimates of the Population Element of the Comprehensive Plan. However, while population growth has occurred as expected, traffic increase, primarily in the number of vehicle trips on our streets, have grown at a much faster rate. For example, while Ashland's population grew approximately 8.5% between 1980 and 1990, the number of vehicle miles traveled (VMT) within the city increased by approximately 39%.

While some of this increase can be attributed to tourists, it is apparent that local residents, increasingly dependent on the automobile for convenience, primarily account for the rising figures. More children are driven to school than walk or ride bicycles, more people drive to work alone than share rides, and more people make separate shopping excursions than combine them into a single linked trip. Residential development beyond Ashland's city limits also affects the transportation system. The city serves as a shopping/school/employment center for rural southern Jackson County residents who center many of their daily trips around Ashland. With ever-increasing traffic levels, Ashland must ensure future livability by reducing dependence on the automobile and encouraging the use of other travel modes.

Land Use Patterns
Ashland is fortunate to have retained a relatively compact urban form throughout its history. Despite its linear configuration, most of the community's residential areas are well served by nearby commercial service centers. The downtown core contains the banks, the post office, restaurants, and other services used by local residents. With distinctive stores and restaurants, it is also a regional specialty shopping center for the Southern Oregon/Northern California region. The downtown core is also a tourist

destination, as are Lithia Park and the Oregon Shakespeare Festival. Exceptional transportation demands exist in this area and create the city's highest auto and pedestrian flows. The downtown core also experiences the highest traffic congestion levels in Ashland.

Other commercial centers lie adjacent to Southern Oregon State College and near the Interstate 5 freeway interchange at Ashland Street. Multi-family and single-family residential developments are located throughout the city, with a large area of multi- family development centered near the college. Most hillside areas are committed to single-family detached housing units.

With the exception of the Railroad District, most areas of Ashland have been characterized for years by single-use zoning. Few areas exist with "mixed uses" in which a blend of residences, offices, and retail services is available. Separation of uses through single-use zoning has resulted in residents' need to drive longer distances to work or for services. Compatible mixed-use zoning would provide services in residential areas and offer housing in commercial areas. These mixed uses would reduce both the number and length of trips for goods and services.

Travel Patterns

Fortunately, Ashland is still a relatively small community and many of the local shopping, school and service trips are very short. The increase in vehicle miles traveled over the last ten years, however, indicates an ever-increasing number of these short convenience trips.

Ashland has an unusual division of travel modes for work- based trips compared to Jackson County and Oregon, as the following table demonstrates. (1990 Census)

MODE	OREGON	JACKSON COUNTY	ASHLAND
Drive alone	73.3%	77.0%	66.9%
Car Pool	12.8%	11.3%	10.7%
Transit	3.4%	0.7%	1.1%
Walk	4.2%	3.8%	10.5%
Other	1.0%	1.1%	3.7%
Work at Home	43%	5.1%	7.1%

As shown above, 33.1% of all work based trips use some form of transport other than the single occupant automobile, and 22.4% of all work trips do not use the automobile at all. But while our travel habits, on average, indicate a higher use of the alternate modes than the statewide average, the auto's use within Ashland has risen between 1980 and 1990.

The number of drivers who commute to work alone increased from 57.2% to 66.9% between 1980 and 1990. Fuel pricing is a major factor in this shift. In the mid-1970s, fuel prices rose rapidly, forcing people to travel more efficiently and to strongly consider other options for travel. Public transit and car pools were vigorously promoted during that decade. During the 1980s, however, fuel prices remained essentially constant. With inflation factored in, fuel prices actually declined in later years, reducing much of the impetus toward economy, which characterized driver behavior during the 1970s.

The following table also demonstrates the increase in the number of people who work at home--a figure that almost doubled during the 1980s. Increasingly, many residents' work trips involve traveling from one portion of the house to the other. The growth of home occupations in Ashland has both enhanced economic development and decreased the number of work trips. These patterns continue to substantially change our transportation system. (1980 and 1990 Census)

MODE	ASHLAND 1990	ASHLAND 1980
Drive alone	66.9%	57.2%
Car Pool	10.7%	18.1%

Transit	1.1%	1.4%
Walk	10.5%	14.6%
Other	3.7%	5.0%
Work at Home	7.1%	3.7%

Rural development outside the city limits has also affected local transportation. Residents of these low-density areas use city streets for shopping, work, schools and entertainment. There are no easy solutions to reduce these trips. Identifying ways in which a rural lifestyle affects city dwellers and reducing development in these areas will help alleviate those impacts.

General Transportation Problems

In comparison to metropolitan cities, Ashland has few critical transportation problems. This situation could change quickly, however, as it did during the 1980s. Congested automobile travel areas are currently found in Ashland's downtown area, in the area near Southern Oregon State College, and on East Main Street near the high school and middle school. Should our reliance on the car continue at the present increasing rates, many more congested areas will evolve.

Pedestrians have a relatively good sidewalk network in the pre-World War II areas of Ashland and in most of the recent subdivisions. The downtown commercial core is well designed for pedestrians and offers a welcoming walking environment. Because the remainder of the community has developed without sidewalks, pedestrians are forced to compete with autos for space on many roadways. In some commercial areas of the city, businesses serve drive-up shoppers and make it difficult for those who choose to walk.

Bicyclists' difficulty in traveling through Ashland is primarily due to a lack of safe, comfortable riding areas. North Main Street through the downtown core, and Siskiyou Boulevard between downtown and the college, create major impediments to bicycle travel through Ashland. Although efforts are being made to remedy these problems, conditions remain difficult for local bicyclists.

Public transportation is steadily improving in Ashland. At present, 15-minute bus service is available along Siskiyou Boulevard almost the entire length of the city, and a reduced fare program encourages ridership. Unfortunately, public transit stops are not currently well-sited and they lack necessary amenities. As these stops and overall bus service are improved within the city, ridership will continue to steadily increase.

Transportation planning for Ashland is both complex and critically important. This element of the Comprehensive Plan identifies important transportation issues and addresses ways to solve future problems. This Transportation Element considers and incorporates various methods to accommodate traffic growth while retaining Ashland's character and livability. Through the concept of modal equity, Ashland shall continue to maintain its high level of livability and accommodate the travel needs of our future populations.

Part 10.02

Street Classifications

Sections:

Section 10.02.01 Introduction

To create a successful transportation plan for Ashland, the interaction of transportation modes must be carefully studied. Whether people walk, drive, take the bus or bicycle, most travel takes place on the city's street network.

Ashland streets must provide convenient transportation facilities and a comfortable, safe atmosphere. Equal consideration of all travel modes requires more than simply providing various physical travel areas. Streets must facilitate pedestrian, transit and bicycle traffic. The streetscape determines which transportation modes people use and affects the community's livability.

This section of the Transportation Element defines the four major street types in Ashland - boulevard, avenue, neighborhood collector and neighborhood street. These classifications identify the character and level of service to be emphasized on city streets. In addition, a classification is included for multi-use paths. Although not typically considered streets, multi-use paths can serve as transportation links to the street network for pedestrians and bicyclists.

The street classifications defined in this section are used throughout this document and on the Transportation System Map (page 9) showing Ashland's future transportation system. Preceding the street classifications are the following definitions of frequently used transportation terms.

Section 10.02.02 Definitions

Bikeways--A bikeway is any road, path or way open to bicycle travel. All streets in Ashland are considered bikeways. The facilities can be a portion of the roadway designated for the preferential use of bicycles such as a bike lane, shared with other transportation modes, or an off-road path. Bikeways must provide direct, continuous courses accessing commercial areas, activity centers and schools. Bikeways must provide safe and convenient bicycle travel and be free of unnecessary delays.

Walkways--Walkways provide a circulation network, a meeting place for neighbors, a play area for children, a leisure area and an exercise place. Walkways are intended to provide safe, attractive and convenient facilities for people traveling on foot and by wheelchair. Walkways are adjacent to streets and although usually in sidewalk form, may occasionally be off-road paths.

Protected Crossings--Protected crossings are pedestrian crossings designed to minimize crossing distance and provide pedestrians with the safest, direct route across streets shared with other modes of travel. Curb extensions, pedestrian refuges, raised crosswalks, marked crosswalks, landscape strips, street trees, on-street parking and traffic signals are design elements used to achieve this effect.

Regional Transit Route--Regional transit routes provide transit service between cities in the Rogue Valley.

Section 10.02.03 Street Classification Guidelines (Arterial)

Boulevards provide access to major urban activity centers for pedestrians, bicyclists, transit users and motor vehicle users, and provide connections to regional traffic ways such as Interstate 5. The engineering term for this type of street is arterial. North Main Street and Siskiyou Boulevard are examples of boulevards.

On an average day 8,000 to 30,000 motor vehicle trips are made on a typical boulevard. Pedestrian, bicycle and transit travel can be difficult and uncomfortable if the street is not designed to buffer non-auto users. To restore balance pedestrian, bicycle and public transit facilities should be emphasized on boulevards. Traffic without a destination in Ashland should be encouraged to use regional traffic ways and discouraged from using boulevards.

As major thoroughfares, boulevards are busy. They should provide an environment where walking, bicycling and motor vehicle travel are equally convenient. Design should facilitate the boulevard's use as a public space where people can comfortably wait for the bus or rest on a bench.

Land Use

A. Mixed-use development should be encouraged along boulevards.
B. Multi-family development should be encouraged in close proximity to boulevards so that a variety of transportation options are available.
C. Direct and convenient bicycle and pedestrian access between land uses should be emphasized.
D. Schools, commercial areas, transit stop employment areas and parks should be accessible by bikeways and walkways.
E. A high concentration of homes and/or jobs within walking distance (one-quarter to one-half mile) of p~ transit services should be encouraged.
F. A mix of land uses should be encouraged within easy walking distance of a transit stop to reduce the number of separate trips. The types of land uses should be those which public transit riders can readily use.
G. Commercial and recreational development such as shopping centers, entertainment centers museums and stadiums, which attract trips throughout or beyond Ashland, should be encouraged to locate along boulevards and be accessible by regional transit routes.

Design

A. Boulevard design should balance safe, attractive and direct walkways and bikeways with an efficient motor vehicle thoroughfare.
B. Commercial buildings should be oriented to the street with the main entrance facing the bikeway and walkway. Convenient bicycle parking should be located near the main entrance.
C. Landscaped medians and park rows offer a visual sense of entry into the community and provide pedestrians with a traffic buffer. Amenities such as benches, shade trees, bathrooms and water fountains should be pro- vided to accommodate pedestrians and bicyclists.
D. Protected (pedestrian) crossings should be provided along boulevards at a minimum of every three blocks or approximately 1,000 feet.
E. Where two boulevards intersect, a boulevard and an avenue intersect or in high traffic areas, a protected crossing should be provided.
F. Signaled intersections involving boulevards should be designed to allow safe and easy movement of bicycles. Signal triggering devices that can be activated by bicycles should be designated on the roadway. Intersections involving bicycle lanes should be designed to minimize conflicts, such as turning movements, and to provide adequate bicycle crossings.
G. Bicycle lanes should be provided on boulevards. Bike lanes should be separated from motor vehicle lanes by an eight-inch solid white line and be well marked.
H. All boulevards should provide a smooth riding surface for bicycles. Drainage grates, abrupt edges in pavement and debris make bicycle travel difficult and unsafe.
I. Boulevard and railroad crossing intersections should be designed to provide safe passage for bicyclists over the railroad tracks.
J. City bikeways should be linked to county bikeways and statewide highway bikeways.

K. Public transit stops should be easily accessible to pedestrians and bicyclists. Covered bicycle racks or lockers should be provided at transit stops.
L. Transit stops should be covered and contain a bench to provide a convenient, pleasant waiting area. The stops should be located so that oncoming buses are easily visible. A buffer, sidewalk and/or landscaping should be located between the waiting area and motorized traffic.
M. Park and rides should be considered adjacent to boulevards on regional transit routes to encourage commuting residents to use public transit.
N. Maintain carrying capacity through driveway and curb cut consolidation or reduction.
O. Off-street parking by uses located on boulevards should be encouraged.
P. On-street parking removal or street widening should be considered only at specific problem locations, and alternatives and the impacts on adjacent land uses should be studied. Special consideration should also be given to a safe pedestrian environment.
Q. Boulevard intersections with streets with similar uses should be designed to facilitate the movement of traffic and to allow all turning movements.

Section 10.02.04 Avenue (Major Collector)

Avenues provide concentrated pedestrian; bicycle and motor vehicle access from boulevards to neighborhoods and to neighborhood activity centers. As Ashland's population increases, transit routes may access avenues. If public transit routes expand service to avenues, the transit land use and design guidelines for boulevards should be employed. The engineering term for this type of street is major collector. Iowa and Wimer Streets are examples of avenues.

On an average day 3,000 to 10,000 motor vehicle trips are made on a typical avenue. Pedestrian and bicycle facilities should be emphasized o~ avenues.

Avenues are similar to boulevards, but are designed on a smaller scale. There are usually fewer motor vehicle lanes and narrower rights-of-way.

Land Use

A. Mixed-use development should be encouraged on avenues.
B. Multi-family development should be encouraged in close proximity to avenues so that a variety of transportation options are available.
C. Direct and convenient bicycle and pedestrian access between land uses should be emphasized.
D. Schools, commercial areas, transit stops, employment areas and parks should be accessible by bikeway) walkways.
E. New or expanding land uses, which attract trips from the surrounding neighborhoods or from throughout Ashland should be encouraged to locate on avenues.
F. Regional land uses should be discouraged from locating on avenues, except where a boulevard is nearby and directly connected to a state/regional traffic-way, such as Interstate 5.

Design

A. Avenue design should balance safe, attractive and direct walkways and bikeways with an efficient motor vehicle thoroughfare.
B. Commercial buildings should be oriented to the street with the main entrance facing the bikeway and walkway. Convenient bicycle parking should be located near the main entrance.
C. Landscaped medians and park-rows offer a visual sense of entry into the community and provide pedestrians with a buffer from traffic. Amenities such as benches, shade trees, bathrooms and water fountains should be provided to accommodate pedestrians and bicyclists.
D. Protected (pedestrian) crossings should be provided along avenues at a minimum of every three blocks or approximately 1,000 feet.
E. Where a boulevard and an avenue intersect, two avenues intersect or in high traffic areas, a protected crossing should be provided.
F. Signaled intersections involving avenues should be designed to allow safe and easy movement of bicycles. Signal triggering devices that can be activated by bicycles should be designated on the

roadway. Intersections involving bicycle lanes should be designed to minimize conflicts, such as turning movements, and to provide adequate bicycle crossings.

G. Bicycle lanes should be provided on avenues. These lanes are separated from motor vehicle lanes by an eight-inch solid white line, and must be well marked.
H. All avenues should provide a smooth riding surface. Drainage grates, abrupt edges in pavement and debris make bicycle travel difficult and unsafe.
I. Avenue and railroad intersection crossings should be designed to provide safe passage for bicyclists over the railroad tracks.
J. City bikeways should be linked to county bikeways and statewide highway bikeways.
K. Maintain carrying capacity through driveway and curb cut consolidation or reduction.
L. Off-street parking by uses located on avenues should be encouraged.
M. On-street parking removal or street widening should be considered only at specific problem locations, and alternatives and the impacts on adjacent land uses should be studied. Special consideration should also be given to a safe pedestrian environment.
N. Intersections of avenues with streets with similar uses should be designed to facilitate the movement of traffic and to allow all turning movements.

Section 10.02.05 Neighborhood Collector (Minor Collector)

Neighborhood collectors distribute traffic from boulevards or avenues to neighborhood streets. The average traffic volume of a neighborhood collector is 1,500 to 5,000 motor vehicles per day. The engineering term for this type of street is minor collector. Fordyce and Morton Streets are examples of neighborhood collectors.

Land Use

A. Mixed-use development that serves the local neighbor- hood should be encouraged.
B. New land uses and major expansions of existing land uses, which attract many traffic trips from outside the neighborhood, should be discouraged on neighborhood collectors.

Design

A. Neighborhood collector design should balance safe, attractive and direct walkways and bikeways with an efficient motor vehicle thoroughfare.
B. Commercial buildings should be oriented to the street with the main entrance facing the bikeway and walkway. Convenient bicycle parking should be located near the main entrance.
C. Landscaped islands and park-rows offer a visual sense of entry into the neighborhood and provide pedestrians with a buffer from traffic. Amenities such as benches, shade trees, bathrooms and water fountains should be provided to accommodate pedestrians and bicyclists.
D. Protected (pedestrian) crossings should be provided along neighborhood collectors at a minimum of every three blocks or approximately 1,000 feet.
E. Bicycle lanes should be provided on streets designated as neighborhood collectors when the average daily traffic is over 3,000, and/or when actual travel speeds exceed 25 miles per hour as outlined in the Oregon Bicycle and Pedestrian Plan. Bike lanes are separated from motor vehicle lanes by an eight-inch solid white line, and must be well marked.
F. All neighborhood collectors should provide a smooth riding surface. Drainage grates, abrupt edges in pavement and debris make bicycle travel difficult and unsafe.
G. Neighborhood collectors and railroad intersection crossings should be designed to provide safe passage for bicyclists over the railroad tracks.
H. City bikeways should be linked to county bikeways and statewide highway bikeways.
I. Maintain carrying capacity through driveway and curb cut consolidation or reduction.
J. Off-street parking by uses located on neighborhood collectors should be encouraged.
K. On-street parking removal or street widening should be considered only at specific problem locations, and alternatives and the impacts on adjacent land uses should be studied. Special consideration should also be given to a safe pedestrian environment.
L. Intersections of neighborhood collectors with streets with similar uses should be designed to facilitate the movement of traffic and to allow all turning movements.

M. Distribution of traffic to the neighborhoods on neighborhood collectors should be encouraged.
N. Non-local neighborhood trips should be discouraged on neighborhood collectors.

Section 10.02.06 Neighborhood Street (Local Street)

Neighborhood streets provide access to residential and neighborhood commercial uses. Motor vehicle traffic should be relatively low at 1,000 or less motor vehicles per day. The engineering term for this type of street is "local" street. Sixth, Allison and Quincy Streets are examples of neighborhood streets.

Neighborhood streets should facilitate pedestrian circulation, allow a meeting place for residents and provide a play area for children. Generally, neighborhood streets are the narrowest city streets.

Land Use

A. The scale and character of a neighborhood street design should correspond directly to the land use it serves.
B. Auto-oriented land uses should be discouraged from using neighborhood streets as a primary access route.

Design

A. Neighborhood street designs should balance safe, attractive and direct walkways and bikeways with an efficient motor vehicle thoroughfare.
B. Landscaped islands and park-rows offer a visual sense of entry into the neighborhood and provide pedestrians with a buffer from traffic. Amenities such as benches, shade trees, bathrooms and water fountains should be provided to accommodate pedestrians and bicyclists.
C. Traffic control measures or devices may be used to slow traffic, control access or deny traffic movements on neighborhood streets where safety, speed, or non-local traffic problems exist.
D. On-street parking removal or street widening should be considered only at specific problem locations, and alternatives and the impacts on adjacent land uses should be studied. Special consideration should also be given to a safe pedestrian environment.
E. Non-local neighborhood trips should be discouraged on neighborhood collectors.
F. The use of neighborhood streets for one-way traffic is not generally appropriate, unless the entire circulation pattern of the neighborhood has been considered.

Section 10.02.07 Alley

The alley is a semi-public neighborhood space that provides access to the rear of property. The alley eliminates the need for front yard driveways and provides the opportunity for a more positive front yard streetscape. An alley at the rear of properties allows the street located adjacent to the front of properties to be designed using a narrow width with limited on-street parking. 1-he use of alleys can create the opportunity for the use of narrower lots to increase residential densities. Alleys are appropriate in all residential areas and in some commercial areas for business frontage, and for access and delivery depending on the circulation pattern of the area.

Land Use

A. Parking spaces and structures should be encouraged to locate on alleys.
B. Delivery areas for commercial uses should be encouraged to locate on alleys.
C. Accessory units above garages and accessory residential uses should be located on alleys in residential areas.
D. Multi-family units and commercial uses may be appropriate on alleys.
E. Utility easements should be accommodated in the alley.

Design

A. Landscaping, street trees and varying parking surfaces should be incorporated into the alley to create a streetscape.
B. Alleys within commercial districts are valuable public spaces. Buildings should be oriented toward the alley with individual businesses showing a strong sense of entry. Alternative pavement materials, textures and colors should be used to develop the pedestrian environment.

C. When multiple structures are located on one lot, the buildings adjacent to the alley should be oriented to- ward the alley.
D. The use of alleys for one-way traffic is not generally appropriate, unless the entire circulation pattern of the neighborhood has been considered.

Section 10.02.08 Multi-use Path

Multi-use paths are off-street facilities used primarily for walking and bicycling. These paths can be relatively short connections between neighborhoods (neighborhood connectors), or longer paths adjacent to rivers, creeks, railroad tracks and open space. Frequented by both pedestrians and bicyclists, multi-use paths provide shortcuts through neighborhoods and to other destinations.

Land Use

Parks and schools should be encouraged to locate along multi-use paths.

Design

A. Multi-use paths within the city limits of Ashland should be linked to state highway bikeways and county bikeways.
B. Multi-use paths should be built as neighborhood connectors in areas where block dimensions exceed the recommended maximum circumference standard.
C. Multi-use paths shared by pedestrians and bicyclists should emphasize design features and adequate path markings that allow for the safety of all users.
D. Intersections of multi-use paths and streets should minimize conflicts and provide adequate pedestrian and bicycle crossings. Crossings should be located at points along the road where adequate sight distance exists. When paths cross streets, safety devices such as signs, signals and painted crosswalks should be considered. Curb cuts should be provided.
E. Intersections of multi-use paths with railroad crossings should be designed to provide safe passage for pedestrians and bicyclists over the railroad tracks.
F. Railings and barriers should be provided on both sides of bridges on multi-use paths.
G. All multi-use paths should be signed with regulatory, warning and destination signs as outlined in the Oregon Bicycle and Pedestrian Plan.

Part 10.03

The Street System

Sections:

Section 10.03.01 Introduction

Streets are pivotal in shaping the character of Ashland neighborhoods. Streets provide the first impression visitors have of the community, and longtime resident's view Ashland primarily from the streets -- the city's most prevalent public viewshed.

Street, public right-of-way and street right-of-way are used interchangeably throughout this document. The term "street" refers to much more than the roadway surface. It includes the sidewalk, planting strip, street trees, lighting and street furniture, as well as traffic calming structures. The publicly owned land a street occupies is called the right-of-way.

Streets provide a travel corridor for pedestrians, bicycles and motor vehicles. They have also historically served aesthetic and social purposes as multi-purpose public spaces, which diffuse light, circulate air, provide landscaped vistas and facilitate informal, spontaneous recreation and socializing.

After World War II and the development of suburban street standards, streets became single-purpose spaces for the safe and convenient operation of automobiles. Houses were set farther back; sidewalks often disappeared completely and use of the front yard as an activity area decreased.

Four decades of single-purpose streets have resulted in negative consequences, such as the loss of livable neighborhoods due to fast-moving traffics. The cost of an automobile-dominated transportation system, traffic's effect on quality of life and the environmental degradation caused by motor vehicles, have forced communities to examine the ways in which the public right-of-way is used. Streets must be reclaimed as multi-purpose public spaces to facilitate non-auto travel and to maintain community livability.

Section 10.03.02 Existing Street Network

Network Description

Ashland's geographic location has historically governed local transportation patterns. Bounded on the west by the foothills of the Siskiyou Mountains and on the eastern edge by Interstate 5 and large floodplains, the city has developed in a linear fashion. The main thoroughfare, North Main Street-Siskiyou Boulevard, runs between steep terrain to the south and the gentle slopes of the north.

Ashland's street system design reflects the cultural values and available technology of earlier eras. Most of the first streets were developed within what is today the downtown core. Streets in the Railroad District were laid out in a grid pattern perpendicular and parallel to the tracks. Subsequent neighborhood streets were patterned in a strict north/south grid with little consideration for terrain limits. As a result, many Ashland streets are very steep.

As Ashland became increasingly auto dependent, attempts were made to reduce the car's impact by limiting access to neighborhood areas. For example, more recent residential developments contain curvilinear streets with cul-de-sacs. Current street design trends employ a modified grid pattern while accommodating terrain limitations.

The main boulevard, North Main Street-Siskiyou Boulevard, extends the length of the city. Two boulevards branch off it in an easterly direction. Ashland Street (Highway 66) intersects Siskiyou Boulevard near Southern Oregon State College and Interstate 5. East Main Street runs in an easterly direction from the city center to Highway 66. Numerous avenues and neighborhood collectors connect city neighborhoods to the boulevards.

Ashland has three freeway interchanges adjacent to Interstate 5. Exit 19 is located at the northern end of the city off Valley View Road. Exits 14 and 11 are located at the southern end of the city off Ashland Street (Highway 66) and Siskiyou Boulevard respectively. Interstate 5 provides primary north-south access through the Rogue River Valley as well as to other Oregon regions and the state of California. On Interstate 5, Ashland is 12 miles from Medford, 40 miles from Grants Pass and 45 miles from Yreka, California.

Several state highways connect Ashland to areas in Southern Oregon. State Highway 99 (Rogue River Highway) is also known as North Main Street and Siskiyou Boulevard within the city limits. Highway 99 closely parallels Interstate 5 and extends from the freeway in Ashland to Grants Pass. Highway 99 also provides access to areas northwest of Ashland.

State Highway 66 (Greensprings Highway) runs in an easterly direction from Ashland to Klamath Falls, 60 miles away. Dead Indian Memorial Road, a county road, extends in a northeasterly direction to State Highway 140. State Highway 140 provides access to Klamath Falls and connects to State Highway 62. Due to steep, rugged terrain, the area directly west of Ashland is not accessible by local roads. The main routes to the Applegate Valley and the Illinois Valley are either State Highway 238 through Jacksonville or U.S. Highway 199 through Grants Pass.

Street Conditions

Approximately 83 miles of streets lie within Ashland. There are 75 miles (90%) of paved streets and eight miles (10%) of unpaved streets. Public road maintenance within Ashland is shared by the City, the County, and the State. The Oregon Department of Transportation maintains two of the boulevards in the city--North Main-Siskiyou Boulevard (Highway 99) and Ashland Street (Highway 66). Both streets are state highways. Jackson County provides maintenance for county roads within the city. The City of Ashland Public Works Department maintains all other public streets within the city limits. The City grades and gravels unpaved streets and conducts required maintenance on paved streets.

Future transportation projects currently planned and funded are described in Appendix A.

Street Classifications

Ashland streets have been classified as part of the transportation planning process. Roadway classifications, also called functional classifications, establish uniform criteria for the construction, maintenance and use of the streets. The classifications are based on street function, traffic volume, average trip length, spacing and relationship to the network. There are four street classifications: boulevard, avenue, neighborhood-collector and neighborhood streets. The Transportation System Map on page 9 shows the functional classification of Ashland streets. The map also indicates proposed streets, which will improve travel circulation as the community grows.

The City of Ashland uses a modified version of the functional class system as outlined in the Street Classifications section. The modifications were made to recapture streets as multi- modal travel corridors and public spaces. Specifically, traditional street type names are used in place of standard engineering terms. Boulevard is used for arterial, avenue is used for major collector, neighborhood collector is used for minor collector and neighborhood street is used for local street.

Traditional street type names are used because they evoke classic, human scale streets such as Siskiyou Boulevard and East Main Street rather than modern, automobile dominated roads. See Street Classifications section for further information.

The functional class system was developed by the Federal Highway Administration and adopted in the Federal-Aid Highway Act of 1973. The Oregon Transportation Planning Rule of 1991 requires local jurisdictions to use the functional classification system and ensure that road classifications are consistent with regional and state functional classifications.

According to the functional classification system, streets serve two basic purposes--traffic movement and land access. Boulevards move traffic through the community and onto the collector system and restrict or prohibit access from adjoining properties. Avenues and neighborhood collectors are designed to collect traffic from neighborhood streets and funnel it onto boulevards. Although some property access is provided by these street types, moving traffic is of prime importance. Neighborhood streets primarily provide access to adjacent properties and move neighborhood traffic onto collectors. Neighborhood streets should be protected from shortcut or detour traffic, from vehicles moving at excessive speeds, and from parking unrelated to residential activities.

While the functional classification system is a useful transportation planning tool, it has several shortcomings. First, the concentration on vehicular traffic volumes and street capacities tends to dominate street design and construction. Streets are widened at the expense of sidewalk width, trees and front yards. Cities across the nation have made changes based on the assumption that traffic would increase at a steady rate in the future and have used traffic volumes and capacities as principal measures of street use. It is becoming increasingly apparent that a road's function and its relationship to the network, as well as its traffic volume, must be considered.

The functional classification system, which focuses on vehicular traffic, assumes that streets exist for two purposes--moving motor vehicles and providing land access. As a result, non-automobile users (pedestrians, bicyclists and transit riders) are only considered in afterthought. The third street purpose that of providing a public space is entirely ignored.

Section 10.03.03 Roadways Needs

Ashland citizens have expressed opinions about transportation needs in many forums. To address their concerns, the city held neighborhood meetings from February to April 1994. At these meetings citizens identified a variety of problems and possible solutions. Appendix B contains a complete list of neighborhood meeting comments.

Land Use and Travel Patterns

Transportation demand and resulting traffic are determined almost entirely from the ways in which land is organized and used. Suburban development tends to be low in population density and requires use of the personal automobile for almost all travel. Destinations are far apart in suburban areas and residential neighborhoods are strictly separated from the places people work, shop, and socialize. Extensive areas of suburban development result in sprawl.

In contrast, traditional neighborhood development is compact and integrates residential areas with employment, shopping and recreational districts. By locating destinations close to areas in which people live, walking, bicycling and public transit can be used for everyday trips. While a sprawling development pattern systematically locks cities into dependence on the single-occupant automobile, a traditional development pattern provides multiple transportation options.

A recently completed study by the University of California at Berkeley's Institute of Urban and Regional Development compared travel characteristics in two distinctly different neighborhoods in the San Francisco-Oakland region's East Bay. These enclaves included Rockridge, an older compact and mixed-use neighborhood with many traditional design qualities, and Lafayette, a post-World War II community dominated by suburban tract housing, spacious community designs and auto- oriented retail strips and plazas. The two neighborhoods were discovered to be similar in some ways. They lie in the same geographic area, are the same approximate distance to downtown San Francisco, have a public transit station, are served by the same regional freeway and have comparable median household incomes.

The study, however, found that the older traditional neighborhood, Rockridge, averaged a 10% higher share of non-work trips by travel modes other than automobile, compared to the auto-oriented Lafayette. Neighborhood characteristics exerted the strongest effect on non-work trips of less than one mile. Specifically, in Rockridge walking trips were frequently substituted for automobile trips. Residents made 28% of non-work trips under one mile by foot and 66% by automobile. In contrast, Lafayette residents made just 6% of non-work trips by foot and 81% by car.

The University of California study highlighted two factors, which have been critical in the evolution of sprawl--the personal automobile and single-use zoning. Prior to the 1950s, homes were built on small lots close to public transportation. As economic growth and the national standard of living escalated in the 1950s, an increasing number of households purchased automobiles. As extensive road systems were developed throughout the nation and within communities, the car became the connecting link between home and work. New homes were built on large lots away from employment centers and the suburban population exploded.

Shortly before the automobile's proliferation, single-use zoning, which designates areas for specific, limited land uses, became the basis of comprehensive planning and zoning in the United States. Single-use zoning had been developed in the late nineteenth century to prevent poor living conditions caused by industrial pollution, noise and odor, and to prevent fire and disease.

The resulting development pattern decentralized land uses and strictly separated residential and commercial functions. The landmark 1927 U.S. Supreme Court decision of the Village of Euclid vs. Amber Realty Co. upheld the municipality's right to designate areas for single land uses9. Ironically, cars traveling between separate uses have caused the pollution and destruction of natural resources that single-use zoning was originally intended to eliminate.

Sprawl-induced dependence on the automobile negatively affects communities in many ways. Sprawl emphasizes the private living space and ignores development of public spaces. It does not respond to changing demographics. As families become smaller and less traditional, and as cars are required for daily living, other demands, such as regular chauffeuring of children, become a hardship.

Sprawl is expensive. On average, a two year old car costs $5,000 per year to own and maintain~3. Keeping a private automobile has become more costly for wage earners and a formidable economic barrier for lower income residents. The cost of installing and maintaining public infrastructure, such as roads, sewers, water, electricity, schools, parks, police and fire protection, grows as the amount of serviced land area increases.

The public pays the high infrastructure costs for a sprawling development pattern. Extensive road networks consume valuable land and low density makes transit inefficient and ineffective. Requiring high-energy consumption, sprawl is also a major source of air and water pollution. The cumulative effects of sprawl compromise the quality of life and the environment, and discourage a sense of community.

The traditional neighborhood is an alternative to low density development. Traditional neighborhoods are moderately dense, multiple-use communities which provide transportation options. Traditional communities include a core with mixed and multiple uses, variation in the size of buildings and building footprints, an increase in the size of residential units and lot sizes from the neighborhood core to its periphery, open space and a focus on pedestrians and human scale in the streetscape. In Ashland's traditional neighborhoods, such as the Railroad District, new development and redevelopment increasingly integrate those elements, which have historically proven effective.

Traditional neighborhoods facilitate everyday life without the need for extensive driving. Compact land use, mixed and multiple-use areas and the pedestrian environment promote walking, bicycling and public transit. In contrast, the low density development, separated land uses and automobile environment of suburban areas limits travel to the car and promotes an increasing number of vehicle miles traveled

(VMT) per capita. Traditional neighborhood development must be facilitated to increase walking and bicycling trips and to make public transit possible in the long term.

Street Layout and Design

Street network patterns and the physical design of the right-of- way are intrinsically linked to travel patterns and neighborhood character. Successful, multi-modal streets in traditional neighborhoods resemble inviting public spaces and function in an interconnected network. Street layout and design should support the traditional neighborhood.

Traditional neighborhoods such as the Ashland's Railroad District reveal common characteristics in network layout and street design. They typically contain a grid network--a framework of parallel or crisscrossed streets intersecting at right angles with very few dead ends. Blocks are 300 to 400 feet in length with 1,200 to 1,600 feet perimeters.

In contrast to the multiple curves and cul-de-sacs found in suburban development, a grid network spreads out local traffic by providing multiple ways to reach the same point. The many interconnections and short block lengths mean that trips are more direct and shorter in distance. This network allows residents to get to neighborhood destinations, schools, stores, or friends' houses, without entering a boulevard.

Physical street design is strikingly different in traditional neighborhoods than in suburban areas. Typical neighborhood streets have evolved from the narrow pavement width and right-of-way designed to carry horse-drawn vehicles to the much wider streets seen in today's suburbs, which allow people to drive 40 to 50 miles per hour.

Traditional neighborhood streets typically have 30 to 50 feet of right-of-way, with 18 to 24 feet of pavement. Houses are set back 12 to 20 feet from the right-of-way and detached garages are either located behind the house or set back further than the house facade. In contrast, subdivision streets have 60 feet of right-of-way, 32 to 36 feet of pavement; houses set back 20 to 60 feet from the right-of-way and attached garages set back the same distance as the house facade.

Other elements of traditional neighborhood street design include parallel parking on at least one side, park-rows and sidewalks on both sides, street trees and street lamps at regular intervals, curb radii of not more than 15 feet, and bump-outs and safety islands on wider streets. In traditional neighbor- hoods, all streets are not the same. Some serve high-density neighborhoods, some commercial cores, and others serve low- density districts. They also vary in pavement widths, sidewalks and building locations contrasting markedly with rigid contemporary suburban standards. A noticeable feature of traditional neighborhoods is that design differs from street to street.

Street design should promote safety and livability. It should permit comfortable and safe pedestrian and bicycle travel as well as motorized vehicular operation. Vulnerable users such as children, the disabled and the elderly, should be protected. The street should be a multipurpose, public space that enhances the neighborhood's overall aesthetics. Deliveries, emergency access and where densities allow, bus or paratransit service must be accommodated.

Ashland's street layout and design need to be better matched to adjacent uses, the physical features of the land, location in the neighborhood and position in the community. A grid or modified grid network pattern should be used to provide connectivity. Ashland street design standards must incorporate traditional neighborhood street elements.

Traffic Calming

The challenge of the neighborhood street system is to balance restoring the human scale characteristic of traditional neighborhoods with residents' desire for convenient automobile access to their home. This involves reducing traffic unrelated to the neighborhood, slowing down traffic using the streets and providing for attractive and unobtrusive vehicle parking.

There are three methods for achieving traffic control in the neighborhood: general laws and ordinances; traffic control devices; and traffic calming techniques. The third method, traffic calming, is increasingly being used on neighborhood streets because traffic control devices and speed limit laws tend to be ineffective in both deterring through traffic and slowing down local traffic.

Traffic calming uses geometric design features to guide or restrict physical movement of motor vehicles, bicycles and pedestrians. The basis for traffic calming is simple. Drivers tend to respond to their surroundings rather than to posted speed limit signs. If the street is designed using suburban standards and has the width and gentle curves of a highway, people will drive as if they are on a highway. Even the Romans understood that certain measures had to be taken to restore neighborhood tranquillity when they placed stone blocks at some street entrances as a physical barrier against high speed chariot traffic.

Traffic calming can be used to address two major problems: the protection of neighborhood streets from high speed and through traffic; and the mitigation of traffic impacts on residential areas located on major streets.

"Cut-through" traffic in established neighborhoods disrupts life and erodes the neighborhood's integrity. Residential traffic problems arising on major streets may require special efforts to balance residents' needs with those of the traveling public.

A wide variety of traffic calming measures can be combined in various ways to create different traffic control levels. In general, where there is an alternative route, steps, which discourage use and decrease roadway capacity, are appropriate. In situations where no alternative route exists, traffic can be slowed down without substantially taking away capacity~4.

Traffic problems are most judiciously handled when a clear, understandable traffic control planning process is in place.

Traditionally in Ashland and most small cities, traffic complaints are handled on a case-by-case basis. The weakness in this approach is that complaints do not always come from the areas where problems are most frequent, spot treatment often simply shifts problems to other areas, and residents may demand a specific action which may not be the best solution to their problem.

The Institute of Transportation Engineers recommends developing a traffic control planning process which regularly inventories neighborhood traffic problems throughout the community, and adopting standards to identify conditions which need attention. Once a traffic problem meets the criteria for traffic control treatment, the following process should be used:

- assess problem and causes
- develop alternative courses of action that could eliminate or reduce the problem
- predict both primary and secondary impacts of alternatives on the neighborhood and general community
- develop an implementation strategy, including a financing and maintenance plan
- evaluate in-place performance of selected action or actions, and make adjustments as needed

The City of Ashland should develop a traffic control planning process for the systematic treatment of traffic problems in the existing street network. Traffic calming measures should be used to protect neighborhood streets from through traffic and to mitigate traffic impact on major streets.

Future Travel

A travel forecasting model for Ashland was developed in 1992 by Kittelson and Associates, Inc. The model tested various measures of reducing future motor vehicle travel in the Ashland area by replicating the existing traffic volumes and predicting future volumes on Ashland streets. Non-automotive measures and automobile-oriented measures were both studied.

Specifically, the 1992 model addressed two questions. First, what roadway network improvements would be necessary for all boulevards and avenues to operate at volume-to-capacity ratios of less than 1.0 in Year 2005? (A volume-to-capacity (V/C) ration equal to or greater than 1.0 means the roadway volumes exceed capacity of the facilities.) Second, what net effect would future non-auto modal enhancements have upon overall travel in the Ashland area in 2005?

The first test, the "base scenario", was conducted to predict traffic flow in the year 2005. It assumes no physical changes to the street network and that the modal split remains the same. The base scenario serves as a constant, to which several other scenarios using different transportation system options can be compared.

In the base scenario, five roadway segments on Ashland's boulevard/avenues street system operate with V/C ratios in excess of capacity in 2005:

- Siskiyou Boulevard (northbound and southbound) between Mountain Avenue and Ashland Street
- Siskiyou Boulevard (northbound) south of the inter-section of East Main Street and Lithia Way
- Ashland Street (eastbound) between Interstate 5 southbound and northbound ramps
- Pioneer Street (both directions) at East Main Street
- Valley View Road (northbound) at Interstate 5 inter-change

When a scenario with full improvements to Hersey Street was studied, the roadway segment of Siskiyou Boulevard south of the intersection of East Main Street and Lithia Way operated below capacity.

Two "automobile-oriented" scenarios, building additional roadway capacity and transportation system management (TSM), were developed to test whether auto measures would alleviate future roadway congestion. (TSM is a method of maximizing the efficiency of the existing transportation system by managing traffic through the use of traffic control devices such as traffic signals, ramp meters, median turn barriers, restricted access to properties along congested corridors, etc.)

The first scenario to enhance street capacity added more travel lanes to Siskiyou Boulevard between Ashland Street and Lithia Way, and to Ashland Street between the Interstate 5 ramps. The five "above capacity" street segments from the base scenario all operated at V/C rates less than .9 with added travel lanes in 2005.

A second test was conducted using TSM measures such as traffic signal system enhancements, intersection capacity improvements and access management of driveways and intersections instead of added travel lanes. All street segments operated with V/C rates less than 1.0 in 2005 as a result of TSM improvement measures.

Five "mode-split enhancement" scenarios, pedestrian, bicycle, transit, high occupancy vehicle and combined modes, tested whether non-auto measures would reduce automobile travel in the Ashland area and relieve roadway congestion. The pedestrian scenario applied a 25% reduction rate to all trips less than one-half mile, and resulted in a less than 1% reduction in auto trips in 2005. The bicycle scenario applied a 10% reduction to all trips between one-half and two miles, and resulted in a 2% reduction in auto trips in 2005.

Mode-Split Enhancement Scenarios (TDM) from 1992 Travel Demand Model

Increase of...	Reduction in 2005 Auto Trips
25% of all trips made by walking	less than 1%
10% of all trips between .5 and 2 miles by bicycling	2%
10% of trips adjacent to bus routes by transit	2%
15% of trips to Medford by high occupancy vehicle	6%
All Mode-Split Enhancements Combined	11%

The transit scenario applied a 10% vehicle trip reduction rate to all origin-destination pairs located adjacent to RVTD bus service Routes #5 and #10 in Ashland. These calculations resulted in a reduction of approximately 2% of future auto trips. The high occupancy vehicle to Medford scenario applied a 15% vehicle trip reduction rate to all Ashland generated trips with an origin or destination located in Medford. This calculation results in a reduction of 6% future auto trips in Ashland.

The combined scenario of all the mode-split enhancements tested the impact of all transportation demand management (TDM) measures on reducing auto travel i~ Ashland. (The purpose of TDM is to reduce the number of motor vehicles using the road system by providing a wide variety of mobility options. Examples of TDM strategies include encouraging walking and bicycling trips, decreasing distance traveled through land use, encouraging ridesharing and alternative work arrangements.) Combined trip reduction factors resulted in a decline of approximately 11% future auto trips in Ashland. Overall, auto travel was significantly reduced on North Main Street, Siskiyou Boulevard and Ashland Street. However, V/C rates in excess of 1.0 are still found on two of the five "above capacity" roadway segments from the base scenario--Siskiyou Boulevard between Mountain Avenue and Ashland Street, and on Pioneer Street at Main Street.

Finally, a scenario combining the TSM and Combined Mode- Split Enhancements was developed to test the impact that TSM and TDM measures would have on reducing auto travel in Ashland. The combined TSM/TDM enhancement scenario resulted in a significant reduction of future auto trips on North Main Street and Ashland Street. No roadway segments on Siskiyou Boulevard showed V/C rates above 1.0.

The City must select a transportation system alternative that adequately meets Ashland's transportation needs. The alternative should combine strategies which best meet the goals and objectives of the Transportation Element and which address future capacity insufficiencies.

The travel demand model is a valuable tool for predicting where future bottlenecks, sensitive intersections, etc. will occur. However, like any other forecasting method, travel demand modeling has limitations. Travel demand models are automobile-oriented and were developed strictly to determine where roads should be built or expanded. Traditional models look only at automobile travel and assume that these patterns will continue and remain constant in the future. They do not incorporate alternative modes of transportation or changes in land use patterns, and they do not examine travel behavior or options, which might affect how people travel. When analysis assumes the automobile is the only transportation option, the only solution for congested areas is to add capacity to the streets. In this respect, the travel demand model perpetuates accommodation of increased traffic by building roads.

Many communities mistakenly use model results as the sole basis for transportation policy. Streets, which were supposed to function below capacity for many years in the future, may reach above-capacity conditions in a much shorter time. When cities use travel demand modeling as an overriding doctrine in transportation planning, they often accept methods, which accommodate automobile traffic by building new roads.

Recent travel demand models have only begun to attempt incorporating options such as walking, bicycling, public transit and different land use patterns. Transportation modeling professionals began to consider non-auto modes in response to passage of the Federal Inter-modal Surface Transportation Efficiency Act and the Oregon Transportation Planning Rule. These laws explicitly acknowledge non-auto transport as viable modes of transportation and initiated a new era in transportation planning. At the time of this writing, a model, which solidly predicts walking and bicycling has not been perfected.

The 1992 travel demand model for Ashland included non-auto trip analysis to the extent possible at that time and assumed a traditional, single-use land development pattern in the future. Since then, modeling alternative land use patterns has become a fairly common practice. Depending on advances in travel demand modeling and available resources, the Ashland 1992 model may require refining to test alternative land use patterns and non-auto transport options.

Freeway Access

Presently, the City of Ashland is served by three freeway interchanges- Exit 19 at the northern endofthe city; Exit 14 at the intersection of Ashland Street and Interstate 5, and Exit 11 at the far southern end of the community at the intersection of Siskiyou Boulevard and Interstate 5. In the previous Transportation Element of the Comprehensive Plan (1981), there was discussion of an additional freeway interchange at the intersection of North Mountain Avenue and Interstate 5, designed to serve the center of the community. For several reasons, this new interchange is not likely to be developed during the planning period. However, it is not precluded as an option for the future.

First, additional research has been conducted regarding the service area of the interchange. The new interchange would primarily serve Southern Oregon State College commuter students and Medford-based trips from the nearby residential areas. However, due to the linear nature of the community, and the perceived distance of the freeway interchange from Siskiyou Boulevard, the total area served by the interchange would not be large. The overall impact on through traffic to the community is not offset by the large financial investment necessary to construct the interchange.

Second, regarding the financial investment, current state highway construction dollars are tightly controlled, and the likelihood of gaining state support for construction of an interchange during the planning period is minimal. The availability of three interchanges for a community of 18,000 appears to be ample, by state standards. Therefore, the cost of constructing the interchange would fall entirely on the local community.

Third, the investment in the freeway interchange, and the necessary infrastructure improvements to streets accessing the North Mountain area would be almost entirely auto-oriented. The benefits to other modes of travel would be minimal, especially when compared to the large capital outlay necessary. Therefore, a freeway interchange at North Mountain Avenue is not likely to be developed during the planning period, but it is not precluded as an option for the future.

Access Management

Access management reduces maneuvers in the travel corridor through roadway design techniques that maintain or increase street capacity. Access management is used on boulevards and avenues to create a safe roadway environment that allows pedestrian, bicycle and motor vehicle traffic to flow smoothly. Among tools used in access management are proper spacing of traffic signals, provision of turn lanes, use of medians and planned driveway spacing and design.

Access management is a useful transportation management tool for the existing street network as well as for future streets. It can be used as an alternative to constructing additional motor vehicle travel lanes on existing streets. Preliminary studies of Highway 30 from Portland to Astoria show that using access management techniques can decrease the need for traditional highway widening and equal savings of over $75 million over the next 20 years.

All streets functionally classified by the Oregon State Division of Highways as rural collectors and minor arterials that connect Ashland with other municipalities are under the administrative control of either the County or the State. Access management on these routes is handled by permit. Within the city limits, roadways under State administrative control are coordinated by the State. Access management on streets under jurisdictional control of the City is its responsibility. In the interest of minimizing street construction and widening, the City of Ashland must develop an access management plan for the boulevard and avenue street network in cooperation with the County and State.

Safety

Safety is important in existing street network function as well as in the successful design of future streets. Areas prone to traffic accidents must be identified and systematically addressed.

Safety problems are rooted in the conflicts among the many users of street space. Although streets are public property and belong to everyone, some users have preempted more of the street space than others.

The "traffic function", moving traffic streams efficiently, competes with streets as public spaces, access to properties and parking.

The number and types of conflicts between street users depends on the facility's physical design and on the users' behavior. In order to identify goals for street design, it is important to identify all user needs, consider what conflicts they might have and what safety needs might result. Safety for all users should be a guiding factor in street planning and design in Ashland.

Conflicts arise out of the manner in which people use the street and interact with other users. As outlined in the Pedestrian/Bicycle Section, well-enforced traffic laws play an important part of street safety. Also, transportation safety education is one way to familiarize pedestrians, bicyclists and drivers with proper practices and traffic law.

Regional and State Roadway Systems

Clearly, Ashland needs a safe and efficient roadway system connecting the city to the region, to the state and to the rest of the nation. The United States has heavily invested in the interstate highway system, and as a result the flow of people, goods and service depends on the roadway network. In the interest of the residents and the local economy, Ashland's transportation system must be coordinated with county, regional, state and federal jurisdictions.

In the Rogue Valley region, land use patterns directly affect the development of viable non-auto transportation. Alternatives to the single-occupant vehicle cannot succeed if an auto- oriented low-density development pattern continues. Ashland must be involved in advocating regional land use patterns that support a multi-modal transportation system.

Section 10.03.04 Goal

To Provide all Citizens with Safe and Convenient Transportation While Reinforcing the Recognition of Public Rights-of-Way as Critical Public Spaces.

Section 10.03.05 Policies

1. Provide zoning that allows for a mix of land uses and traditional neighborhood development, which promotes walking and bicycling.
2. Periodically review and revise street design standards. Incorporate traditional neighborhood design elements such as, but not limited to, planting strips, minimum necessary curb radii, alleys and skinny streets in standards. The street design standards shall incorporate the land use and design guidelines in the Street Classifications section of this element.
3. Design streets as critical public spaces where creating a comfortable and attractive place that encourages people to walk, bicycle and socialize is balanced with building an efficient travel corridor. Design streets with equal attention to all right-of-way users and to promote livability of neighborhoods.
4. Enhance the streetscape by code changes specifying placement of critical design elements such as, but not limited to, windows, doorways, signs and planting strips.
5. Reduce excessive street pavement width in order to facilitate convenient pedestrian and bicycle circulation, to facilitate convenient pedestrian and bicycle circulation, to reduce the costs of construction, to provide for more efficient use of land and to discourage excessive traffic volumes and speeds.
6. Encourage a connected street network pattern, as topography allows, to promote pedestrian and bicycle travel. Off-street pathways should be connected to the street network. Block perimeters should be 1,200 to 1,600 feet and the distance between streets should be a maximum of 300 to 400 feet.
7. Design the Land Use Ordinance to ensure Ashland Street is developed as a multi-modal corridor including attractive landscaping, sidewalks, bike lanes and controlled access. Development along Ashland Street shall be compatible with and support a multi-modal orientation.

8. Design the Land Use Ordinance to ensure that Siskiyou Boulevard is developed as a multi-modal corridor with sidewalk and bike lane facilities appropriate to the volume and speed of motor vehicle traffic.
9. Design the Land Use Ordinance to ensure that A Street and B Street are developed as multi-modal corridors. Development along A Street and B Street shall be compatible with and support a multi-modal orientation.
10. When designing and funding facilities, consider all the costs of automobile use compared with using other forms of transportation. These costs include social costs, and air, noise and water pollution.
11. Advocate regional land-use patterns that support multi-modal transportation.
12. Encourage the use of all modes of travel that contribute to clean air and energy efficiency.
13. Integrate traffic calming techniques into city street design standards to reduce automobile speeds within new and existing neighborhoods.
14. Develop a process for traffic control management for the systematic treatment of traffic problems in the existing and future street network. Traffic control includes general laws and ordinances, traffic control devices and traffic calming techniques. The process should include a regular inventory of neighborhood traffic problems, at both intersection and other locations on the street, throughout Ashland, and standards to identify conditions, which need attention.
15. Develop a process for identifying and addressing areas prone to traffic accidents.
16. Maintain carrying capacity, safety and pedestrian, bicycle, public transit and motor vehicle movement on boulevards, avenues and neighborhood collectors through driveway and curb cut consolidation or reduction.
17. Direct driveway access onto streets designated as boulevards and avenues should be discouraged whenever an alternative exists or can be made available.
18. Require design that combines multiple driveway accesses to a single point in residential and commercial development.
19. Develop a process for evaluating the consistency of curb cut requests with the Comprehensive Plan and Land Use Ordinance.
20. Maintain street surfaces to achieve maximum pavement life so that road conditions are good and pavement maintenance costs are minimized. Prioritize streets for repaying by factors such as the level of use, street classification and pavement condition.
21. Prohibit the formation of new unpaved roads.
22. Discourage development from occurring on unpaved streets.
23. Off-street parking for all land uses shall be adequate, but not excessive, and shall not interfere with multi-modal street uses.
24. Manage the supply, operations and demand for parking in the public right-of-way to encourage economic vitality, traffic safety and livability of neighborhoods. Parking in the right-of-way, in general, should serve land uses in the immediate area.
25. Reduce the number of automobile parking spaces required for new development, discouraging automobile use as the only source of access and encouraging use of alternative modes.
26. Consider environmental impacts when developing new street projects. Require new street projects to reduce impact on terrain and natural vegetation.
27. Acquire or control parcels of land that may be needed in the future for any transportation purpose when the opportunity arises through sale, donation or land use action.
28. Periodically assess future travel demand and corresponding capacity requirements of street network. Choose a comprehensive transportation system approach to address any capacity insufficiencies that is consistent with the goals, policies and philosophy of the Transportation Element of the Comprehensive Plan.
29. Coordinate land use planning with transportation planning. Integrate transportation-related functions that involve several City departments so that the goals, policies and philosophy of the Transportation Element of the Comprehensive Plan are consistently pursued in the transportation project development process.
30. Coordinate City transportation planning with county, regional, state and federal plans.
31. Coordinate the transportation planning efforts of the adopted Ashland Downtown Plan with the goals and policies of the Transportation Element of the Comprehensive Plan, including the provision parking lots and parking structures.

32. Interconnections between residential neighborhoods shall be encouraged for automobile, pedestrians and bicycle traffic, but non- local traffic shall be discouraged through street design, except for boulevards, avenues, and neighborhood collectors. Cul-de-sac or dead-end street designs shall be discouraged whenever an interconnection alternative exists. Development or a modified grid street pattern shall be encouraged for connecting new and existing neighborhoods during subdivisions, partitions, and through the use of the Street Dedication map.
33. Plan for the full improvement of Hersey, Nevada and Mountain Avenue as alternative routes to the downtown area for north-south traffic.
34. Street dedications shall be required as a condition of land development. A future street dedication map shall be adopted and implemented as part of the Land Use Ordinance.
35. Re-evaluate parking space size requirements due to the increased use of smaller cars.
36. Encourage sharing of existing and future parking facilities by various nearby businesses.
37. Require effective landscaping throughout continuous paved parking areas to increase shading, screening and buffering aesthetics, and for percolation of water into the groundwater table.

Part 10.04

Pedestrian and Bicycle Transportation

Sections:

Section 10.04.01 Introduction

Habit, established by our nationwide dependence on the automobile since the end of World War II, accounts for most of the situations in which citizens elect the automobile as a standard travel mode. Less apparent reasons for these choices are the perception of greater distance than actually exists and the presence of unsafe, unaesthetic or intimidating barriers to travel that discourage people from walking or cycling.

Ashland residents make decisions about travel each time they run errands, visit friends or attend events. In most cases they choose their cars even when the distances to be covered are relatively short. Although 40% of all trips made in Ashland are two miles or less, and 25% are one mile or less, over 86% of trips one mile or less are still made by automobile.

Like other cities, Ashland must reduce auto dependence in the face of compromised air quality, traffic congestion, and large subsidies for our road systems. The community must avoid further increases in automobile traffic by expanding the number of short trips made on foot or by bicycle.

Pedestrian and bicycle facilities must be improved and promoted in Ashland to encourage residents to abandon their automobile for the sidewalk and the bikeway.

Section 10.04.02 Benefits of Walking and Bicycling

"Families get to know one another better when there are sidewalks. Without them, it is awkward to take a walk. You feel you're intruding. A man walking along a sidewalk appears to have a purpose; a man walking in the street or across your front yard looks suspicious... Without sidewalks, houses are just houses. When sidewalks tie them together with a neat ribbon of concrete, they become part of something more: a neighborhood" (Pearce, 1980).

Walking and bicycling not only improve health and well-being; they benefit the general public, motorists, employers, the community and the environment. Many positive effects result when residents walk and bicycle instead of drive.

The number of people who regularly walk and bicycle is one measure of a city's quality of life. Businesses benefit when people stroll and window-shop. Sidewalks provide places for casual socializing. The presence of pedestrians and bicyclists in the community indicates that people feel safe and confident outdoors. Walking and bicycling allow people to more directly appreciate Ashland's natural beauty.

WHAT HAPPENS WHEN WALKING AND BICYCLING REPLACES VEHICULAR TRIPS?

- reduced accidents and property damage
- reduced air and noise pollution
- reduced consumption of petroleum resources
- reduced wear and tear on roads
- reduced light pollution and visual clutter
- reduced need for additional roads, travel lanes and parking

Section 10.04.03 Pedestrians and Bicyclists: Differences and Similarities

Although pedestrians and bicyclists do not have the same travel behavior, they have been considered similarly in the past. As bicyclists are routed on sidewalks instead of the road, conflicts arise because they move more rapidly than pedestrians. Motorists are often confused when bicyclists enter or leave the traffic stream at pedestrian crosswalks.

While walking and bicycling are both used for local short trips, pedestrians and bicyclists have very different travel needs. Bicycles move faster than pedestrians but slower than automobiles. Since pedestrians move more slowly, they require greater separation from traffic and need extra time to cross roadways.

Both walking and bicycling are used for short trips that can be accomplished in 20 minutes or less. Typically, this is one-half mile or less for pedestrians, and three miles or less for bicyclists. Both pedestrians and bicyclists are exposed to the elements, both are sensitive to geographical barriers and both are vulnerable to motor vehicles. Pedestrian and bicycle facilities compete with "edge" right-of-way demands such as on-street parking, utility poles and signs. Neither walking nor bicycling requires a license.

Section 10.04.04 Walkway and Bikeway Design

Two factors are critical in walkway and bikeway design. Pedestrian and bicycle facilities must be routinely considered as part of the total design on all transportation projects. Furthermore, individual walkways and bikeways must be designed to be safe, convenient, attractive and easy to use.

The Oregon Bicycle and Pedestrian Plan and the American Association of State Highway and Transportation Officials (AASHTO) provide facility design standards for walkways and bikeways. The following is a brief summary of the basic design principles included in the Oregon Bicycle and Pedestrian Plan.

Pedestrian

Sidewalks provide separation from traffic and all-weather surfaces for pedestrians. Planted strips between the sidewalk and roadway create an attractive environment by buffering pedestrians from traffic and increase their comfort and safety by making the street more inviting. Ideally, sidewalks should be provided on both sides of streets.

Accessible sidewalks must be available to people with disabilities unless topography makes construction unfeasible. Special attention must be given to curb ramps and vertical clearance. Accessible walkways must be conveniently tied into adjacent development walkways.

Bicycle

The type of bikeway provided on a street should be based on the motor vehicle traffic volumes and speeds that share the roadway. Bike lanes are the appropriate facility for bicyclists on boulevards and avenues. Bike lanes help define the road space, provide bicyclists with obstruction-free paths, decrease bicyclists' stress in traffic and remind motorists of cyclists' right to the road. A shared lane is appropriate on neighborhood collectors and streets because of the low traffic volumes and travel speeds.

On existing roadways where bike lanes are not possible due to constraints such as buildings or environmentally sensitive areas, the Oregon Bicycle and Pedestrian Plan recommends a wide outside lane and reduced actual travel speeds of 25 m.p.h, or less. This option, however, is recommended only after alternatives, such as narrowing or removing travel or parking lanes, are examined.

Neighborhood Connectors

Neighborhood connectors are off-road, separate pedestrian and/ or bikeways that minimize travel distances within and between residential areas and schools, shopping and workplaces. In most cases, walkways and bikeways should be provided along streets in a well-connected street network.

Neighborhood connectors are used in situations where street connections are infeasible. For example, these short multi-use paths are useful to connect cul-de-sac streets and dead ends, and to allow passage through areas with topographical constraints. In Ashland for example, the Talent Irrigation District (TID) right-of-way could provide pedestrian and bicycle connections for areas on steep hillsides that are otherwise inaccessible by roads. Historically, the TID right-of-way has been used as an unofficial neighborhood connector.

Section 10.04.05 Effective Walkways and Bikeways

A street network should serve the transportation needs of everyone in the community. Well-worn dirt paths where sidewalks would usually be, as well as bicyclists riding on sidewalks, demonstrate that pedestrians and bicyclists use streets even if no facilities exist.

In Ashland, the street network is the primary transportation infrastructure with most destinations oriented to the street. With the most direct and convenient travel routes, this network logically should contain pedestrian and bicycle travel corridors where walkers and cyclists will be more visible than they are on separate pathways. Incorporating these corridors into the street network is economical and efficient and reduces the need for additional easements or maintenance.

According to Oregon Bicycle and Pedestrian Plan, effective walkway and bikeway networks depend on:

- accommodating pedestrians and bicyclists on boulevards, avenues and neighborhood collectors
- providing appropriate facilities
- creating and maintaining a grid system of closely spaced, interconnected neighborhood streets
- overcoming barriers such as freeway crossings, railroad tracks, intersections, rivers and canyons

The Oregon Transportation Planning Rule requires boulevards and avenues, the backbone of the urban transportation system, to accommodate pedestrians and bicyclists. Major streets provide direct, continuous and convenient access to most destination points because they move traffic through the street system. In addition, they provide signalized crossings and bridge obstacles such as rivers, freeways and railroad tracks.

Cyclists and pedestrians tend to use the shortest, most convenient route to travel to their destinations. Major streets provide direct travel routes for pedestrians, bicyclists and motorists alike. If walkways and bikeways are not provided on major streets, negative consequences such as the following may occur:

- Many pedestrians and cyclists will choose to stay on the thoroughfare, even without sidewalks or bike lanes. This can cause safety problems and traffic delays.
- Some motorists will not respect bicyclists or pedestrians who are perceived to be "riding or walking where they don't belong."
- Circuitous bike route signing will be ignored by bicyclists. As a result, other bicycle signing is not respected.
- The importance of bicyclists and pedestrians in the transportation network is diminished.

Section 10.04.06 Existing Walkways and Bikeways

Most of the boulevards (North Main Street, East Main Street, Lithia Way, Siskiyou Boulevard, Ashland Street and North Mountain) have sidewalks on both sides within the city limits. Avenues, neighborhood collector streets and neighborhood streets, however, lack continuous sidewalks in many places. Boulevards such as East Main Street, Ashland Street from Siskiyou Boulevard to Interstate 5, and Siskiyou Boulevard from Walker Avenue to Tolman Creek Road have bike lanes on both sides. Avenues such as Hersey Street, Walker Avenue from Ashland Street to East Main Street and Tolman Creek Road from the north city limits to Siskiyou Boulevard have bike lanes on both sides. However, similar to the sidewalk situation, the bike lanes are not continuous.

A bikeway system map identifying existing bicycle facilities and future proposed bike lanes, shoulder lanes, shared lanes and bike paths was adopted by the City Council in June 1995.

Future transportation projects, including pedestrian and bicycle facilities, currently planned and funded are described in Appendix A.

Section 10.04.07 Pedestrian and Bicycle Needs

Ashland citizens have contributed to an assessment of local transportation needs in many forums. To address their concerns, the city held neighborhood meetings from February to April 1994. At these meetings citizens identified a variety of service and facility needs. Comments ranged from general suggestions, such as "keep bike lanes free of debris," to the site specific such as "difficult crossing Siskiyou at SOSC'. Appendix B contains a complete list of neighborhood meeting comments.

Ashland has many characteristics, which make walking and bicycling viable transportation options. It covers an area roughly six square miles in size, which makes most in-town travel by bicycle possible within 20 to 30 minutes. The 1990 Census indicates that Ashland had one of the highest percentages of residents walking to work of all cities in Oregon. Many of the older neighborhoods such as the Railroad District are compact and have sidewalks in place. Most of the city is within bicycling distance of commercial centers, including the downtown core.

Ashland's goal is to increase the number of short trips made by walking and bicycling. Even though 49% of all trips are within walking or bicycling distance, national statistics show only 7.2% of all trips are by walking and 0.7% by bicycling. In order to determine how walking and bicycling can be increased, three questions must be addressed:

- Who is or will be making short trips?
- Where are people going?
- What makes people drive?

Section 10.04.08 Who is or will be making short trips?

Future Population and Employment

Pedestrian and bicycle systems in Ashland must accommodate both future population changes and employment conditions. Ashland's official population projection for the year 2005 is 20,000, with an employment to total population ratio of approximately 39%. Historically, the majority of employment has been in the service and retail sectors.

An addition of 2,225 people from 1995 to 2005 is equivalent to approximately 820 households. If current transportation trends continue at ten-vehicle trips per household per day, 820 new households would generate roughly 8,200 additional vehicle trips each day.

Ashland demographics vary from typical patterns in several ways. Between now and 2005, the greatest population increase will occur in the 35 to 65 year old age group, the mature work force. While this trend

matches existing trends in Jackson County, the SOSC student population results in a disproportionate amount of people in the 15 to 29 year old age group.

The tourist population is also rather unique in Ashland. In 1988, the average daily tourist population in Ashland was 1,476, and in 1989 there were 873 traveler's accommodation units. Even if tourists made only one-half the number of vehicle trips made by a household, they could still generate approximately 4,365 additional vehicle trips each day. Since the tourist market is centered at the Shakespeare Festival and in the downtown area, walking is a viable option. The potential of the tourist group to generate a significant number of vehicle trips suggests the need to increase their walking and bicycling trips.

Quality of life constitutes one of the most important considerations in planning the pedestrian and bicycle systems. Historically, the community's livability has attracted new residents, industries and tourists to Ashland and part of this appeal lies in the opportunity to walk or bicycle. In order to maintain quality of life, Ashland pedestrian and bicycle systems must keep pace with population and economic growth.

Non-Drivers

Walking and bicycling are especially important to people who do not have automobiles. Non-drivers include school age children, elderly residents, people with disabilities and the poor. Almost a quarter of Jackson County residents do not have drivers licenses37. People without drivers' licenses depend on other people, or on walking, bicycling or public transportation. Future walking and bicycling planning must provide non-drivers with multiple transportation options.

Section 10.04.09 Where are People Going?

Walking and bicycling trips can be grouped according to four basic trip purposes: personal/family, social/recreational, earning a living and civic/educational. Examining trips by purpose indicates the importance of addressing all types of trips in pedestrian and bicycle networks.

School and Personal Business Trips

Residents make most trips to run errands and take children to school. According to the 1990 Nationwide Personal Transportation Survey, the largest portion of trips (41.5%) is for personal or family business such as shopping, visits to the doctor or dentist, or to transport a child to school.

Daily Trips by Purpose

Personal/Family	41.5%
Social/Recreational	24.8%
Earning A Living	21.6%
Civic/Educational	11.4%
Other	0.7%.

(Nationwide Personal Transportation Survey, 1990 Federal Highway Administration)

Civic related trips (when an individual transports him or herself to school, such as a child walking to school) account for another 11.4% of trips. Approximately one-third of pedestrian miles traveled in the United States are for school-related purposes. Ashland residents must have the option to make school and personal business trips by foot or bicycle. All home-to-school links should have walkways and bikeways, and promotional and educational activities should be provided for students and parents.

Recreational Trips

Social or recreational travel such as visiting friends, or trips to a park, account for another 24.8% of travel. Social meeting places such as coffee shops, neighborhood parks and sports parks should be within convenient walking or bicycling distance of residential areas.

Work Trips

While commuting to work may seem to be the day's primary trip, only one out of five trips actually involves travel to or from work. Less than 2% of trips involve on-the-job travelP9. Even though commute

trips comprise a modest proportion of all trips, travel-to-work trips have typically been the focus of daily travel statistics and many multi-modal programs.

Census data shows that a significant portion of Ashland's working population makes short work trips. Almost two-thirds of the working population is employed in the city and travels less than 15 minutes to work. Since Ashland is approximately six square miles is size, the trips made by people who live and work in the city are likely to be short enough to be within walking or bicycling distance.

Although many of the work trips are short enough to be within walking or bicycling distance, census data indicates that Ashland workers drive single occupant vehicles. In fact, as a transportation means, walking and bicycling declined approximately 5% from 1980 to 1990. At the same time, the number work trips made by driving alone increased by 9.6%. In the future, the number of walking and bicycling work trips should be increased.

Working people frequently use their lunch hour and break to run errands. They are more likely to make personal business trips by automobile if the area around their work site is automobile-oriented and if shopping and eating areas are distant or inaccessible by walking. Personal business trips from the work site on foot or bicycle should be convenient and pleasant.

Section 10.04.10 What Makes People Drive?

The "Decision to Walk or Bicycle" model helps identify measures that facilitate walking and bicycling. The model looks at the psychological, cultural and physical barriers that encourage driving and discourage walking and bicycling.

Personal Considerations

Values, Attitudes, and Habits

Many people do not seriously consider bicycling or walking because by habit they rely on a car. Driving represented affluence and convenience after World War II, and this attitude became part of our national culture. As a result, driving for all trips is now a typical nationwide pattern.

Decision to Walk or Bicycle

Personal Considerations
Values & Attitudes
Habits
Distance & Time
Family Responsibilities
Work Requirements

Destination Barriers
Parking
Showers
Employer/Organization Support
Peer Support

Trip Barriers
Traffic Safety
Weather
Topography
Facilities & Access
Route

Distance and Time

Although distances may vary in what is suitable for bicycling or walking, it is likely that the farther one is from a destination, the less likely one is to walk or bicycle. Distance is probably the key factor, which limits utilitarian pedestrian trips because walking is much slower than bicycling.

Studies show that utilitarian bicycle trips usually are two miles or less, while work bicycle trips tend to be average five miles. The 1990 Nationwide Personal Transportation Survey found average length walking trips to be .6 mile and bicycling trips to be two miles.

Travel time is highly valued in our society. The time people perceive a travel mode to require directly affects their choice to walk or bicycle. Common perceptions suggest that walking and bicycling sacrifice time even though it frequently does not. Walking and bicycling can save time by enabling travelers to avoid congestion and omit finding parking--two inconveniences associated with motorized travel.

Average Walking and Bicycling Speeds

Walking = 3 miles per hour
= 264 feet per minute
= 1/4 of a mile in 5 minutes

Bicycling = 10 - 12 miles per hour
= 880 - 1,056 feet per minute
= 1 mile in 5 - 6 minutes

(Adapted from Nelessen and federal Highway Administration.)

Family Responsibilities and Work Requirements
Automobile-oriented cities and regions make driving the only option. Needs such as transporting children at school, running errands conveniently during the commute, using the car for work-related meetings or having to transport heavy or bulky items, lead people to drive. Walking and bicycling should be options for all our daily trips, not only in the neighborhood, but also in cities and regions.

Trip Barriers

Traffic Safety
Traffic safety is most often cited as a reason for not bicycling. Although people who regularly cycle in traffic are less fearful than non-riders, the general perception of danger can not be dismissed and must be changed through better facilities and training.

Pedestrian traffic safety concerns focus on specific facilities. Survey data suggests that sidewalks, traffic signals, pedestrian crossings and street lighting are important pedestrian safety concerns and determine whether or not they choose to walk42.

National safety statistics regarding pedestrians and bicyclists are sobering. The Fatal Accident Reporting System data for 1991 recorded 6,595 pedestrians and 841 bicyclist killed in crashes involving motor vehicles nationwide. In addition, an estimated 109,000 pedestrians and 77,000 bicyclists were injured in motor-vehicle-related crashes. Pedestrians and bicyclists comprise more than 14% of all highway fatalities each year.

Approximately 15% of pedestrian accidents occur while the pedestrian walks in the roadway. While a sidewalk, shoulder or pathway would not necessarily prevent these accidents; it would clearly reduce the accident potential in locations where facilities do not exist.

Weather and Topography
Evidence suggests that rain and snow are the greatest barriers to walking and bicycling. Studies suggest that rain is a bigger barrier to bicyclists than to pedestrians. Weather was found to be a greater deterrent to fixed-schedule trips, such as the work commute, than it was to discretionary trips. Hills are a deterrent to walking and bicycling because climbing is strenuous. In Ashland, fall and winter weather as well as the steep slopes south of Siskiyou Boulevard, need to be considered in all walking and bicycling plans.
Facilities, Access and Route

Pedestrians and bicyclists need walkways and bikeways that are clean, free of obstructions and continuous. They must be able to cross barriers such as freeways, railroad rights-of-way, busy streets and

waterways. Connectivity of travel routes is as important as having a physical place to travel. Fragmented systems are a serious impediment to convenient travel.

Destination Barriers

Storage, Showers and Employer/Organization Support
People are discouraged from using a bicycle if their destination lacks safe and adequate bicycle parking. A tack of changing and shower facilities also deters bicycle commuting. Pedestrians and bicyclists need support and encouragement from employers, businesses, schools and the larger community. In order to make walking and bicycling viable travel options; residents need flexibility to adjust work and school schedules for daylight travel, and to have other forms of transportation available in case of emergencies.

Peer Support
Some professions and social groups consider utilitarian bicycling to be inappropriate. Potential riders cite dress requirements as a reason to eliminate bicycling as a method to travel to work and school. Walking and bicycling should be eventually viewed as acceptable and even fashionable modes of transportation.

Section 10.04.11 Encouraging Walking and Bicycling Through Design
Walking and bicycling can be encouraged by providing mixed- use areas and by making the pedestrian environment more hospitable. Creating sidewalks and bikeways alone will not sharply increase the numbers of walking and bicycling trips. People probably will not walk five miles along a five-lane, high-speed boulevard to go to the store even if a sidewalk leads all the way there. 1-hey will be much more likely to walk and bicycle if the distance is reasonable and the environment is attractive.

In a study of the pedestrian environment in the Portland Metropolitan Region, walking and bicycling were found be as low as 2.2% in uninviting pedestrian environments and as high as 7.4% in areas rated high as a pedestrian environment. The pedestrian environment factor is based on ease of street crossings, sidewalk continuity, local street characteristics (grid vs. cul-de-sac) and topography. Similarly, daily vehicle miles traveled (VMT) per household decreased from 38.3 in areas with the lowest pedestrian environment factor to 18.0 in areas with the highest pedestrian environment factor. Daily vehicle trips per household decreased from 6.5 to 5.7.

Mixed Uses
Mixed use is a term describing a heterogeneous mixture of commercial, retail, residential and light industrial uses in individual or interconnected buildings. Traditional single-use zoning strictly segregates commercial areas from residential areas. In addition, residential zones are separated by density per acre--a situation, which creates a monotonous environment when subdivisions of similar size houses are placed on equally- sized lots.

Mixing land uses, housing and jobs reduces traffic by locating residences close to shopping, entertainment and job centers. Because trips are short, walking and bicycling are attractive transportation methods in the mixed-use environment.

Architect and Urban Designer Anton Clarence Nelessen suggests that every neighborhood should have a mixed-use core that is one-quarter mile from the periphery. This design is based on that of urban areas built prior to World War II when walking and bicycling were more prevalent. The core should contain office and retail uses to be utilized by residents on a daily basis. If possible, cores should be located where the largest number of jobs occur. Housing density is usually highest at the core and lowest at the neighborhood periphery. Walkways and bikeways must connect all neighborhoods to the larger downtown core.

The Pedestrian Environment
When asked to identify the most likeable qualities of the pedestrian environment, respondents to a survey identified the following (listed in order of popularity):

trees and landscaping
parks, open space
quiet streets and sidewalks
shade on hot days
historic buildings/neighborhoods
safety from crime
benches, places to rest

When asked to identify the most unappealing qualities, they identified the following (listed in order of importance):

air pollution/car exhaust
litter and garbage
dangerous street crossings
traffic noise
poorly maintained sidewalks
skateboarders on sidewalks
panhandlers
cyclists on sidewalks

The pedestrian environment consists of the path and the area around and above it. Walking slow pace allows the pedestrian to absorb much more of the surrounding environment than motorists can. As a result, features, which appeal to the senses, make walking a more attractive option.

Streets are typically designed for automobiles, which isolate their drivers from the physical street environment. As a result, street design tends to neglect creation of an attractive pedestrian environment. Street design needs to create appealing pedestrian environments in order to increase the number of walking trips made.

Convenience of travel, safety from vehicles and an interesting environment must all be addressed in the physical design of the pedestrian path. These pedestrian needs are ensured on what Lennertz and Coyle describe as transportation balanced streets. These streets have narrow driving lanes, tight curb turning radii at corners, a buffer of on-street parking, planting strips between car lanes, and sidewalks and building front doors and windows at the sidewalk and street. Traffic calming measures may be necessary on neighborhood streets, which experience high traffic flows.

Grid street patterns enhance the pedestrian environment by providing people with many connections between destinations. Small blocks in a grid pattern are much more conducive to walking than are large blocks with cul-de-sac streets. Block perimeters of 1,200 to 1,600 feet provide convenient pedestrian circulation.

Pedestrian environment design must account for different types of walking trips. People's willingness to walk varying distances depends on the situation. Studies show people will walk two to three minutes (one-eighth mile), from a parked car to the entrance of their destination. In a neighborhood, or an employment area, people will walk five minutes (one-quarter mile), from the core to the periphery. People will walk about twice as far--ten minutes (one half-mile) to get to school or to work.

The pedestrian environment must have human scale proportions and perceptions. Nelessen defines the human scale as the relationship between the dimensions of the human body and the proportion of the spaces people use. Adults are about six feet tall with an arm span of equal distance and travel at about three miles an hour. Conversely, automobiles are about six feet wide, twelve to fifteen feet long and travel about ten to 100 miles per hour. Clearly, spaces that feel comfortable to people are much smaller than those designed for automobiles. Streets must be designed for the pedestrian as well as to accommodate motor vehicles.

Section 10.04.12 Goals & Policies

Goal I: To raise the priority of convenient, safe, accessible, and attractive walking and bicycling networks.

Policies:

1. Provide walkways and bikeways that are integrated into the transportation system.
2. Incorporate pedestrian and bicycle facility needs into all planning, design, construction and maintenance activities of the City of Ashland
3. Provide walkways and bikeways in conjunction with all land divisions, street construction and reconstruction projects and all commercial, industrial and residential developments.
4. Require pedestrian and bicycle easements to provide neighborhood connectors and reduce vehicle trips. Modify street vacation process so pedestrian and bicyclist through access is maintained.
5. Target walkway and bikeway improvements that link neighborhoods, schools, retail and service areas, employment centers and recreation areas.
6. Use design standards that create convenient, safe, accessible and attractive walkways and bikeways.
7. Design walkways and bikeways for all types of users including people with disabilities, children and the elderly.
8. Require sidewalks and pedestrian access in all developments.
9. Require wide sidewalks in retail areas.
10. Require planting strips and street trees between the roadway and the sidewalk to buffer pedestrians from vehicles.
11. Require secure, sheltered bicycle parking in business developments, institutions, duplexes and multi-family developments.
12. Design street intersections to facilitate pedestrian and bicycle travel by using design features such as, but not limited to, raised medians and islands, curb extensions, colored, textured and/or raised crosswalks, minimum necessary curb radii, pedestrian crossing push buttons, left and right bike turn lanes, signal loop detectors in bike lanes and signal timing conducive to pedestrian and bicycle travel speeds.
13. Design intersections with equal attention to pedestrian, bicyclist and motorist safety. Identify existing intersections that are dangerous for pedestrians and bicyclists, and develop plan for redesign of unsafe areas.
14. Develop maintenance program to keep walkways and bikeways smooth, clean and free of obstructions.
15. Pedestrian Traffic should be separated from auto traffic on streets and in parking lots.
16. Encourage the establishment of a Community-owned Bicycle Program, allowing the provision of "loaner" bikes throughout the community for residents, commuters and tourists.

Goal II: To support and encourage increased levels of walking and bicycling.

Policies:

1. Promote decreased auto use and increased walking, bicycling, public transportation, ride sharing and other transportation demand management techniques.
2. Develop and implement a transportation safety education program.
3. Increase enforcement of pedestrian and bicycle traffic safety laws. Target motorists, pedestrians and bicyclists.
4. Increase neighborhood use of Sidewalk LID Program.
5. Encourage employer commuter programs to promote walking, bicycling, public transit, ride sharing and other transportation demand management techniques.
6. Encourage businesses to inform customers of available non-auto access to the business locations and to support customer use of non-auto access.
7. Establish aggressive but realistic performance targets for increasing walking and bicycling trips (for personal business, school, social and work).

Goal III: Emphasize environments, which enhance pedestrian and bicycle usage.

Policies:

1. Maintain and improve Ashland's compact urban form to allow maximum pedestrian and bicycle travel.
2. Promote a mixed land use pattern, where appropriate, and pedestrian environment design that supports walking and bicycling trips.
3. Develop street design standards that outline street widths, curb radii, and other pedestrian environment factors which facilitate walking and bicycling.
4. Use traffic calming tools to create a safe, convenient and attractive pedestrian and bicycle environment to slow speeds, reduce street widths and interrupt traffic as appropriate in each particular location.
5. Establish a street tree program to plant more trees on existing streets and to promote/monitor street tree care throughout Ashland.
6. Identify areas needing pedestrian and bicycle amenities, such as rest rooms, benches, pocket parks and drinking fountains, and develop installation and funding plan.
7. Encourage public art along multi-modal travel corridors.

Goal IV: To dedicate funding and staff support to implement the goals and policies of this section.

Policies:

1. Identify funding sources for walking and bicycling promotion, planning and facilities construction.
2. Investigate the creation of the role of transportation coordinator to facilitate a viable multi-modal transportation network and achieve Ashland's transportation goals.
3. Develop transportation program using a comprehensive approach with planning and engineering, education, enforcement and encouragement components.
4. Support participation by all City staff involved in creating the transportation network in educational programs covering transportation planning, design and engineering.
5. Consistently incorporate pedestrian and bicycle facilities in the City of Ashland Capital Improvement Plan.

Part 10.05

Public Transit

Sections:

Section 10.05.01 Introduction

Public Transit, like walking and bicycling, constitutes an important transportation alternative to the automobile. Ashland has consistently encouraged public transportation as an integral part of its transportation goals. Because of that commitment, public transportation in Ashland has a relatively high level of use compared with other areas in the Rogue Valley. In fact, the Ashland bus routes accounted for 51% of the Rogue Valley Transportation District's (RVTD) total ridership between July 1, 1993 to June 30, 1994.

In cooperation with Southern Oregon State College (SOSC) and Rogue Valley Transportation District (RVTD), the City developed the Reduced Fare Program and SOSC Student Pass Program. The Reduced Fare Program, funded by the City, reduces the fare on all bus trips within Ashland city limits to 25 cents per ride. This program increased ridership by 3,000 trips per month within the Ashland city limits. The SOSC Student Pass Program allows all students to ride the bus for free anywhere in the district service area. Students simply show their student identification to the driver for passage. This program is funded by student fees.

This unique partnership between the City of Ashland, SOSC and RVTD resulted in increased use of the public transit system in Ashland. Continued involvement by the City with RVTD is essential to assuring the current level of service and improving the future system.

The City must continually find ways to expand public transportation use in Ashland, for the automobile remains the most popular travel mode. The number of Ashland residents driving alone to work increased 9.6% from 1980 to 1990. At the same time, 3% fewer Ashland residents used public transportation to get to work. Overall, approximately 1% of the working population uses public transit to commute. This means that only 78 of the 7,759 Ashland workers aged 16 and over regularly use RVTD services to get to work.

On an average day, a person boarding one of the RVTD buses on an Ashland route will find that over one-half of the seats are empty. Although Ashland bus routes generated 51% of RVTD's total ridership from July 1, 1993 to June 30, 1994, they run on average at 16.2% of total capacity.

Ashland bus routes accounted for 51% of the Rogue Valley Transportation District's (RVTD) total ridership between July 1, 1993 to June 30, 1994.

Two out of five Ashland residents (43%) used public transportation in 1993 according to the Public Awareness and Perception Study completed in Spring 1994 by Laurel Research for RVTD. No single use dominated the public transportation trips. However, 65% of ridership is centered on commuting to work, school, and shopping.

Section 10.05.02 Existing Public Transit Services

Rogue Valley Transportation District: Service Area and Governance

The Rogue Valley Transportation District is Jackson County's regional mass transit resource. The District, which covers approximately 159 square miles, includes the incorporated cities of Medford, Ashland, Central Point, Jacksonville, Talent and Phoenix, and the unincorporated community of White City. The District serves approximately 122,000 residents who live within its jurisdiction.

Created in 1975, RVTD is an Oregon special district. It is supported by revenues from a property tax levy, state and federal grants, advertising fees, and fares paid by passengers.

The Oregon legislature established the Elderly and Disabled Special Transportation Fund (STF) during the 1984-1985 session. The fund is to help provide adequate transportation services to those who are disabled, are age 60 or over, or both. The local advisory committee for Jackson County called the Special Transportation Advisory Committee (STAC) recommends how STF funds should be distributed. The RVTD Board of Directors is the local governing body that takes STAC recommendations and distributes the funding locally among service providers. In the past, STF funds have been used to fund the Coupon Connection program, the Retired and Senior Volunteer Program's Call-A-Ride, the Ashland Senior Program and the Upper Rogue Community Center.

RVTD offers five services--fixed-route bus service, valley feeder, coupon connection, valley rideshare and the alternative transportation program. A description of each service follows.

Fixed-Route Bus Service
The fixed-route bus service is the most recognized RVTD service. Ten fixed routes totaling approximately 210 miles operate regularly district wide. Passenger miles traveled annually exceed 2.5 million. Most bus routes operate Monday through Saturday. On workdays, certain routes feature early morning and late- evening commuter service. Fares are discounted for the elderly (62 years or older), the disabled and children 6 to 12 years old.

Ashland Bus Routes
Four fixed-routes directly serve Ashland. Route 5 and Route 6 are the Ashland Loop routes. They provide service within Ashland to the Downtown Plaza, Ashland Library, Ashland Shopping Center, Tolman Creek Plaza, SOSC and Ashland Hills Inn. Route 10 and Route 15 provide transportation between Ashland and the Front Street Transfer Station in Medford. Route 10 turns around in Ashland south of the Plaza at Oak Street. Route 15 replaces Route 10 and the Loop Routes during the early morning and evening "commuting" hours.

Service Schedule
Every 15 minutes an RVTD bus arrives at each RVTD stop within Ashland. From Medford to Ashland, there is a 30-minute service frequency.

Ashland does not have an official transfer station. However, riders coming into Ashland from the north on Route 10 and Route 15 can catch the Ashland Loop routes, Route 5 and Route 6 at the Ashland Plaza bus stop. Currently, no park and ride facilities exist in Ashland.

Route 5 and Route 6 run on 30-minute schedules. It takes a bus leaving the Ashland Plaza stop 30 minutes to make all stops along the loop and return once again to the Ashland Plaza stop. Route 10 runs on a 70-minute schedule. A one-way trip from the Ashland Plaza to Front Street Transfer Station in Medford on Route 10 takes approximately 30 minutes. Route 15 runs on a 78-minute schedule. Route 15 includes the 30 minute trip to Medford (Route 10) plus the Ashland Loop route (Routes 5 and 6).

Bus Stops
There are 46 bus stops throughout Ashland, 21 for northbound routes and 25 for south bound routes. The amenities offered at the bus stops range from a pole and a sign to a covered waiting area with a bench. Eleven bus stops have covered waiting areas.

RVTD Fleet
In Spring 1995, the majority of the fleet was converted to buses using compressed natural gas (CNG) for fuel. The RVTD fleet includes 16 buses: 11 CNG vehicles and 5 diesel fuel vehicles. All of the CNG buses are equipped with bike racks. Prior to the conversion to CNG buses, the fleet operated at 15.8% of total capacity on the Ashland routes. Based on 1993/1994 ridership figures, the CNG fleet runs at approximately 40% of total capacity on Ashland routes.

Ridership Volumes
Approximately 51% of RVTD ridership was generated by the Ashland bus routes in fiscal year 1993/1994. A total number of 69,320 boardings were made on Route 5, 246,480 boardings on Route 10 and 96,266 on Route 15. Because Route 6 was relatively new (instituted in July 1994), ridership data was not available at this writing.

Routes 5, 10 and 15 are in heaviest use during the evening peak hour - 3:00 p.m. to 5:50 p.m. Ridership on Route 6 is comparable to Route 5 during the evening peak hour, but has the most use during the midday from 9:00 a.m, to 2:59 p.m. The aver- age trip length on Route 5 and 6 is approximately 1.9 miles, and the average trip length on Route 10 and 15 is approximately 6.4 miles.

Valley Feeder
The Valley Feeder program is a shuttle service that delivers people to the nearest RVTD bus stop from designated stops near where they live or work. Persons needing transportation in a Valley Feeder Service Area call the service number, and a dispatcher arranges to have a Valley Feeder taxi meet them at a designated pickup point. Valley Feeder stops are identified by distinctive green and white signs. If a person needs a shuttle on their return trip from a bus stop to a Valley Feeder Service Area, they tell the bus driver when boarding, and the bus driver arranges to have a Valley Feeder taxi meet the rider at the designated pickup point. Valley Feeder clients do not have to pay for the shuttle service ride, but pay the regular bus fare once they board the RVTD bus.

The Valley Feeder program enables RVTD to deliver reliable transit service into neighborhoods where it isn't practical or economically feasible to operate a full-size transit bus. There are six existing Valley Feeder Service Areas in Jackson County: the Lower Table Rock Road area east of Central Point, the Sage Road area in northwest Medford, the Upper Table Rock Road area and White City area in White City, the Brookdale area near Providence Hospital and the Kings Highway area in southwest Medford. In fiscal year 1993/1994, 4,925 Valley Feeder trips serviced 9,254 passengers. Presently, there are no Valley Feeder Service Areas in Ashland.

Purpose of Public Transit Trips for Ashland Residents

Commuting to/from work	27%
Travel to school/college	14%
To go shopping	24%
Travel to recreation	11%
To visit friends	11%
To medical care	0%
Special events	11%
Other	3%

(From "Public Awareness and Perception Study," Spring 1994, by Laurel Research for RVTD)

Coupon Connection
The Coupon Connection program is a service for people whose disability or age may prevent them from using a bus or from traveling to a bus stop. This program is considered "comparable paratransit service" under the Americans with Disabilities Act (ADA).

The program uses local taxis under contract with RVTD. People who meet the eligibility requirements receive coupons that they use to pay for their taxi trips. Coupon Connection clients make arrangement for their trips with the local taxi company of their choice. Ride requests can be made from up to 14 days in advance to within an hour of a rider's appointment. Coupon Connection service is available from any origin to any destination within the RVTD service area.

In fiscal year 1993/1994, there were 1,921 Coupon Connection rides made by 137 Ashland residents. Districtwide, 38,167 Coupon Connection rides were provided in the same time period.

Valley Rideshare

Through the Valley Rideshare program, RVTD provides detailed information and planning support to Jackson County residents and employers interested in carpooling and vanpooling programs. Workplace surveys help match employees interested in sharing rides. Approximately 40 people are enrolled district wide in the Valley Rideshare program.

Alternative Transportation Program

RVTD's Alternative Transportation staff provides information and referrals regarding various transportation services, activities and organizations. RVTD is also a regional clearinghouse for information about telecommuting. Telecommuting enables employees to work from home using telephone and computer equipment as an alternative to commuting daily by car.

Future transportation projects, including public transit projects, currently planned and funded are described in Appendix A.

Section 10.05.03 Public Transit Needs

As with other transportation concerns, Ashland citizens gathered at several neighborhood meetings held by the City between February and April 1994. At these meetings, residents contributed many ideas for public transit facility and service improvements. Appendix B includes a complete set of comments expressed at the neighborhood meetings concerning public transit.

Among them were several common ideas, which indicate specific areas of concern. People were interested in new connections within the city to the Ashland Hospital and nearby medical offices, on East Main Street and Walker Avenue and to neighborhoods. A park and ride, an express commute service between Ashland and Medford, daily routes to Grants Pass and Yreka and an interstate bus depot were identified as regional needs. Residents suggested extending service hours to the evening and to Sundays and expanding the frequency of service in the downtown area during the tourist season. Regionally, bus stops were described as needing such improvements such as shelter from the weather, maps and bus schedules on-site, lighting, drinking fountains, bathrooms, telephones and newspaper machines.

The future viability of public transit in Ashland is dependent on two factors. One involves Ashland residents' perception of public transportation. The other factor concerns tangible improvements, such as adding new routes and amenities to bus stops and providing shuttle service to outlying neighborhoods.

Perception of Public Transit

As discussed earlier in this document, Ashland citizens must change their priorities in order to make public transportation more viable. In the 1980s although the population increased 8.5%, the number of vehicle trips increased by 39%. When surveyors asked people living in Ashland why they hadn't used public transportation, 46% said, "I drive my own car" and 10% said "1 don't have a need for it." Only 29% of respondents cited reasons such as "inconvenient times, not available in the area or too expensive."

These figures suggest that over one-half of Ashland residents do not see the bus as an alternative to driving their cars. Ashland residents think of public transportation as a product of necessity, not choice, and they only ride the bus when their car is not available.

Unfortunately, Ashland residents see RVTD services as being good for other people in the community, but not necessarily as being advantageous for their own families and businesses. While 56% of Ashland residents rate RVTD services as excellent or as a good value to the community, only 24% rated RVTD services as high value to their families, and only 19% rated RVTD services as high value to their businesses.

The RVTD Board of Directors has long directed services and promotional activities toward non-drivers -- those who are unable to drive a car or who do not have access to a car. Providing access to this core group is important and should be considered the very minimum level of service. Future efforts however, should concentrate on persuading people who have and drive personal automobiles to become public transportation users. The public perception of public transit as a "product of necessity" needs to be shifted to public transit as a "product of choice." The City should work with RVTD to expand the range of users while maintaining the minimum level of service.

Facility and Service Improvements
Current and future facility and service needs for Ashland and the entire RVTD service are outlined in the district's Ten Year Community Transportation Plan for 1996 to 2006. Although RVTD is directly responsible for identifying and addressing the needs, the City of Ashland has been an active partner in facilitating this process. In the interest of viable public transit, the City will continue to work with RVTD and SOSC.

Section 10.05.04 Public Transit Goals and Policies

Goal: To create a public transportation system that is linked to pedestrian, bicycle and motor vehicle travel modes, and is as easy and efficient to use as driving a motor vehicle.

Policies:
1. Develop pedestrian and bicycle networks that are linked to the public transportation routes.
2. Zoning shall allow for residential densities and a mix of commercial businesses within walking distance (one-quarter to one-half mile) of existing and planned public transit services which support use of public transportation.
3. Work with the local public transit provider to provide service within one-fourth of a mile of every home in Ashland.
4. Promote and support express commuter service between cities in the Rogue Valley.
5. Incorporate needs of people who don't drive when developing transit routes and facilities.
6. Provide pleasant, clean, safe, comfortable shelters along transit lines.
7. Require residential and commercial development within one-quarter of a mile of existing or future public transit services to provide transit shelters, bus access, and bus turnaround areas.
8. Install bike racks or lockers at transit stops.
9. Identify park and ride, bike and ride and walk and ride lots in Ashland to support ridesharing.
10. Develop a transportation center in Ashland.
11. Encourage promotional and educational activities that encourage people who own cars and school children to use public transit.
12. Work with the local public transit provider to address the specific public transportation needs of Ashland.
13. Participate and show leadership in interacting with counties, cities and other special governments in Southern Oregon to develop regional public transportation services to reduce the frequency and length of vehicular trips.
14. Establish aggressive but realistic performance targets for increasing public transit use for the short, medium and long run.

Part 10.06

Commercial Freight and Passenger Transportation

Sections:

Section 10.06.01 Introduction

Commercial freight and passenger transportation in and connecting to Ashland takes place via the air, rail, water, pipeline and highway systems. Air, rail, water, pipeline and highway freight transportation is discussed below. Public passenger transportation is discussed in the Public Transit section.

Section 10.06.02 Air Transportation

Ashland Municipal Airport

Ashland Municipal Airport is located on approximately 94 acres, 3 miles northeast of downtown Ashland at the extreme eastern boundary of the city limits. Airport elevation is at 1,894 feet mean sea level (MSL). Access to the airport is provided by Dead Indian Memorial Road, which connects to East Main Street. Interstate 5 is located one-half mile west of the airport, with access provided via Greensprings Highway. The airport is bordered on the east, west and south by sloping valley lands surrounded by rising mountainous terrain.

The Ashland Municipal Airport is classed as a general aviation airport by the Federal Aviation Administration (FAA). General aviation includes every type of civil flying other than the certified air carriers -- business, commercial, instructional and personal. Ashland Municipal Airport is owned and operated by the City of Ashland under the Department of Public Works. The City holds an operating agreement with a fixed base operator to administer tie-down and hangar rents, fuel flowage fees, etc.

The airport was established at its current site in the 1940s. The airstrip was developed by Sumner Parker, a local pilot, and leased to the City of Ashland for use as a public airport. The City continued to lease the property and make improvements to the airfield into the 1960s. In 1964, the City purchased the airstrip and the property surrounding it, and received Federal approval of the site. At that time, the airport was renamed Ashland Municipal Airport - Sumner Parker Field. For a complete description of existing airport facilities, see chapter 3 of the Airport Master Plan.

The City, in cooperation with the Oregon Department of Transportation (ODOT), under a Federal Aviation Administration (FAA) grant, retained SFC Engineering Company to update the Airport Master Plan to determine airport facilities required to serve the vicinity through the year 2012. The City Council adopted the plan as a supporting document to the Comprehensive Plan on March 2, 1993.

Aviation demand forecasts from the Airport Master Plan indicate airport operations will grow at a relatively modest rate through the year 2012. Based on the forecasts and an inventory of the existing facilities, the plan includes an airport layout and capital improvement plan for recommended airport improvements to meet forecast aviation demand during the 20-year planning period. Recommended improvements include the development of new hangar facilities, aircraft storage and business-oriented aviation activity, addition of airport security fencing around the perimeter of the airport, construction of a

helicopter landing area, provision of a non-precision instrument approach, and upgrading of runway edge lighting from low to medium intensity.

The Airport Master Plan is the ruling document concerning airport development and is hereby adopted by reference. Any transportation system improvements involving air transportation or development which may impact or be impacted by the Ashland Municipal Airport should consult the Airport Master Plan for the City of Ashland, October 1992.

Rogue Valley International-Medford Airport

The Rogue Valley International - Medford Airport provides the nearest scheduled commercial service carriers for passengers and/or freight, approximately 16 miles northwest of Ashland. The airport provides both air carrier and regional air service to cities throughout the Northwest and connections to larger markets and beyond. The airport lies on 989 acres within the city limits of Medford, and approximately three miles north of the central business district of Medford on Biddle Road near Interstate 5.

The airport was established at its current site in 1940. It was a military airport and was turned over to the City of Medford at the end of World War II. In 1971, Jackson County became responsible for the airport's operation. In January 1995, the airport was designated as a foreign trade zone and became an international point of entry.

Other Facilities

Other air facilities in the region include a public general airport and Air National Guard Base in Klamath Falls, and small strips in Shady Cove, Beagle and Cave Junction. Klamath Falls and Coos Bay are also recognized as foreign trade zones.

Section 10.06.03 Rail Transportation

The Siskiyou Line of the Southern Pacific Rail System runs from Springfield, Oregon through Roseburg, Grants Pass, Central Point, Medford, Phoenix, Talent and Ashland. The portion of the line running south from Ashland through the Siskiyou Mountains to Montague, California is known as the Black Butte Line. Both lines are limited to the transport of freight. At the time of this writing, the Siskiyou and Black Butte lines were owned by Rail Tex and operated by Central Oregon and Pacific Railroad, Inc. (COPR), a subsidiary of Rail Tex.

Ashland citizens gathered to discuss transportation concerns at several neighborhood meetings held by the City between February and April 1994. At these meetings, residents expressed a desire to have commuter rail service between Ashland and Grants Pass. Appendix B includes a complete set of comments expressed at the neighborhood meetings.

An analysis conducted for the Rogue Valley Regional Transportation Plan found land use development based on current zoning projected to be at densities that are too low to support a commuter rail service. (The Rogue Valley Regional Transportation Plan is the long-range transportation plan for the Rogue Valley Metropolitan Planning Organization, a geographic area established by the Governor encompassing Medford, Central Point, Phoenix and White City.) As stated in the Street System Section, alternatives such as commuter rail service cannot succeed if an auto-oriented low-density development pattern continues throughout the region. Regional land use patterns must change so that non-auto travel modes can be viable options in the future.

Section 10.06.04 Water Transportation

The rivers in Southwest Oregon are used primarily for recreational purposes such as river rafting, fishing and kayaking. The largest river in the area is the Rogue River, with sections protected under the Wild and Scenic Rivers Act. Water transportation is not feasible on the Rogue River and small water sources such as Bear Creek.

The Port of Coos Bay located approximately 178 miles northwest of Ashland is an international/national shipping facility and is the closest Oregon port to Ashland. The Oregon Transportation Plan identifies the

Port of Coos Bay as a major inter-modal hub facility. (The Oregon Transportation Plan defines an inter-modal hub as a facility where two or more modes of transportation interact so that people and/or goods can be transferred from one mode to another, for example, from a bus to an airplane or from a truck to a train.) The port serves as a link to the international marketplace with access to multi-modal connections, including air and rail freight service.

Section 10.06.05 Pipeline Transportation

WP Natural Gas, a subsidiary of Washington Water and Power, serves Jackson County with a 10-inch steel high pressure main from its origin at the Grants Pass terminus of the Northwest Pipeline transmission facility. The pipeline is located in the Interstate 5 corridor.

At the time of this writing, a new WP gas transmission from Klamath Falls to Ashland was under construction. The new line is intended to increase capacity and thereby meet increasing demand for service in the greater Southern Oregon region. For further information, refer to the Oregon Pipeline Transportation Plan.

Section 10.06.06 Highway Freight Transportation

Highway freight transportation is the movement of goods and services by truck. The key to providing effective freight movement is a boulevard and avenue street system that can support truck traffic and has continuous connections within the city and to inter-modal hubs and interregional routes. The Oregon Transportation Plan suggests streets used for freight transportation should provide a Level of Service C (LOS C) during off-peak periods.

Trucks are permitted to use all boulevard and avenue streets in Ashland, with the exception of Oak Street, which has weight limitations. Highway freight transportation in the Rogue Valley metropolitan planning region is concentrated along designated truck routes. These designated truck routes include Interstate 5, Crater Lake Highway and Lake of the Woods Highway.

As Ashland's future street network is planned, truck access to the city from the north and south and circulation of truck traffic within the city needs to be reviewed. The provision of truck facilities should be considered in conjunction with the goals and policies of the Economic Element of the Ashland Comprehensive Plan. The Economic Element encourages a diverse economy that retains Ashland's high quality environment. Clearly, the type of truck facilities the City provides needs to match the type, size and freight requirements of current and future businesses in Ashland. On a regional and state basis, truck travel needs to be coordinated with highway freight systems outlined in the Rogue Valley Regional Transportation Plan, Oregon Transportation Plan and Oregon Highway Plan.

Future transportation projects currently planned and funded are described in Appendix A.

Section 10.06.07 Commercial Freight and Passenger Transportation Goals and Policies

Goals: To provide efficient and effective movement of goods, services and passengers by air, rail, water, pipeline, and highway freight transportation while maintaining the high quality of life of Ashland.

Policies:

1. Review development within the Airport Overlay Zone to ensure compatibility with the Ashland Municipal Airport.
2. Explore intra-city commuter rail service on existing rail lines.
3. Mitigate railroad noise through the use of berming and landscaping in developments adjacent to the railroad and which are impacted by railroad noise.
4. Maintain boulevard and avenue street facilities adequate for truck travel within Ashland.
5. Coordinate with County, regional, State and Federal jurisdictions to maintain and develop inter-modal hubs, which allow goods and passengers to move from truck or automobile to rail to ship or plane.

6. Encourage the use of rail transport for the movement of goods and passengers as a means of conserving energy and reducing reliance on the automobile.

Section 10.06.08 Summary

In the preceding five sections, the Transportation Element of the Comprehensive Plan has examined many of the critical issues that face Ashland as it plans a viable and livable future. As the population grows in coming decades, pedestrian, bicycle, public transit and motor vehicle transportation will figure prominently in decisions that affect the community's quality of life. As stated earlier in this document, the Transportation Element is intended as a guide to Ashland's development in residential, commercial and industrial neighborhoods, and it offers the groundwork for sound transportation planning. The joint efforts of citizens, planning staff and government representatives should ensure that thoughtful decisions are made and implemented for the future.

Part 10.07

APPENDIX A: Committed Facilities

Sections:

Section 10.07.01 Introduction

Committed facilities, as defined by the Oregon Transportation Planning Rule, are proposed transportation facilities and programs that have approved funding. The following section summarizes the committed facilities in place at the time of writing.

Section 10.07.02 City and State Transportation Capital Improvement Projects

The City Capital Improvements Plan, 1996-97 Through 2001-02, includes 15 transportation projects. Status in the Oregon Department of Transportation (ODOT) *1996-1998 Statewide Transportation Improvement Program* is noted for projects involving the State. The construction and funding of projects on state highways is largely determined by ODOT. Further project details and costs are detailed in *the City of Ashland Capital Improvements Plan, 1996-97* through 2001-2002 and the 1996-1998 Statewide Transportation Improvement Program.

Sidewalk Installation throughout the City -- This project includes design and construction of side- walk facilities throughout Ashland. The purpose is to provide greater continuity in the sidewalk system.

Ashland Street Redesign -- This project includes side- walk expansion and landscape improvements beginning a t the intersection of Siskiyou Boulevard and Ashland Street. The purpose of the project is to increase pedestrian and bicycle use of the area.

Bikeway from Railroad Park to Shamrock Lane -- Construction of a 1.3-mile bicycle/pedestrian path adjacent to the railroad tracks. The purpose is to provide a safe pathway through the city for bicyclists and pedestrians. This project is included in the 1996-1998 Statewide Transportation Improvement Program.

Siskiyou Boulevard Redesign -- Construction of .57 miles of bikeway along Siskiyou Boulevard. The project is designed to provide a direct, convenient and safe travel route through the city for bicyclists. The installation of bike lanes on Highway 99 from Valley View Road to Walker Avenue is included in the 1996-1998 Statewide Transportation Improvement Program.

Bus Shelters -- This project will replace four shelters and construct two new shelters at existing bus stops. The six shelters will be located in the following areas: on the plaza, in front of the library, in front of Safeway, at Palm Avenue and Siskiyou Boulevard, at SOSC near Bridge Street, and on the Water Street overpass on Lithia Way. The shelter areas will be improved to include lighting, a bicycle rack and a drinking fountain. The position of the shelters will be changed slightly to provide a view sight of the oncoming bus. The new shelters are designed to encourage ridership by offering a more attractive and useful environment in which to wait for the bus.

Senior Shuttle Bus -- Purchase of a 17 to 21 passenger bus equipped with wheel chair lift kit, air conditioning and a mobile radio. The bus is used to transport local senior citizens to various locations.

Reconstruction of East Main Street from Railroad Tracks to Walker Avenue -- East Main Street will be re-paved, have storm drains installed and have sidewalks constructed on both sides from the railroad tracks near California Street to Walker Avenue.

Realignment of the Intersection of Indiana Street and Siskiyou Boulevard -- Reconstruction of the intersection, including curbing, crosswalk and storm drain construction. The purpose of the project is to improve pedestrian and vehicle movement and efficiency from Indiana Street to Siskiyou Boulevard.

Rebuild Sherman Street from Siskiyou Boulevard to Iowa Street -- Sherman Street will be completely torn out and replaced including the curb, gutter and storm drain system.

Rebuild Union Street from Siskiyou Boulevard to Auburn Street -- Union Street will be completely torn out and replaced including curb, gutter and storm drain system.

Signals at the Intersection of East Main Street and Mountain Avenue -- This project includes the installation of new turn signals at the intersection of East Main Street and Mountain Avenue. The purpose of the project is to address increasing current and future traffic flows.

Airport Security/Fencing -- Construction of chain link fencing around the perimeter of the Airport property. The purpose of the project is to prevent people and animals from roaming onto the runway.

Eight Unit T-hangars -- Construction of a new block of eight T-hangars adjacent to the 18 T-hangars currently being used. The purpose of the project is to meet consistent demand for enclosed hangars.

Six Unit T- hangar and Turf Tie Down Area -- Construction of a six unit T-hangar and an area dedicated and equipped as a turf tie down area. The purpose of the project is to meet demand for aircraft storage facilities.

East Area Access to Taxi Lanes -- Construction of a road, including grading and drainage, for access to the eastside of the airport.

The following projects are included in the 1996-1998 Statewide Transportation Improvement Program, but are not included in the City's Capital Improvement Program.

Ashland Park and Ride Lot -- This is a RVTD project scheduled for construction in 1997.

Bear Creek Greenway from South Valley View Road to Ashland -- This is a Jackson County project scheduled for construction in 1996.

Sidewalk Local Improvement District (LID)
The City began a Sidewalk Local Improvement District program in July 1995. Through the program, the City pays 25% of sidewalk construction, and provides engineering and inspection for residential neighborhoods that form a LID for sidewalk improvements.

Priority Walking Corridors
The City began a Priority Walking Corridor program in July 1995. The purpose of the program is to identify sidewalk needs for high priority construction funding.

Community Development Block Grant (CDBG) Sidewalk Projects
Beginning July 1994, the City was entitled to receive Community Development Block Grant (CDBG) funds from the federal Department of Housing and Urban Development (HUD). A portion of the funds was earmarked for sidewalks in eligible neighborhoods. As defined by HUD, a neighborhood having 51% or more of the residents earning at or below 80% of median income is eligible.

Sidewalk projects are selected on a yearly basis. There are two restrictions on the use of the CDBG funds: The funding can not be used to install sidewalks in front of commercial property; and 2) the sidewalk improvements can not be constructed along an boulevard or avenue. Continuation of CDBG sidewalk project funding depends on two factors: 1) the "entitlement" status of the City, and 2) the future of HUD as a federal program.

Part 10.08

APPENDIX B: Comments from Neighborhood Meetings

Sections:

Section 10.08.01 Introduction

The transportation planning process began with six neighborhood meetings in February and March 1994. Participants identified their issues, concerns and needs relating to transportation in the city. One meeting was held in each of the neighborhoods shown on the map below.

The neighborhood meetings generated a wide variety of comments. The following two tables summarize the citizen input gathered at the meetings. The material is, whenever possible, verbatim comments citizens gave at the neighborhood meetings.

Table l/Comment Highlights-comments concerning pedestrian, bicycle, public transit and other subjects that repeatedly came up. Specific ideas about issues in neighborhoods are also included.

Table 2/Automobile Comment High- lights-comments concerning driving in Ashland. Presented in a separate table because the comments tended to focus on specific areas more than the information in Table I.

COMMENT HIGHLIGHTS FROM NEIGHB0RHOOD MEETINGS

MODE	GENERAL	CITY WIDE	NEIGHBORHOOD
PEDESTRIAN	· more benches, bathrooms & water; complete sidewalk network/make connections · dramatically mark crosswalks · educate public on pedestrian laws - utility bills & cable TV safety programs · tree barrier between sidewalk & streets (wider) · post-pedestrian crossings · improve existing curb cuts & install more · separate pedestrians from bicyclists · hand rails on steep sidewalks · incorporate neighborhood pathways to neighborhood parks	· difficult crossing Siskiyou at SOSC · islands on Ashland St. · crosswalks across N. Main · traffic light across 3rd & Lithia Way for pedestrian safety · sidewalk on Ashland St. · need white step-off zone at crosswalks to stop cars-especially N. Main, Lithia Way & Siskiyou · library crosswalk unsafe for pedestrians · clear crossing at Water & E. Main (diagonal) · greenway plan-open space/ natural area/park "nodes" with connection to walking	· crosswalk on Ashland St. & Ray Lane · sidewalk on Walker · sidewalk on Oak · crosswalk at Hersey & Oak · pedestrian path from Williams Way to RR district · sidewalks on Nevada Street · additional pedestrian scale lighting on B St. · sidewalks on 8th St. · sidewalks on Scenic · sidewalk on Nutley from Granite to Winburn Way

	· retrofit pedestrian crossings-raise to increase pedestrian safety, widen to width of cars · stamped concrete identifying pedestrian/vehicle intersection · traffic calming measures to slow autos in pedestrian areas	paths	· sidewalks on Tolman Creek Road · need path from alley to Hillview · sidewalk or path on Wimer · Orange St. parkrow
MODE	GENERAL	CITY WIDE	NEIGHBORHOOD
BICYCLE	· bike racks on buses · bike racks at bus shelters-covered & secure · improve paving/grates are hazardous · benches, bathrooms, shelters & water for cyclists · educate cyclists & public on bicycle safety - in schools · keep paths free of debris bike paths that don't compete with traffic · additional bike paths/lanes · level bike routes/gradual slopes · make paths closer to stores · park/ride for bike w/locked facilities · direct bike routes · bike parking near doors of buildings	· real bike path through downtown - on Lithia Way & E. Main · use RR tracks for bike path · bike lane on N. Main · need a safe way for cyclists to get all the way through town · paths on Siskiyou would be safer for cyclists, pedestrians & cars · safe path from N. Main to library · link Bear Creek trail to Ashland	· safer access on B St. · lane on Oak to greenway · lane on Helman · lanes on hillside streets · no more building on Wimer without provision for cyclists · lane on A St. to Mountain · path on C St.
MODE	GENERAL	CITY WIDE	NEIGHBORHOOD
PUBLIC TRANSIT	· park & ride areas more covered bus stops bathrooms at bus stops · extend evening hours · stops closer to neighborhoods or shuttles	· bus service to hills · express bus earlier for commuters to Medford · need turnouts on N. Main so don't stop on street bus route to hospital & medical	· bus to Oak St. & Helman St. · service to hillside area

	· lighting at bus stops & approaches · encourage hotel/motel guests to use bus · need on-call service · increase timeliness of buses · more frequent runs · service on Sunday · need on-site bus info & maps at stops . need free zone in core area of city	offices · bus route on E. Main-regular route/school time route · interstate bus depot · bus to Grants Pass & Yreka	
MODE	GENERAL	CITY WIDE	NEIGHBORHOOD
OTHER	· better street lighting-motion sensitive · revise taxi ordinance for flexibility for rickshaws, golf carts, electric carts · scooter parking · encourage mopeds · keep horses off sidewalks-road apples are dangerous · encourage alternative auto use (electric, golf carts) · use children/bikes/residential neighborhood signs to increase awareness of neighborhood · separate modes · delivery service for large packages for people using alternative modes · trolley/trams like San Luis Obispo	· better access to Bear Creek · access to Ashland Creek · special lane on Siskiyou for 3-in-car, bike, bus · electric rail from plaza to Medford	· signs on Oak St. obscured by trees · zoning changes for corner groceries in Quiet Village · water fountains in Helman · access for school children to Helman School from Oak across creek · neighborhood market needed by hospital · more short cuts for pedestrians & bicyclists-RR district to Hersey, Oak to Helman, Hersey to Patterson · need park in Briscoe neighborhood so don't have to travel so much

ASHLAND COMPREHENSIVE PLAN

AUTOMOBILE COMMENTS FROM NEIGHBORHOOD MEETINGS

MODE	GENERAL	CITY WIDE	NEIGHBORHOOD
INTERSECTION	· control parking near intersections · visibility concern at intersections	· install signal at E. Main & Gresham · signal at Siskiyou & Walker realignment of Siskiyou & Indiana · traffic light needed at Tolman 8, Siskiyou · need no turn on red light sign at Siskiyou & Mountain · need longer turn signal at Walker & Ashland St. light or 4-way stop at E. Main & Mountain · 3rd & Main dangerous intersection · E. Main should have stop signs at Tolman Creek, Walker & Mountain · bad intersections Maple & N. Main, Wimer & N. Main · stop light at Lithia & Oak	· 1st & B St. intersection visibility · stop sign at Hillview & Peachy · visibility going up hill at Scenic & Church · need stop signs by mini-market by VanNess · difficult to cross or turn left on E. Main from Mallard or North Wightman
MODE	GENERAL	CITY WIDE	NEIGHBORHOOD
TRAFFIC CALMING	· synchronize signals throughout town · traffic law enforcement · alternate routes for trucks to keep them out of neighborhood · alternate route through north/south · speed bumps/raised intersection to slow traffic	no commuter by-way for RR district-alternate route should not destroy neighborhood · worst traffic in city at E. Main, Siskiyou, Gresham, & Third · consistency with speed on N. Main area to Epsteins · Ashland St. too fast from Litwiller-Simonsen funeral home to freeway · lower speed to 25-30 mph on Ashland St. · speed on Siskiyou too fast	· encourage use of Hersey to limit A St. traffic · one way RR district streets · all commercial deliveries from Oak to A Street - not through neighborhood · limit trucks no further than 3rd & 4th on A St. · limit non-local traffic in RR district · use traffic calming on B St. · quantity of traffic on

		· slower speeds on Lithia Way · N. Main needs left turn lanes · add alternate route through town past Billings · lower speed limit on E. Main at city limit, on Tolman Creek Rd. from Ashland St.	Hillview · route traffic off Strawberry and Skycrest down Ashland Mine · heavy traffic on Wimer-safety of school children · make Maple, Church safer · slow traffic on Pebble, Maple & Briscoe . slow traffic on Oak traffic calming on Diane & Jacquelyn
MODE	GENERAL	CITY WIDE	NEIGHBORHOOD
PARKING	· parking on one side of street · restrict truck parking downtown	· require Copeland to unload using city parking, not 1st · no parking last 1/2 before Siskiyou on Walker · move parking from down town E. Main to 1 block away · paid parking downtown · more short term parking downtown · more parking on (decking) on Hargadine lots · shorten time limits for City lots	· no parking north side of A Street ·A Street is a zoo · increase parking in Railroad district near downtown · parking problems at armory · parked cars interfere with visibility on Scenic & Wimer · remove parking one side of Helman, Oak
MODE	GENERAL	CITY WIDE	NEIGHBORHOOD
OTHER		· more yield signs at Sentry market · plant trees in median on Siskiyou to block sunlight in windshield · need Mountain St. interchange off I-5	· install 4th street crossing to Hersey · new roads across to Grandview & Westwood from Strawberry Lane · get rid of ruts on Grandview, but don't pave · widen & pave Grandview

Chapter 11

Energy, Air and Water Conservation

Parts:

Part 11.01

General

Sections:

Section 11.01.01 Introduction

Things have changed since the 1982 Comprehensive Plan was developed. The city's supplier of electricity is now the Bonneville Power Administration, the Northwest Power Planning and Conservation Act was passed, and many requirements of the Act have been implemented at both the regional and local level. The electric energy surplus of the 1980's is dwindling faster than many people anticipated only a few years ago. Energy is still fundamental to the quality of life we all enjoy in Ashland and America. National concerns about global warming, acid rain and dependence on unstable international oil supply provide a national framework for city energy activities. At the community level, energy and water usage is related to many planning facets, most notably transportation, land use and site design, new construction, air quality, housing and economic development.

In reviewing the 1982 energy element, it is remarkable that the majority of the goals, policies and objectives have been largely satisfied. However, much remains to be done. All the reasons to use our resources wisely are still relevant -- possibly even more important today in 1991. Changes in the electric utility industry require wise energy usage not only from a customer service point of view, but also to remain competitive in the 90's.

Meanwhile, the job of fostering wise resource usage is becoming more difficult because so much has already been done. It will be difficult to continue this momentum because the earlier, easier savings have already been acquired. We will need innovative ideas and programs to get these harder to reach resource opportunities. Our regional successes prove that not only can conservation be acquired, but also that it is the most cost effective way to meet the northwest's future energy needs.

Ashland is regionally recognized as a leader in instituting and providing energy conservation. We need to continue this leadership, but to also enhance our position by developing ways to conserve water and air quality. This is the first step in moving our community on to the next level of achievement. While it is only the first step, it is probably the most important, as it sets the tone and direction for City policy. Therefore, it is very important that the aims presented here be sufficiently challenging to motivate that public commitment which will be necessary to achieve success. Our aspirations are high, for the goal to be obtained is of critical importance.

Section 11.01.02 Historical Perspective

The City of Ashland is the second oldest municipal utility in Oregon. We have been providing wholesale electric energy since 1909. In February 1982, the City began purchasing wholesale electricity from the Bonneville Power Administration as a full requirement preference customer. Prior to this time, we purchased power from Pacific Power and Light. The City's power sales contract with BPA, currently in effect, will expire in 2001.

The Bonneville Power Administration (BPA) provides wholesale power to the City as a preference customer. BPA is a Federal marketing agency of the U.S. Department of Energy. It is responsible for marketing the hydroelectric energy produced by the federally owned dams on the Columbia River System. Bonneville Power Administration supplies electrical power to preference citizens (municipal

utilities, rural electric co-ops and public utility districts), direct service industries (DSI's) which are mostly aluminum smelters, and investor owned utilities. Surplus or non-firm energy and capacity are also sold both outside (mainly California) and inside the region. BPA's firm utility customers are located in Washington, Oregon, Idaho and Western Montana. BPA's resource mix in 1987 consisted of 90% hydroelectric generation and 10% thermal resources.

Section 11.01.03 Pacific Northwest Electric Power Planning And Conservation Act of 1980

In December 1980, President Jimmy Carter signed the Pacific Northwest Electric Power Planning and Conservation Act (NW Power Act). This very significant piece of legislation introduced many changes in the way that electric power issues would be dealt with in the Northwest. While the Act is very complex, a number of the more significant changes were:

Created the Northwest Power Planning Council. This Council, made up of two gubernatorially appointed representatives from each of the four states of Washington, Oregon, Idaho and Montana, was mandated to determine the northwest's electric needs and to develop a plan for the most cost effective resources to meet these needs.

Gave BPA a much more active role in acquiring new resources to meet the future needs of the Pacific Northwest. Prior to the Act, BPA could only market the output of the federal dams on the Columbia. Now it can actually acquire all the needed resources for its Northwest citizens.

Set up a list of priorities for the Council to use in determining which new resources BPA would acquire. This list of priorities, in order, was:

1. Conservation
2. Renewable resources
3. Co-generation
4. Thermal resources

In addition, the Act gave a 10% cost advantage to conservation over any other resource type. This meant that any conservation resource could cost 10% more than a competing resource and still be selected over the other resource.

Mandated that the Northwest Power Planning Council adopted a 20-year load forecast and a 20-year resource plan to meet the energy requirements of the forecast by 1983.

On April 27, 1983, the Northwest Power Planning Council adopted the 1983 Northwest Conservation and Electric Power Plan. True to the requirements of the Act, the plan did include a 20-year load forecast predicting the future electricity needs of the Northwest. However, the Council decided that accurately forecasting the actual energy needs of the region over a 20-year time span was next to impossible. Therefore, the load forecast, in the 1983 Plan, contained a range of forecasts instead of one single guess. The idea was to plan for different growth scenarios and then develop a plan, which could respond to any of them with the most cost-effective resources. The Council's Plan followed the resource priority of the Act by relying mainly on conservation for each of the growth scenarios.

Another key element of the plan is the Model Conservation Standards. These are construction standards for new residential and commercial buildings. The Act directed the Council to develop these standards which "must secure all the power savings that are cost effective to the region. In addition, they must be economically feasible for consumers." The 1983 Plan called for these standards to be implemented by the region's utilities, local governments and code agencies by January 1, 1986. And it also required BPA to develop a surcharge policy to be levied on utilities not implementing these standards by the deadline.

In January 1986, the 1986 edition of the power plan was adopted. Like the 1983 plan, this plan emphasized conservation and called for no immediate development of new resources except for lost opportunity resources. Lost opportunity resources are resources which, if not acquired, will be lost

forever to the region. One example occurs when a new home is built. If that home is not constructed to maximum conservation levels, it will be impossible to ever acquire that conservation. You may be able to retrofit the home with some of the conservation measures, but it will be much more costly and will never be as effective as correctly building the home initially. This plan reemphasized the need to get the Model Conservation Standards in place because they represent the most significant opportunity to protect a resource that could otherwise be lost to the region forever. These new buildings are likely to last for a considerable time and all cost-effective conservation measures should be captured at the time of initial construction.

The Council is presently in the process of reviewing and developing an updated version of the Northwest Power Plan. Also, it is considering strengthening the requirement of the commercial Model Conservation Standards. The updates will provide additional direction to BPA and the region's utilities.

Section 11.01.04 State Energy Plan

The Oregon Department of Energy is directed by State law to prepare an energy plan for the State every two years. The 1989 State Energy Plan is the third biennial plan. It guides policies and programs to ensure Oregon's energy needs will be met in accord with State goals. This plan states:

Oregon should build and maintain the capability to meet energy demand at the lowest cost. This means the state should:

1. Commit to and develop resources as close as possible to the date that power will be needed.
2. Secure all cost-effective conservation in new structures; capture renewable resources that would be lost if not developed now.
3. Pursue pilot and research conservation programs so conservation can be acquired when needed; pursue renewable resource research, development and demonstration.
4. Ensure that financial incentives to utilities promote least-cost resources.
5. Promote market competition that lowers costs and improves services.

Oregon supply policies and actions should guard against rapid price increases and supply shortages. Should they occur, state government should be prepared to lessen their impacts?

Oregon should promote wise use of energy resources in accord with our social, environmental and economic goals.

Oregon's energy supply choices should weigh all benefits and costs, including costs to the environment and the public.

Activities of the City of Ashland should be considered in light of regional and State energy policies and reinforce and implement them whenever feasible.

Section 11.01.05 Regional Energy System

The Bonneville Power Administration (BPA) provides wholesale electricity to the City of Ashland.

BPA is an arm of the U.S. Department of Energy. It was created by the Congress in 1937 to act as marketing agent for power from Bonneville Dam, which was nearing completion. Bonneville Dam was the first large dam built by the U.S. Government on the Columbia River or its tributaries.

When Grand Coulee Dam neared completion in 1941, BPA was designated to also market the power from this project. BPA has since been made marketing agent for 28 other Federal dams in the Northwest.

To accomplish its mission, BPA has designed and built the nation's largest network of long-distance, high-voltage transmission lines. This system has grown in the past 45 years to become the main grid for the Northwest.

BPA does not build dams or power plants. The federal dams are built and operated by the U.S. Army Corps of Engineers and the Bureau of Reclamation. Most Corps and Bureau projects are multipurpose. That is, they are designed to provide flood control, navigation, recreation, and other public benefits - as well as to generate electricity.

The power features of the federal dams, together with the BPA's transmission system, are operated as a single unit known as the Federal Columbia River Power System.

BPA's service area includes that portion of the Columbia River drainage basin that lies within the United States. The full service area covers about 300,000 square miles.

Most of the federal power is generated east of the Cascade Mountains. BPA transmits large amounts of energy over the mountains to bulk power stations near load centers west of the Cascades. Most of the northwest's major cities are west of the mountains.

BPA's transmission system is connected with other transmission systems. Besides scheduling and dispatching power from the federal dams - which have a total peaking capacity of about 19 million kilowatts - BPA "wheels" (transmits) over its grid large amounts of additional power from non-Federal utilities.

The Federal system supplies about 50 percent of the power generated in the region. BPA's transmission network provides nearly 80 percent of the transmission capacity in the region. This network serves as the "backbone" grid for all interconnected utilities in the Northwest.

BPA wholesales power to 148 Northwest citizens: 54 cooperatives, 37 municipalities, 26 public utility districts, 15 industrial firms, 8 investor-owned utilities, 6 federal agencies, the Washington Public Power Supply System (Supply System), and an irrigation district. It sells power outside the northwest to 14 utility citizens when no market exists for this power inside the region.

Part 11.02

Ashland's Electric System

Sections:

Section 11.02.01 System Description

The City of Ashland purchases electrical power from BPA via PP&L's Ashland and Oak Knoll Substations. PP&L owns and operates the 115-kV high voltage bus, circuit breakers, two 12,000/16,000/20,000-kVA (65--C) 115/12.47-kV transformers, one in each substation, and the 12.47-kV main and transfer bus. Service is provided to Ashland at the 12.47-kV bus with BPA primary metering installed ahead of the feeder reclosers. Both substations are fed by the Baldy to Copco 115-kV transmission line. The transformer capacity available is calculated by PP&L to be 24.4 MVA at winter peak for each power transformer.

The City of Ashland does not own or operate any substations. The City does own and operate the Ashland Substation 12.47- kV main bus, which serves four feeders, the Morton Street, Mountain Street, the North Main and business district circuits. All of the 15-kV type W reclosers on the four feeders at Ashland Substation have nominal current ratings of 400 amps. PP&L owns and operates the two circuit breakers at Oak Knoll Substation which provide protection for the Highway 66 and Highway 99 feeders. These circuit breakers are rated at 600 amps continuous current.

The City of Ashland's primary electrical distribution system consists of six 12.47-kV distribution feeders serving an area entirely within backbone primary lines consisting of 336.5 AAC conductors. Feeder branches and tap lines consist of #6 AWG solid copper through #2 ACSR conductor. Underground cables include 1,000 kcmil aluminum for substation get-a-ways at Ashland Substation and #2 AL cables for use in residential areas and primary underground taps. #2, 2/0, 4/0AL cables are used for 30 commercial and large residential developments.

The primary City-owned electric system consists of single circuit pole lines and some double circuit pole lines near the substations. All feeders have tie points to other feeders with normally open air switches or disconnects. The ability to switch and transfer load to other feeders is limited by the thermal capacity of the Highway 66 and Highway 99 circuits in the summer and by the transformer capacity at both Oak Knoll and Ashland Substations in the winter. The existing electric system is well maintained and construction practices conform with industry standards.

Some electric distribution facilities within the City limits of Ashland are owned by PP&L. As a result, there are several distribution lines in Ashland that are City-owned but used by PP&L to serve load. The City will be acquiring these PP&L facilities since this un-metered load is already being served by the City's facilities. This would result in a simpler, safer and more reliable overall electrical distribution system within Ashland.

Section 11.02.02 Electric Sales

In 1990, the City of Ashland purchased 160,753,170 kWhs from BPA and generated 1,855,000 kWhs at the Reeder Hydrogenerator. Total sales for 1990 equaled 162,608,170 kWhs and line losses equaled 9,813,423 kWhs. 152,794,742 kWhs of these sales were metered and 2,439,323 were un-metered sales.

Of the metered sales, 75,689,251 kWhs (or 49.6%) were residential sales, 58,363,054 kWhs (or 38.2%) were commercial/industrial sales, 14,671,087 kWhs (or 9.6%) were government sales, and 3,468,098 (or 2.3%) were municipal sales. Total revenues of $2,949,505 (or 47.1%) were residential; $2,446,417 (or 39.1%) were commercial/industrial; $669,150 (or 10.7%) were governmental; and $195,789 (or 3.1%) were municipal. The City generates electricity at the Reeder Gulch Hydroelectric Plant, produced from the City's water supply. In 1990, 1,855,000 kWhs were generated at Reeder. In 1988-1989, the general and street funds received $1,868,318 in electric utility taxes and fees.

Section 11.02.03 End Use Sector Analysis

The City of Ashland's utility serves about 6,200 residential accounts. While we do not know precisely, estimates made in developing the original energy element in 1980, assumed about 3,100 (or 50%) of these citizens relied on electric heat. Electric water heating saturation is higher and estimated at about 4,960 (or 80%).

Commercial/industrial accounts are numbered at 900. Very little is known about this sector's energy using habits. The only large industrial accounts are Croman Corporation and Parson's Pine Products, both lumber related businesses. Commercial/industrial sales equaled 37.8% of the total sales in 1990. 11.9% of total sales were for municipal and other governmental operations. The largest use among this group is Southern Oregon State College.

Section 11.02.04 Load Profile

The City of Ashland is a winter peaking utility. This is due to the large amount of electric space heating, increased lighting needs in the winter (i.e. less daylight hours), and larger amounts of hot water usage, combined with lower incoming water temperature.

All of these factors contribute to a winter peaking utility load profile. To indicate the size of this load diversity - in June 1988, our system peak equaled 20,690 kW. However, on December 21,1990, we encountered an all-time system peak of 45,110 kW, or over twice the capacity of June 1988. The City also has a daily load profile which results in maximum usage between 8:00 and 9:00 a.m., and a second smaller system peak around 7:00 or 8:00 p.m.

Annual Load Factor is defined as the total mount of kilowatt hours produced divided by 8,760 (# of hours in one year) divided by the highest demand during the year. Calculating the annual load factor for Ashland for 1990 results in:

159,875,070 ö 8,760 = .405
45,110

The higher the load factor a utility achieves, the better because utilities which have a constant year-round energy demand for will operate more efficiently. This means that building facilities will be easier, as there is not a major difference between months in demand for energy. Facilities can operate at the same level year round, not at half capacity for part of the time and full capacity for the remainder of the time. Ashland's load factor is low because our winter peak is nearly double our summer peak. As will be illustrated later, activities, which increase our load factor, and therefore decrease peaking, can have beneficial effects on electric utility systems.

Section 11.02.05 BPA Billing System

The City of Ashland is billed monthly by BPA for wholesale power purchases. The bill is separated by our two points of delivery (i.e. Nevada and Oak Knoll substations) of electricity. The bill consists of energy (kWh's) and demand (kW's) components. Under BPA's present rate structure, energy is billed at $.0144/kWh during April, May, June, July and August, and $.0184 for the remaining seven months of the year.

Demand or capacity is billed year round at $3.46/kW. We are billed for demand on a non-coincident peak for each substation, which means that the maximum amounts of electricity used for one hour at each substation are added together to determine total demand for the months. Non-coincident means that highest single hour at each substation, regardless if they occur at different times, are still added together to determine total demand for the month.

In 1990, the City total wholesale power bill equaled $3,942,795, of which $2,691,574 (or 68.3%) was for energy and $1,251,221 (or 31.7%) was for demand.

The current rate structure is scheduled to remain in effect until 1991, at which time, BPA will institute new rates.

Section 11.02.06 BPA Contracts and Cooperative Agreements

The City presently has a contractual agreement with BPA to purchase wholesale power (Power Sales Contract), and acquire residential energy conservation (Residential Weatherization Buy-Back Agreement). We also have cooperative agreements for the Super Good Cents new home grant program and the Energy Smart Design Assistance Program for commercial buildings. The residential Weatherization Buy-Back Program Agreement is scheduled to expire in September 2001.

Section 11.02.07 Other Energy Providers

The city's electric service territory is totally surrounded by Pacific Power & Light. Power purchased from BPA is delivered to the city on PP&L lines and delivered through two PP&L-owned substations.

C.P. National provides natural gas service to almost all of Ashland. For the last couple of years, it has advertised extensively in an effort to get citizens to select natural gas for space and water heating in new construction, and to encourage existing citizens to switch from electricity to natural gas. The current low price of natural gas, coupled with this extensive media campaign has resulted in more citizens using natural gas than at any other time in the past. C.P. National has been tentatively sold to Washington Water Power. This sale must be approved by the Federal Energy Regulatory Commission before it will become finalized.

The 1980 census data indicated that 558 citizens used oil for space heating. Our experience indicates that this number has declined over the last decade, but we have no idea just how many citizens have oil heat and will probably have to rely on the 1990 census for new data.

Part 11.03

Ashland's Energy Conservation History

Sections:

Section 11.03.01 Energy Element of the 1982 Comprehensive Plan

While Ashland had tried various ways to informally encourage energy conservation prior to 1982, the first official movement in this direction was the adoption of the City's energy element in 1982. It is commendable that the goals and policies of this element have nearly all been satisfied to some extent. This element aggressively pursued conservation and provided the impetus for our actions during the 1980's. Fortunately, our partnership with BPA enabled progress in many areas which the goals and policies addressed.

Section 11.03.02 Solar Access

In August 1980, the City of Ashland passed a citywide solar access protection ordinance. This code was a pioneering effort, which paved the way for many other jurisdictions to follow during the 1980's. Presently, there are solar access ordinances in effect in 30 Northwest jurisdictions and communities. Ashland's leadership in this area no doubt facilitated similar efforts throughout the region.

Section 11.03.03 Performance Standards and Energy Density Bonuses

When the City passed the Performance Standards Development Ordinance in 1981, a number of objectives were being sought. One of the major goals was to encourage people, by increased building densities, to construct energy efficient housing. The fact that many developers are choosing to build energy efficient housing under this code demonstrates how successful it is. While the code has been amended and fine-tuned over the past decade, the energy bonuses are still a very positive and popular way to use market-based incentives to encourage energy efficient housing.

Section 11.03.04 Water Heater Wrap Program

The first BPA-sponsored conservation program was the Electric Water Heater Insulation Program. This program was begun in late 1981 and under it, a City employee installed R-11 water heater blankets on citizens' electric water heaters free of charge. The City was reimbursed on a per unit basis for every blanket installed under this program. A total of over 1,120 water heaters were insulated under this program. We estimated that about 199,000 kWhs are saved annually as a result of this program.

Section 11.03.05 Street and Area Lighting Program

In 1982, the City began converting all of the City-owned streetlights from mercury vapor to high-pressure sodium lights. Under this BPA-funded program, over 1,215 City-owned lights and an additional 220-school district and Southern Oregon State College-owned lights were converted. Energy savings in these lighting conversions are estimated to be about 235,000 kWhs per year.

Section 11.03.06 Residential Weatherization Buy-Back Program

In April of 1982, the City implemented the BPA-sponsored Weatherization Buy-Back Program. Under this program, BPA purchases first-year electric energy savings at .32/kWh. Houses are eligible for ceiling, wall, floor and duct insulation, storm or replacement windows, clock thermostats, and caulking and weather-stripping. Weatherization funds for this program are paid directly to the homeowner as a one-time cash grant, which can cover up to 60% of the total costs of weatherization. Certified low-income citizens are eligible for up to 100% funding. These grant funds do not have to be paid back to BPA or the City. In addition, a loan program through Valley of the Rogue Bank can be utilized by qualified borrowers to cover the portion of the costs not covered by the BPA grant. During the period June 1982 through June 1989, a total of 1,450 residences had been weatherized. The yearly savings for this program are estimated to be about 8,628,000 kWhs. The total amount of money spent for weatherization measures is $2,169,537, and an additional $266,205 has been paid to the City for administration of the program.

Section 11.03.07 Solar and Heat Pump Water Heater Market Test

From November 1985 to September 1987, the City offered $300 cash rebates to electric water heating citizens who installed qualified solar or heat pump water heaters. This was part of a BPA-sponsored Pilot Hot Water Incentive Program operated by eleven different utilities in the Northwest. It was designed to test whether marketing and/or financial incentives could persuade citizens to install these alternative water heating devices. This program resulted in 7 heat pump water heaters and 106 solar water heaters being installed. $33,900 was paid to Ashland participants as rebates, and the City received $12,035 for administration of the program. Savings for these 113 systems are estimated to be about 248,600 kWhs per year.

Section 11.03.08 Commercial Audit Program

In late 1984 and early 1985, a total of 69 commercial businesses in Ashland received a free energy audit. This was done under the BPA-sponsored Commercial Audit Program, as it selected engineering firms to provide this service to citizens of various public utilities throughout the Northwest. The Eugene office of Brown and Caldwell Consulting Engineers did all of the audits in Ashland. The program only involved providing the auditing service. No money was allocated for implementing the recommended energy conservation measures. No follow up was provided to see how many of the recommended measures were implemented by our commercial citizens.

Section 11.03.09 Super Good Cents Program

Since May 1985, the City has been implementing the Super Good Cents energy efficient new home certification program. This program is sponsored by BPA and uses marketing, promotion and certification to encourage new homes to be built to energy efficiency levels in excess of the Oregon Building Code. Since the program's start, a total of 178 buildings had been certified as of June 30, 1989. These 178 buildings represent 305 residential units. These houses use one-third to one-half less electricity for space heating than a standard home. Savings for these 305 units are conservatively estimated to be 762,500 kWhs per year.

Section 11.03.10 Heating System Evaluation Program

This City-sponsored program provides energy information to existing Ashland residential citizens who are considering a change in their heating systems. A thorough energy audit, heat loss calculation, heating system sizing calculation, and an operational cost comparison of various types of heating systems are provided to citizens. In addition, a personal loan from Valley of the Rogue Bank, is available for citizens who install an electric zonal heating or retrofit heat pump and associated weatherization, which is

required as part of the heating system upgrade. So far, only 7 installations have been financed under this program, but an additional 11 systems were installed with owner financing outside the program. This program is relatively new and active promotion of its existence was only begun in August 1989. Estimated savings for these 18 systems are conservatively estimated to be 36,000 kWhs per year.

Section 11.03.11 Energy Smart Design Assistance Program

This BPA-sponsored program provides professional energy design assistance for new commercial buildings or major renovations/remodels of existing commercial buildings. BPA pays professional engineering firms for computer modeling and other design services that identify energy savings, cost and economics of energy efficient design options. Special awards are provided for buildings that achieve electrical energy savings 10% to 30% over Oregon Building Code requirements.

The total yearly estimated electric energy savings, as a result of these programs, has been summarized in Table XI-1.

[See Table XI-1 "Yearly Electric Energy Savings" on Comp. Plan page XI-10.]

Section 11.03.12 Other Conservation Programs

As a provider only of electricity, the City's conservation programs are mainly aimed at conserving electric energy. However, other programs are made available to Ashland's citizens by other fuel providers and the State of Oregon.

C.P. National Gas Company, the supplier of natural gas to Ashland and under a franchise agreement with the City, provides a free energy audit and a Cash rebate of $350, or a 60.5% loan for weatherization of gas heated homes. It will also finance gas water heaters and furnaces to Ashland citizens.

The State of Oregon, through the Oregon Department of Energy, provides weatherization services to homes heated with oil, propane, butane, or kerosene, or heated solely with wood. This program, called the SHOW (State Home Oil Weatherization) Program, provides 50% rebates for low and moderate-income citizens and can also facilitate loans for oil heat customers at 6.5% interest for one-half of the costs of weatherization not covered by the rebate.

In addition, tax credits are available from the State of Oregon for residents who install alternative energy water heating systems. This credit is based on the performance of the solar system. To qualify, the system must be certified by DOE. On average, one to two solar collectors will provide enough energy to qualify for the maximum tax credit. The maximum credit is $1,500. The credit can be carried forward five years from the year of approval.

The State also offers tax credits to businesses for projects that conserve or use renewable resources to produce energy. The credit is a State corporate income tax credit equal to 35% of the eligible project costs. The credit is taken over five years - 10% in each of the first two years and 5% in the third, fourth, and fifth years. Unused credits from one year may be carried forward up to three years.

The Oregon Department of Energy also has a program called the Small Scale Energy Loan Program (SELP). Loan funds are available for projects that conserve natural gas, electricity and oil, or projects that produce energy from water, wind, geothermal, solar biomass, waste materials or waste heat. Individuals, businesses, non-profit organizations and municipal corporations are all eligible for SELP loans.

Section 11.03.13 Electric Load Growth and Management

Purchased electricity from BPA since 1983 is depicted in Table XI-2. This table also gives the largest monthly demand per year.

[See Table XI-2 "Year/Total Energy/Maximum Monthly Demand" on Comp. Plan page XI-10.]

The city has also generated electricity since 1985 at the Reeder Hydrogenerator. Table XI-3 shows the production figures for those years. This data reflects a steady increase in loads since 1983, despite quite active and aggressive conservation programs. Since monitored results of BPA's regional conservation programs have confirmed that energy is being saved, we must conclude that load growth would be even higher in absence of our conservation efforts.

[See Table XI-3 "kWhs" on Comp. Plan page XI-11.]

We have also experienced growth in capacity required to serve our citizens. An all time system peak was set on December 21, 1990 of 45,110 kW's. This particular day was atypical in that we had low temperatures of about 0°F. This worst case weather scenario also caused system peaks for BPA and other public and private utilities in the Northwest. Since BPA's wholesale electric bill includes demand charges of $3.46/kW; the monthly demand component for December 1990 was $156,680. Programs, which can move energy sales from peak to off-peak hours, could have considerable cost benefits to Ashland's utility. The main reason for this is that our winter peak is mostly made up of residential electric space and water heating. Since residential accounts only pay energy charges, programs which move energy sales to off-peak times without an overall sales reduction will result in identical sales revenue generated, but will also reduce the demand component of our wholesale bill from BPA. Even programs reducing total sales but significantly shifting loads could be attractive if revenue reductions are smaller than wholesale bill reductions.

Demand management is evolving quite rapidly as more and better products appear in the market place. This technology ranges from total utility control of certain appliances remotely, to smart appliances, which control themselves. Additional technology includes customer control of appliances and demand metering or time of use metering which encourages load shifting for bill reduction reasons. Since there is a large potential for savings, it is in the City's interest to consider demand side management in planning for future metering, rate setting and other related utility decisions.

Section 11.03.14 Fuel Choice and Fuel Switching

Since the City has a dual role of electric utility and a municipal government, our attitude toward influencing citizens' fuel choices creates a dilemma. While most electric utilities in the Northwest are aggressively promoting the benefits of electricity over other fuels (especially for space and water heating), our position has traditionally been that all fuels should be conserved, and we have not tried to influence citizens' fuel choice. Faced with a very aggressive gas company promotional campaign aimed at convincing our citizens to switch to gas water and space heating, the City began considering ways to get accurate fuel choice appraisal information to our citizens.

This effort resulted in the heating system evaluation program. Its purpose was to allow the City to provide a full picture with all of the facts to our citizens contemplating a major heating system change. One of the main thrusts was not to convince people to switch from gas to electricity, but to try and give unbiased information to citizens. Our Super Good Cents Program, which pays cash incentives for every new Super Good Cents home, has probably caused some people to select electricity to heat their homes.

While we have not promoted electric load growth, we have two programs, which have effected citizens' fuel choices. While our City government's goal is to promote the efficient use of all resources, the Conservation Division's goal has been to promote efficient electricity use.

Because we believe strongly in our programs' merits and our zeal to make them successful, we have probably emphasized the promotion of the efficient electricity use over conservation of fuel sources. It is important to point out, however, that in both the Super Good Cents Program and the Heating System Evaluation Program, that while citizens choose electricity for space heating, the increased insulation and weatherization required in the programs still results in our citizens using electric energy more efficiently.

It is important to note that power supplied by BPA is predominantly hydro produced electricity, which is a renewable resource. And while there are environmental costs associated with these dams, most of these costs are fish and wildlife related and are subject to an extensive mitigation plan being implemented as part of the Northwest Power Planning Council Northwest Fish and Wildlife Plan, and being paid for by the region's ratepayers. However, with this fact in mind, it is preferable to select the renewable resource over other non-renewable resources.

Since the City's electric utility is publicly owned, there is less income drain for electricity purchases than by purchasing from other fuel suppliers who pay profits to shareholders. However, it would not be good policy to promote the use of electricity at the expense of our citizens solely for this reason.

The current price of natural gas is lower than it has historically been for some time. For this reason, using natural gas for space and water heating in some instances will result in the lowest operating cost for the consumer. But since water and space heating systems are expected to last 10-25 years, we need to try and determine the relative price of gas and electricity in the future. The 1989 Oregon Energy Plan attempts to project the price of gas and electricity into the future. Table XI-4 gives the estimates from the State Energy Plan.

[See Table XI-4 "kWh's Beck Report Energy Use Forecasts" on Comp. Plan page XI-13.]

If these forecasts indicate future changes, customer fuel-choice decisions based on current prices could lead to unwise decisions which, if looked at over a longer time frame, are not economically prudent.

Section 11.03.15 The Role of the City as an Energy Conservation Provider

Part of the problem with only supplying one fuel but trying to conserve all fuels, is that costs of conserving other fuels cannot be paid out of rates. The Conservation Division is funded by the city's electric utility and thus the city's users of electricity fund the energy conservation activities of the department. Thus, we tend to emphasize conservation of electricity over other fuels. This is illustrated if you look at the new construction process in Ashland. Homes built with electric space heat are scrutinized by the City's Energy Conservation Staff. We perform a computerized heat loss analysis of the home and then try to convince the builder or owner to take part in the Super Good Cents Program. Because of the current high level of new home construction, it takes all available staff time just to keep up with the electrically heated houses. Thus, no analysis of gas heated homes by the Energy Conservation Staff occurs. While the Building Division still requires the new building to comply with the State Energy Code (Chapter 53), no attempt to encourage additional energy conservation is made.

Section 11.03.16 Compliance With The Northwest Power Act

In the foreword of the first Northwest Power Plan, it states:

"This plan does not create one additional kilowatt of energy in the region. To accomplish its purpose, the plan must be implemented by Bonneville and other federal agencies, the region's utilities, state and local government, private businesses, and the people of the Northwest."

Because the City has a dual role of both a local government and a public utility, our responsibility to implement the plan is greater.

The 1986 plan states that "a central purpose of the Council's Plan is to provide the lowest cost energy future for the Northwest." It goes on further to say "If the provisions of this plan are implemented, the Council forecasts that average retail rates over the next 20 years will be stable or decrease (adjusting for inflation) in all but the highest growth scenario."

[See Table XI-5 "Residential Energy Costs ODOE Forecast - 1989 State Energy Plan" on Comp. Plan page XI-14.]

Since keeping electric rates stable has many important benefits for the City's utility and Ashland's citizens, the City should do all in its power to implement the provision of the Power Plan. This includes providing a leadership role to other utilities in the region. Ashland's "can do" attitude in the area of energy conservation has already made our existing conservation efforts very successful and recognized regionally.

One example of how this benefits the region is the Super Good Cents Program. Our early success and high rates of participation by local builders influenced other utilities to get involved in the program. We also provided training and technical assistance to utilities just starting the program. As always, our belief in the program's merits was reflected in our operation and this attitude contributed to the success of the program. Successful operation of such programs proves that the attitude of the implementing agency has considerable effect on the program's success.

Regional efforts toward energy conservation will proceed at a more rapid pace because aggressive utilities like Ashland lead the way. We should ensure that our regional leadership continues in existing and new conservation programs in the years to come. As the Northwest moves from a surplus energy situation in future years, more conservation will be needed in our region. Since the cornerstone of the northwest's energy future lies in successfully capturing energy conservation in areas that have yet to be tapped, leadership in the successful implementation of these new conservation programs will be vitally important. Ashland should help this effort by operating future conservation programs with the same measure of professionalism and enthusiasm embodied in our current programs. Our successful programs will signal to the region that "if it works in Ashland, it can work here."

Part 11.04

Air Quality

Sections:

Section 11.04.01 Introduction

The Bear Creek Valley, including Ashland, contains one of the highest propensities for air pollution in the nation because of the physical geographic situation of the valley, its particular landforms, and the prevailing climatic conditions.

The topography of the bowl-shaped valley, ringed by mountain ridges on all sides, leads to frequent, prolonged periods of stagnant air and frequent violations of State and Federal air quality standards. Temperature inversions trap the polluted air in the valley, reducing visibility and threatening the health of the community.

The State Department of Environmental Quality (DEQ) has designated the Medford-Ashland area as an Air Quality Maintenance Area (AQMA).

Section 11.04.02 Emissions

Air pollutants are emitted from a wide variety of sources. These sources can be classed into three broad categories - point sources, area sources and mobile sources.

Point sources emit large volumes of pollutants from a stationary location. Some examples include manufacturing plants, lumber and paper mills, and rock quarries. Area sources are collective groups of relatively small sources of pollution spread over a broad geographical area. Woodstoves, field burns, slash burning and road dust are some examples of area sources. Cars and trucks are examples of mobile sources.

Section 11.04.03 Pollution Types

Pollution types are monitored by DEQ for compliance with the National Ambient Air Quality Standards established by the Environmental Protection Agency (EPA).

Section 11.04.04 Carbon Monoxide (CO)

Carbon monoxide is a colorless, odorless, highly toxic gas. Medford is the only city in the county with a CO pollution problem. The vast majority of this CO problem is produced by motor vehicle emissions. The last five years of available data indicates that this problem is being steadily reduced. According to the 1988 Air Quality Annual Report, Medford exceeded CO standards on 24 days in 1983, 18 days in 1984, 35 days in 1985, 16 days in 1986, 4 days in 1987 and 2 days in 1988. When this is compared to 1977, when the CO standard was exceeded on more than 200 days, this dramatic improvement is demonstrated. A number of reasons combined to bring about this improvement in air quality with respect to CO in Medford. They include traffic pattern changes, vehicle inspection and maintenance program (I/M), and a gradual reduction of older non-catalytic equipped automobiles.

Section 11.04.05 Photochemical Oxidants

Photochemical oxidants are hydrocarbons and oxides of nitrogen, which react with sunlight to produce ozone (03) and a mixture of other noxious and irritating chemicals, commonly known as smog. While this problem was quite severe in the late 1970's (the standard was exceeded on 40 days in 1977), the latest data indicates that Medford has had no days when the ozone exceeded the minimum standard from 1983 to 1987. However, it is important to note that the ozone standard was relaxed by the federal government in 1982. Even this relaxed standard was exceeded on one day in 1988.

Section 11.04.06 Particulate Emissions

Federal Standards for particulate emissions until 1987 were in the form of Total Suspended Particles (TSP). Effective in July 1987, this standard was replaced by a standard for particles with a diameter of 10 micrometers or smaller. These smaller particles (called PM10) require different sampling equipment than did TSP. DEQ, in anticipation of the standard change, began sampling for PM10 in 1983. Therefore, the historic data for PM10 only dates back to 1983. Medford exceeded the PM10 standard 0 days in 1983, 5 days in 1984, 13 days in 1985, 2 days in 1986, 5 days in 1987 and 7 days in 1988. There is also an annual PM10 standard. This standard has been exceeded in Medford from 1984 to 1988.

In May 1987, the Jackson County Board of Commissioners appointed the Jackson County Woodburning Task Force to reevaluate the particulate air quality issues and advise local governments on the most appropriate woodburning control measures. The Task Force made the following recommendations in December 1987:

1. Mandatory curtailment of woodstove and fireplace use (with limited exemptions) during periods of air stagnation.
2. Comprehensive public education program.
3. Clean air utility rates for electricity and natural gas.
4. Financial incentives and subsidies for cleaner woodburning units.
5. Ban on installation of non-certified woodstoves.

The Task Force report was given to the Jackson County Board of Commissioners and cities in the Rogue Valley. The recommended strategy targeted a 75 percent reduction in residential woodburning emissions on peak PM10 days and a 50-60 percent annual reduction. Jackson County has initiated efforts with the cities of Medford and Central Point for a coordinated action plan.

The Department has identified additional control requirements for wood product industry in the Medford-White City area. These include tighter emission requirements for veneer driers and wood-fired boilers, more comprehensive industrial requirements for continuous emission monitoring and/or operation and maintenance, and more restrictive offset requirements. Such additional industrial measures are needed to help meet daily or annual standards and avoid more drastic, if not impractical, controls on residential wood heating in the future.

State rules would be needed for these industrial measures. The Department has drafted these rules and intends to request authorization from the Commission to hold a public hearing on them once local governments have made decisions on the wood heating strategies.

In the Medford-Ashland AQMA, there has been an overall decreasing trend in particulate emissions as a result of reduced emissions from industry. Improvement in the efficiency of wood used for home heating and curtailment during bad air quality are the areas that can make the most impact in efforts to improve the County's air quality with respect to particulates.

Section 11.04.07 Woodburning Advisory

Jackson County instituted a voluntary woodburning advisory in 1985. This program designates days as red, yellow or green during the months of November, December, January and February. The number of

red days since the advisory was instituted were 19 in 1985-86, 30 in 1986-87, 3 in 1987-88 and 19 in 1988-89.

Follow-up studies done by the County indicate voluntary compliance with the advisory was very low. Therefore, both the City of Medford and Jackson County instituted mandatory woodstove curtailment ordinances to control woodstoves on red days.

Section 11.04.08 Costs of Air Pollution

Air pollution impacts the health of humans, wildlife populations, the vegetative environment, the natural ecosystem, and local climates. It reduces visibility, aesthetic quality, and even the amount of usable solar radiation that reaches the ground. It is a scientific fact that diseases like bronchitis, emphysema, asthma, tuberculosis, lung cancer, pneumonia, and others are related to air pollution. It can also accelerate deterioration of many man-made and natural materials.

Section 11.04.09 Ashland's Role

Many residents of Ashland perceive air quality as a Medford-Central Point-White City problem, not Ashland's. While it is true that Ashland's air quality is better than those areas of the AQMA, it is still important to realize that we are all in the same airshed and pollutants caused by Ashland's residents contribute to the overall problem. It is very important that we establish that it is a countywide problem, which can only be solved by efforts by every county resident. Ashland should use its resources as both a local government and a municipal electric utility to foster the wise use of energy and enhance the valley's air quality.

The Ashland Citizen's Air Quality Advisory Committee was appointed by the Mayor in 1989. Its goal was to develop an overall air-quality enhancement program to present to the Ashland City Council for adoption. Things considered were education, ways to make the wood burning advisory have higher compliance rates, financial incentives and/or subsides for increasing the efficiency of wood usage, bans on installation of non-certified woodstoves, clean air utility rates, outdoor burning regulations, and many other ideas. These actions should guide the City in trying to improve the valley's air quality.

Part 11.05

Water Conservation

Sections:

Section 11.05.01 Introduction

The issue of water conservation was not considered in the 1982 Comprehensive Plan. However, a number of reasons have surfaced since then to merit this special section in the City's Conservation Element.

First, the City, in 1989, funded a water supply report by R.W. Beck and Associates. The study concludes that "Ashland must augment its water supply capabilities within the next 10 years." It makes sense that any new water supply resource should be delayed as long as possible through cost-effective demand reduction programs.

Second, planning for water systems has traditionally focused on new supply options, much like electric energy planning did in the 1970's. The lessons learned by the electric industry in the 1980's can be applied to develop the most cost-effective combination of demand side reduction and new supply options as a future source of water for the City.

Third, the City's successful energy conservation programs can be used as models to develop demand side reduction programs for the water utility.

Fourth, efficient use of water can accrue direct financial benefits to Ashland's residents and businesses.

Fifth, the Beck report calls for bonded indebtedness to finance the new supply. Getting voter approval for this could be politically difficult. On the other hand, an effective demand side program, coupled with revenue generation for a new supply, along with a delayed date for a new supply, could result in financing the new supply without bonded indebtedness.

Sixth, a number of new water conservation products are now available in the marketplace. These products provide the same or better levels of water services with lesser amounts of water usage.

Section 11.05.02 Ashland Water Demand

National data indicates that Americans use about 77 gallons per day per person for inside water usage. Outside water usage equals about the same amount as inside usage. Therefore, the national average of about 150 gallons/person/day shows that Ashland residents use about the same amount of water as typical Americans.

Section 11.05.03 Residential Retrofit

Many new products are now available that conserve water but still provide the service that people expect. According to an article in the July/August 1988 issue of Home Energy Magazine, "A home retrofitted with advanced water-conserving devices inside and out saves 20 to 55 percent of the total 150 gallons/ person/day, depending on which devices are installed and which modifications are made to existing appliances."

Another article looks at successful retrofit water efficiency programs across the nation. In programs in both San Jose, California and Phoenix, Arizona, savings equaled ten gallons/person/day. These were measured savings, not calculated savings. Both of these programs saved water by concentration on indoor water usage, not outdoor watering. There may exist a number of cost-effective measures, which could be implemented in existing water usage to extend our existing supply. We need to look at these alternatives and weigh their effect on the timing of a second water source.

Section 11.05.04 New Construction

The City has a number of options to reduce future demand from new growth which could result in less incremental demand per new residences than presently occurs. Many other jurisdictions have utilized codes and other methods to reduce water usage in new homes.

A study done by the Rocky Mountain Institute (RMI), in looking at a proposed dam for Denver, found that indoor water usage can be reduced from 80 gallons/day/per capita to 53 gallons, or 33.8% by installation of one gallon per flush toilet, two gallons/minute low flow showerheads, and aerators for kitchen and bathroom faucets. This study states that this equipment is readily available, involves no change in lifestyle, works at least as well as conventional equipment and looks as attractive as equipment in use today. This study states "Engineering tests under laboratory conditions and in house performance data show many 1.0 to 1.5-gallon-per-flush toilets perform substantially better than 3.5 gpf models." It recommends passing building code plumbing requirements as the proper first step in the orderly development of a water efficiency program.

The City should make efforts to ensure that all new residential construction is built with water efficient equipment. Code requirements for new water service have already been adopted in California by Goleta, Monterey, Santa Monica, and Los Angeles. Glendale, Arizona; Highland, New York; and the Commonwealth of Massachusetts have enacted similar requirements.

Section 11.05.06 Rates

Our current rate structure is not geared to encourage efficient water usage. Our rates encourage more use by offering volume discounts. An inverted rate structure should be considered both to encourage efficiency and generate revenue for future needs. Inverted rates are a more equitable way to generate revenue for future demand or supply side water options, as the basic household needs would not cost more. But the "luxury" use of water beyond the minimum amount a household needs for its use would be at a higher cost.

[See Table XI-6 "Ashland Water Consumption" on Comp. Plan page XI-19.]

Section 11.05.07 The Future

We can only be sure that future energy and resource usage in the next 20 years will be characterized by change, which could be profound and significant. The City must monitor changes and be able to adapt programs and policies to accommodate these changes. Deregulation of the natural gas industry, more diversified investor owned electric utilities, mergers and buy-outs of utility companies, acquisition pressures on small systems both public and private, wider transmission access, more independent power producers, new forms of energy generation, technological production breakthroughs, more competition in the marketplace, new products which utilize energy and resources, more informed consumers and citizens, global warming, acid rain, and increased environmental regulations are a few of the things that loom on the horizon.

This new set of rules will potentially impact the operation of our conservation programs and priorities. It is vitally important that we monitor and identify these changing conditions and be flexible enough to adapt to these changes.

In this changing future, we must keep in mind that our city should continue to operate and provide programs which are sensitive to our citizens' wants, but also in the best long term interest of all of the citizens of Ashland. This may require us to do things and provide programs outside our current scope of operation. We need to keep an open mind and continually monitor all of our options with forward looking vision and not be constrained by our past history or the activities by other utilities or BPA.

Part 11.06

Goals and Policies

Sections:

Section 11.06.01 Assumptions

Conservation of energy, air quality, and water resources will continue to be very important in the region and especially in Ashland. Through its policies and programs the City is in an excellent position to effect significant energy savings and resource conservation. City policies and programs directed toward energy efficiency and resource conservation are firmly in place in Ashland and we are recognized regionally for our success and leadership in these areas.

The current transitional nature of the energy situation will require and reward a vigorous planning effort, which is flexible enough to adopt as changes occur.

Section 11.06.02 Goals

The City Shall Strive, In Every Appropriate Way, To Reduce Energy Consumption Within The Community. Water Conservation and Air Quality Enhancement Should Also Be Promoted. Programs Should Emphasize Greater Efficiency In End Use, Rather Than Sacrifices in Living Standards.

In General, Policies That Effect Change Through A Combination of Economic Incentives and Public Education Shall Be Considered More Appropriate Than Policies Involving Strict Legal Requirements Or Mandates.

The City Shall Give Due Attention to Energy and Resource Conservation And Air Quality Enhancement in All Planning Actions and City Activities.

Section 11.06.03 Policies

Information and Education

1. The City shall continue to develop clear information for the general public to help educate them on energy conservation, load shaping, water conservation and air quality enhancement.

2. By relying on education as a cornerstone of City policy, we can be assured that programs will be accepted and embraced by Ashland's citizens. It is very important that all staff, but especially everyone in direct contact with the public, understand and believe in the importance of these programs and how they benefit not only individual citizens, but also the City and the utility.

3. The City shall strive to ensure that policies from various City departments do not conflict with each other but enhance not only each other, but also the overall goal of fostering wise resource usage.

4. The City shall continue to provide creditable energy information to the general public. The competitive energy markets of today should not bias City policy or the reliability of our information. We should not promote the use of one fuel over another, but strive to reduce all forms of energy and resource usage.

5. The City can gain invaluable information and assistance from other utilities and utility organizations. We should continue our active role and communication network with these entities. That way we can learn from their programs and experiences.

6. The City's utility billing process provides us with a valuable means of communication with our citizens. We should continue to utilize bill inserts to inform and educate our citizens, and promote our goals and programs.

Existing Housing

1. Homes already in existence will continue to constitute the vast majority of the City's housing stock. Moreover, the older, existing homes typically have a greater need for weatherization due to poorly developed insulation technology and a lack of concern for energy efficiency at the time of their construction. While the City has weatherized over 1,450 electrically heated residential units, we estimate that at least 1; 400 more units with electric heat are in need of additional weatherization. These units will be more difficult to reach because a high percentage of them are not owner-occupied. We need to continue to aggressively operate the BPA-funded residential retrofit weatherization program and its success to weatherize as many of these units as feasible.

2. Weatherization of homes that heat primarily with wood heat can greatly enhance the County's air quality. Replacement of older wood stoves with new certified clean burning woodstoves should also be encouraged. The State Home Oil Weatherization program (SHOW) and the City's Save Our Livability, View and Environment (SOLVE) program provide funding mechanisms (i.e. grants and loans) to help citizens weatherize wood heated homes. The City shall make efforts to publicize and facilitate using these programs for this purpose.

3. Program experience from other areas indicates that water conservation in existing homes can provide additional water for growth. Programs aimed at acquiring this resource shall be thoroughly evaluated on equal footing with new supply options.

4. Energy efficient appliances represent a cost-effective energy conservation resource. People should be encouraged to install energy efficient appliances. Incentive programs, codes, and rebates are possible ways to foster this policy.

5. The cost of photovoltaics continues to decline. At some point in the future, they could be cost competitive with alternative forms of energy generation. The City needs to monitor this technology and accept and embrace it when it becomes cost effective for our citizens to utilize.

6. Lighting technology is evolving quite rapidly. This area could also provide a cost-effective strategy to pursue in homes. The City shall keep updated as this technology evolves and help educate citizens who could benefit from these technological advances.

7. Passive solar design and sum tempering has application in existing homes. Also, solar water heating technology and photovoltaics might prove to be very cost effective in the future in existing homes. Consequently, solar access protection is still very important. Therefore, we shall continue our aggressive policy of protecting solar access.

8. Energy rating and certification systems for existing homes are gaining more prominence throughout the United States. They utilize the competitive marketplace to reward energy conservation efforts. There exists potential in Ashland to encourage weatherization and appliance upgrades by such a system. We shall explore the costs and benefits of employing such a system.

9. Solar water heaters, coupled with State tax credits, can be a cost-effective investment for some households in Ashland. We shall make tax credit information, technical assistance, and economic analyses available to Ashland citizens for whom solar water heaters are an attractive investment.

10. Multi-family housing is difficult to weatherize because most owners do not pay heating bills, but their tenants do. Therefore, other types of motivation are necessary to encourage weatherization of multi-family units. However, utility weatherization programs, coupled with the State Business Energy Tax Credits (BETC), can sometimes sufficiently motivate owners. The City shall promote and educate landlords to the benefits of weatherization along with the BETC to reach this difficult market.

New Housing

1. The City's Super Good Cents new home certification program has been very successful in encouraging new energy efficient electrically heated homes to be built. We shall continue to aggressively market this program and assure its continued success.

2. Some new homes are not built to the efficiency levels of Super Good Cents homes. Efforts shall be made to educate all builders in the benefits of energy conservation and encourage higher levels of conservation in all new homes.

3. New homes and apartments are being built which do not utilize the latest technological advances in water consuming devices. The City shall use any legal means to insure that only water-conserving equipment be installed in new construction. This should be done to accommodate growth with lesser incremental water demand and also to eliminate the need to return to these homes later to retrofit them with water conserving devices.

4. Passive solar design and sum tempering are very cost effective in new home construction. They shall be encouraged in new housing developments and individual houses.

5. The City shall address overall energy usage of new developments instead of just looking at houses on an individual basis. Areas to be considered could be transportation energy, recycling, composting, communal gardens, water usage and solar access protection.

6. Appliance efficiency shall be encouraged in new housing. This could be done through existing programs (i.e. Super Good Cents), by codes, by education or by incentive programs (i.e. density bonuses). All of these options shall be considered in trying to achieve this goal.

Commercial and Industrial Sectors

1. Very little energy conservation has occurred in this sector in Ashland. BPA will be sponsoring commercial conservation programs in the next decade to begin capturing this resource. The City shall keep abreast of these developments and offer these programs to our commercial customers, as they become available.

2. The State Small Scale Energy Loan Program and Business Energy Tax Credit can help finance energy conservation in the commercial/industrial sector. The City shall publicize their existence in conjunction with any commercial conservation programs we offer and to any other interested businesses.

3. The City's Energy Smart Design Assistance Program, sponsored by BPA for new commercial buildings and major commercial remodels, can have a significant effect on energy usage in commercial buildings. The City shall continue to aggressively market this service and also encourage BPA to continue the program beyond the initial three-year period.

4. If BPA does not make a commercial energy-auditing program for existing businesses available by 1993, the City shall investigate starting our own commercial energy-auditing program. Such a program could rely on reliable information, education, awards, civic pride, peer pressure and possibly even financial incentives to encourage energy and water conservation in this sector.

5. The City knows very little about the potential for water use efficiency in this sector. We need to begin gathering data about this sector so water conservation can be evaluated for businesses in Ashland.

6. The City shall ensure that Chapter 53 of the Oregon Building Code, which deals with energy conservation, is adequately enforced for businesses being constructed in Ashland. The City's new Electrical Inspector could be especially helpful in this by evaluating lighting systems for not only code compliance, but also for cost effective investments beyond code requirements.

Land Use Planning and Zoning

1. The energy efficiency density bonuses in the City's performance standard ordinance have been very successful in encouraging new homes to be built more efficiently than Oregon building code requirements. This bonus shall be preserved and maintained in future versions of this code.

2. Performance Standards' density bonuses for energy efficient housing have not been utilized in multi-family developments on R-2 and R-3 zoned land. This is because the base density is high enough that additional density is not needed. The base density in R-2 and R-3 developments shall be reduced accordingly so developers will have an incentive to building energy efficient multi-family housing.

3. Many housing developments require a Conditional Use Permit because they are proposed for land not zoned residential (i.e. E-1 or C-1 land). The City shall have the policy of requiring as a condition of approval that these developments be built to the energy efficiency standards of the Performance Standards Ordinance in all of these conditional use approvals.

4. All planning applications for new commercial, industrial or large residential buildings (i.e. Site Reviews, Conditional Use Permits, Variances, etc.) shall include the following information as part of the application or prior to building permit issuance:

    a. Building plans to scale of the proposed structure including elevations showing all windows on all sides of the structure.
    b. Proposed material and levels (R-Values) of insulation of the ceiling, floor and all walls of the structure.
    c. Type and size of the proposed lighting and heating system for the structure.
    d. A description of the proposed lighting system for the structure.
    e. A description of any types of energy used during the production of a product or service delivered or produced by the use. (This applies mostly to industrial uses.)
    f. A description of the method of water heating, if any, proposed for the structure. This information shall also include your best estimate as to the total annual amount and temperature of hot water that will be required for the proposed use.
    g. A description of the method of refrigeration, if any, proposed for the structure. (This is usually associated with food and frozen food.) This information shall also include an estimate of the total amount of the annual refrigeration load of the proposed building.
    h. Any other energy information, which will aid the City's Conservation Division in computing the above items.

Load Control and Shaping

1. The City shall investigate the cost and benefits of various load control strategies for residential electric water heating systems and space heating systems.

2. Our citizens have very little understanding of the distinction between energy and capacity (or demand). If properly educated on this concept, many people might voluntarily change discretionary energy usage patterns in a way, which could help shape, the Citywide electric load.

3. Energy and demand rate structures can be used to encourage commercial/industrial consumers to reduce their total electric demand on the City's electric system. As rates are changed in the future, the goal of load management shall receive due consideration in these rate-setting matters.

4. The newly installed remote metering systems at our substations could provide instantaneous readouts of electric usage through use of a phone line, computer and modem. The City needs to investigate the cost and benefits of setting up this system.

5. On-peak and off-peak electric rates and/or demand charges could give the correct pricing signals to consumers in encouraging load reductions. However, the City's present metering system does not have this capability. Any changes in our metering system should consider this capability and the cost and benefits it could provide.

6. Load management programs should share the cost savings with citizens providing the load management savings. Also, they should be designed so as to not inconvenience the customer or reduce his standard of living.

7. The City's largest electricity consumers could possibly alter their load patterns and result in wholesale electric bill savings for the City. We should work with these citizens and see if this is feasible and cost effective.

Water Conservation

1. Water rates currently are flat in the residential and commercial sector. An inverted or increased block rate (i.e. more water usage costs more per unit) can help give the correct pricing signals to citizens. The City shall consider changing the water rates to encourage water conservation and reduce waste.

2. The public needs to be educated about water usage and water conservation. Typical water usage by application needs to be publicized so citizens can make more informed decisions about water usage.

3. Irrigation is a large water usage and it also can be accomplished with lower quality water. Therefore, water conservation efforts shall be directed toward an overall reduction of water usage (conservation) and substitution of lower quality water for outdoor irrigation.

4. Under current state law, as lands with TID irrigation rights use annexed to the City and converted to urban uses, the TID water right must be surrendered. If these uses could continue to utilize TID water for landscaping and irrigation, new water demand could be significantly reduced on newly annexed land. The City shall explore ways to see if these could be facilitated.

5. The City shall maintain City facilities, which deliver TID water to City residents to ensure that this system is usable to the maximum extent for irrigation.

6. The water supply portion of any future system development charge should be used to raise money to pay for increased water supply or water conservation programs.

Future Considerations

1. There would be advantages to the City if we were to become a full energy provider. Therefore, if the gas company becomes available for sale, the City should thoroughly evaluate this option of purchasing the gas company's infrastructure within the city limits.

2. The future will be quite dynamic and volatile in the energy arena. The City needs to actively keep abreast of new advances in technology and embrace and encourage ones, which can benefit water conservation, air quality, energy conservation or production.

3. Smart homes, computer and other new electronic devices will require a higher level of electric service and expertise than currently required. The City has to take whatever measures necessary to ensure that this quality electric service and expertise is available for our citizens.

4. Small-scale energy production systems are becoming less expensive and more common. The City needs to make sure that we accommodate this change and integrate into our electric system so citizens will not be tempted to bypass our electric system entirely.

5. Utilities are beginning to learn that we can no longer just sell our product. We must continue to educate people on the wise use of energy. Our responsibility no longer ends at delivering power to the meter. It extends throughout the entire process of using our product. Conservation shall serve as the foundation of programs designed to meet this new challenge.

Chapter 12

Urbanization

Sections:

Section 12.01 Introduction

The purpose of the Urbanization Element of the Comprehensive Plan is to ensure an orderly transition of land from rural to urban uses. The main tools of urbanization control in Oregon are the urban growth boundary and annexation policies. This element spells out the method and logic used in drawing the urban growth boundary and the policies the City will use when considering annexation of land within that urban growth boundary. The criteria, which are used to determine the location of the urban growth boundary, must include LCDC Goal l4 and the seven findings, which it requires.

The area within the urban growth boundary, but outside the City limits, and, in some cases, areas outside the urban growth boundary, are also subject to a joint management agreement between the City and the County where both jurisdictions will be able to comment on the effect of land use decisions, while the County retains a final authority. The urban growth boundary may also determine the area in which urban facilities can be planned, such as sewer and water facilities, etc. Because of this, it forms an essential element to the Capital Improvements Program of the City.

Section 12.02 Drawing the Urban Growth Boundary

As mentioned before, one of the basic criteria for drawing an urban growth boundary is the seven findings required by Goal 14 - Urbanization. The findings are as follows:

1. Demonstrated need to accommodate long-range urban population growth requirements consistent with LCDC goals.
2. Need for housing, employment opportunities, and livability;
3. Orderly and economic provision for public facilities and services;
4. Maximum efficiency of land uses within and on the fringe of the existing urban area;
5. Environmental, energy, economic, and social consequences;
6. Retention of agricultural land as defined, with Class I being the highest priority for retention and Class VI the lowest priority; and
7. Compatibility of the proposed urban uses with nearby agricultural activities.

The general methodology used to determine the amount of land needed during the planning period has been carried out in the other elements of the Plan, most importantly the Housing and Economic Elements. The method used based land need projections on the City' s population projections. Then assumptions were made regarding such factors as the projected income of future residents, the types of housing they would need, the level of economic activity in the City, estimates of the density of housing, the number of persons per dwelling unit, and the number of employees per acre. Combining these numbers yielded an estimate of the number of acres needed for housing and economic growth in the City between the present and the year 2000.

It is important to note that, because of the number of assumptions made, the level of accuracy of these projections is not great. Small changes in each of those assumptions would result in large differences in the amount of acres projected to be used by the City. Therefore, the figures are not written in stone, but are simply extrapolations of existing and past trends. Since they are only estimates, the urban growth boundary cannot be located solely to implement the estimates made in this Plan.

Once the number of acres needed for urbanization has been determined, the lands in the City limits, which are suitable for development, must be determined. These lands, according to State law and City policy, are to be used first. If lands are not available in the City limits, then additional acreage must be supplied by lands presently in the County. This will help determine the eventual amount of land in the urban growth boundary. Lands, which are in the County but are presently supplied with City services and are committed to urbanization, should also be included in the urban growth boundary. From all of the above criteria, a boundary line is then drawn showing the extent of urbanization for the City.

Section 12.03 Land Needs

Table XII-1 shows the land needs, which have been estimated from prior elements of the Comprehensive Plan. For the specific methodology of estimating the land needs, refer to the appropriate section.

Section 12.04 Buildable Lands Inventory

Table XII-2 shows the buildable lands presently available in the City limits. In assessing the buildable lands in Ashland, the City used relatively conservative criteria. There are large numbers of small parcels of land which, while technically divisible under the minimum lot size criteria of the prevailing zoning in the area, probably will not be divided and not be available for buildable lands. Also, there are lands, which are too steep or are in a 100-year flood plain and will probably not be fully utilized. These lands cannot be counted as buildable lands.

1. Therefore, the following criteria was used for establishing buildable land:

2. All lots in areas designated single-family residential of less than one acre in size were discounted if they contained at least one single-family home.

3. All land, which was over 40% average slope, was discounted as being not buildable.

4. All lands within the 100-year flood plain were also discounted as being non-buildable.

5. In addition, a large amount of land on the north side of Bear Creek presently accessed by Mountain Avenue was discounted in the buildable lands inventory. While this land is in the City limits and has been since the early 1900s, it presently contains very limited utility services and is accessed by a single unpaved road. Due to its distance from the existing urbanization in Ashland, we have not considered that this area will develop over the next 20 years unless major public expenditures are made to bring paved streets, sewer and water to this area. Therefore, in this particular instance, land was also rated as not buildable.

[See Table XII-1 "Estimated Land Needs", XII-2 "Buildable Lands in City Limits", and XII-3 "Land Needed and Available in UGB" in original Comp. Plan document page XII-3.]

Section 12.05 Methodology

To determine the amount of buildable land, all parcels in the City were inventoried and identified by the type of land use present on the parcel. This map was finalized in January 1980, and was used as the basis for determining acreage of buildable land. The final totals shown on Table XII-2 are the City's best estimates of the lands, which are vacant and available for building sites in the City limits. Table XII-3 also shows the buildable lands minus the needs of the City, which have been identified in the Comprehensive Plan. When more land is needed than can be supplied by buildable land in the City, these

needs must be met by land presently not in the City limits or, in other words, land in the urban growth boundary.

Section 12.06 Special Cases

Table XII-3 shows that Ashland has a great deal more land designated Low-Density Residential in the City limits than it is projected to use (about 129 acres), and more land in the urban growth boundary zoned Single-Family Residential than it is projected to use (about 114 acres). Both these special cases deserve some explanation.

The City annexed a great deal of land in the early 1900s. The City limits were drawn in a large rectangle, following section and township lines rather than any specific property lines. The northwest and southwest corners of this old annexation are still visible in the present City boundaries. The northwest sector was addressed in the buildable lands inventory. The southwest sector, however, has services available to it and is largely vacant. It has very severe terrain, with slopes generally over 30%, and locally up to 100%. The hills are covered with a pine-madrone vegetation which has a great wildfire hazard. While these problems do not in all cases prevent development from occurring, they do limit density to less than two dwelling units per acre. Because of the amount of land in the City limits of this type, the land available for low-density development exceeds the projected demand. However, this does not conflict with Goal l4 (Urbanization) as they are not resource lands.

Three areas have been included in the urban growth boundary as Single-Family Reserve. Two outside the City limits, (Wright's Creek area, and Crowson Road area), and one inside (North Mountain Street). This is either because the land may or will be within the service boundary of the sewer or water supply because of topographic reasons, or is already committed to development due to small parcel sizes. The North Mountain and Crowson Road areas are, for the most part, already served by City sewer and water. The areas are not needed for the projected housing demand.

With the exception of these special areas, all of the land within the urban growth boundary is projected to be needed for urban uses.

Section 12.07 Drawing the Urban Growth Boundary

The urban growth boundary must include all land, which will be urbanized by the year 2000. Table XII-3 shows the amount of land needed in the urban growth boundary produced by the above methodology and shows the amount of land actually available in the urban growth boundary. There is a fairly close match in all of the categories except in the single-family residential areas, where there are 124 acres more than are needed, using the strict mathematical methodologies described above. However, as mentioned above, there are reasons other than the strict application of our assumptions for including land within the urban growth boundary, especially for areas which have been partially urbanized and are served by City services but are not presently in the City limits.

Section 12.08 Description of the Urban Growth Boundary

The Ashland Urban Growth Boundary is relatively compact for a city of its size, even for the moderate growth description of each segment of the urban growth boundary uses the points of reference in Map XII-1.

Beginning at point A, which is on the north side of I-5, the urban growth boundary follows the City limits down to point B. This area is North Mountain Street, an area that is presently in a semi-rural state. While it has been in the City limits for some time, it remains sparsely developed. It is included in the urban growth boundary because of the availability of City water, sewer and electrical utilities, and its status as land committed to urban development. From point B the line leaves the City limits to enclose the area around Fordyce Street to point C. This is an area, which is highly parcelized and contains City water service. There are several houses in a rural environment in this area, and it is included as single-family residential land.

The urban growth boundary then follows East Main Street, including areas, which are designated for future expansion by Southern Oregon State College, single-family residential, townhouse residential, and multi-family residential areas. Across the freeway, the urban growth boundary continues along East Main until it comes to the City's Municipal Airport and two areas reserved for expansion of the Municipal Airport. However, there are no plans for any residential development in this area. The urban growth boundary continues across the northern boundary of the Airport to point E, where it intersects Dead Indian Road. The urban growth boundary continues down Dead Indian Road to Highway 66 at point F and includes homes across from the present City limits which have water and sewer service from the City. The urban growth boundary then crosses the freeway at point G.

From this point, the urban growth boundary parallels Crowson Road, including additional homes serviced by City water, to Siskiyou Boulevard, again reaching the City limits near Tolman Creek Road at point H. The area enclosed by this boundary includes land needed for economic development uses. The urban growth boundary then follows closely the City limits line, including two small areas of County land between point J and K and points L and M. The next point of departure for the urban growth boundary line is including a small area on the east side of Thornton Way starting from point N to point O. This area is included since a portion of the area has been divided in an old 1910 subdivision and contains future rights-of-way. Also, this small area can be served by existing urban facilities on Thornton Way, while expansion of the Thornton Way area will require a sewer to be placed through the middle of this area, along Wrights Creek. The urban growth boundary then includes an area, which is partially urbanized on Ashland Mine Road. From here, the urban growth boundary encloses the north Ashland area, an urbanized area in the County, which grew up around the intersection of Highway 99 and Valley View Road, with its access to the I-5 freeway. The urban growth boundary returns to the City limits at point Q.

The only other departure of the urban growth boundary is point R to point S, where it includes the City's sewage treatment plant and a portion of the Bear Creek Greenway.

Section 12.09 Goal

It is the City of Ashland's Goal to Maintain a Compact Urban Form and to Include and Adequate Supply of Vacant Land in the City so as not to Hinder Natural Market Forces Within the City, and to Ensure and Orderly and Sequential Development of Land in the City Limits.

Section 12.10 Policies

1. The City shall strive to maintain at least a 5-year supply of land for any particular need in the City limits. The 5-year supply shall be determined by the rate of consumption necessitated in the projections made in this Comprehensive Plan.

2. The City shall incorporate vacant land only after a showing that land of similar qualities does not already exist in the City limits, or if annexation is necessary to alleviate a probable public health hazard.

3. The City shall enter into a cooperative agreement with Jackson County. This agreement shall designate the City's and County's joint policies for land not urbanized. Generally speaking, land not in the City' s urban growth boundary is to be maintained in a rural state. Land between the City limits and urban growth boundary is to be maintained in a rural state until annexed by the City. Urban-level development in the County, but within the urban growth boundary, is inappropriate to the needs and desires of the City of Ashland to implement its urbanization goal.

4. The City shall develop its Capital Improvement Program to accommodate all the land within the urban growth boundary with an adequate level of urban services for the needs expressed in the City's Comprehensive Plan.

Chapter 13

Comprehensive Plan Policies and Their Implementation

Sections:

This chapter is included to insure that each policy is implemented by some positive action by the City. The policies are usually implemented by ordinance. Some policies, by their nature, are not implemented by ordinance, but represent ideals and general goals the City feels are important enough to warrant a policy statement. Other policies will require future action by the City. This chapter should be used to determine how any specific policy is implemented.

Section 13.01 Historic Sites and Structures

GOAL: TO PRESERVE HISTORICALLY SIGNIFICANT STRUCTURES AND SITES IN ASHLAND

POLICIES

I-1 The City recognizes that the preservation of historic sites and buildings provides both tangible evidence of our heritage and economic advantages.

1) General policy not implemented by law or through the land use process.

I-2 The Historic Commission shall offer recommendations Code to the City Council and Planning Commission concerning the alteration or disposition of structures, sites, or neighborhoods within the historic interest areas in Ashland.

2) Chapter 2.24 and 18.74 of the Ashland Municipal

I-3 The Historic Commission shall review all building, sign, demolition, or moving permits occurring in the areas of historic interest, using procedures established by law, in order to offer its opinion on the proposal's impact on historic preservation.

3) Chapter 18.74 of the Ashland Municipal Code.

I-4 The Historic Commission shall encourage and promote

4) Chapter 2.24, of the Ashland Municipal Code, general educational programs to inform the public of the values of policy historic preservation.

I-5 The Historic Commission shall seek the official designation of important historic buildings and districts by national, state and local organizations. The Commission shall assist the Planning Staff and Planning Commission in exercising appropriate controls on the external appearance and disposition of such buildings and districts.

5) Chapter 18.74, Chapter 18.72, AMC

I-6 The City shall identify and inventory its significant historic buildings, structures, sites, objects and districts employing photographic, written and oral documentation, and maps, and shall protect those resources identified as significant.

6) General policy

I-7 The City shall develop and implement through law design guidelines for new development as well as for alteration of existing structures within the historic interest areas for structures and areas that are historically significant.

7) Chapters 18.72, 18.74, AMC

I-8 The Historic Commission shall take appropriate measures to encourage City communication with local, state and federal agencies which can supply funding, information and political support for Ashland's historic preservation activities.

8) General Policy

I-9 The City shall develop and maintain guidelines for analyzing and resolving conflicting uses of its historic resources, and shall encourage traditional uses of historic resources.

9) General policy not implemented through the land use process.

Section 13.03 Citizen Participation and Involvement

GOAL: TO MAINTAIN A CITIZEN INVOLVEMENT PROGRAM THAT ENSURES THE OPPORTUNITY FOR CITIZENS TO BE INVOLVED IN ALL PHASES OF THE PLANNING PROCESS.

POLICIES

III-I Continue the existing Ashland citizens' Planning Advisory Committee to assist the Ashland Plan significant planning issues, implementing ordinances, and all LCDC and Comprehensive Plan goals.

1) Chapter 2.27, 18.108 AMC.

III-2 Ensure, as much as possible, that the 16-member citizens' Planning Advisory Committee represents a geographic, occupational and ideological cross-section of the citizenship of Ashland. All future selections to the Committee should be with the ideal of representing a cross-section of Ash- land's population.

2) Chapter 2.27 of the Ashland Municipal Code.

III-3 Ensure in the future that all citizens are given the opportunity to contribute their views to planning issues through the public hearing process.

3) Chapter 2.27 of the Ashland Municipal Code.

III-4 The City shall sponsor informal workshops during the development of significant elements of the Plan or implementing ordinances, so that complex issues may be better understood by the public.

4) City policy.

III-5 The City should develop education materials such as guidelines, handouts, etc. to increase understanding of the City codes by the general public. When necessary, the City should sponsor seminars and classes to better inform the public.

5) City policy.

Section 13.04 Environmental Resources

GOAL: TO GUARANTEE THAT THERE IS AN ADEQUATE SUPPLY OF GRANITE AVAILABLE FOR USE IN AND AROUND THE CITY OF ASHLAND, WHILE ENSURING THAT THE INCOMPATIBLE EFFECTS OF MINING ARE SUFFICIENTLY MITIGATED.

POLICIES

IV-1 Restrict the three existing granite quarries to operations within the confines of their existing tax lots, subject to the non-conforming use section of the Land Use Ordinance.

1) Chapter 18.14, 18.16, and 18,68.080 of AMC.

IV-2 Forbid the expansion of the quarries through the Conditional Use Permit procedure as spelled out in the City's implementing ordinances.

2) Chapter 18.14, 18.16, and 18,68.080 of AMC.

IV-3 Prevent the establishment of any additional quarrying sites within the City due to the incompatibility of mining with other urban uses.

3) Chapter 18.14, 18.16

IV-4 Ensure that all the existing private and public quarries are reclaimed and re-vegetated after mining activities are completed.

4) Chapter 18.68.080 of the AMC.

GOAL: HAVE SOUND SOIL CONSERVATION AND EROSION CONTROL PRACTICES IN AND AROUND ASHLAND.

POLICIES

IV-5 Require that development be accommodated to natural topography, drainage, and soils and make maximum use of existing vegetation to minimize erosion.

5) Chapter 18.62, 18.72, 18.84, and 18.88 of the AMC.

IV-6 Prevent development and land management 18.84, practices which result in rapid runoff and accelerated erosion.

6) Zoning map, WR and RR zones, 18.62, 18.72, and 18.88 of the AMC.

IV-7 Require site-preparation procedures and construction practices which minimize erosion and sedimentation.
7) Chapter 18.62, 18.72, 18.84, and 18.88 of the AMC.

IV-8 Protect essential hillside drainage areas for 18.84, absorption of storm runoff, and other areas subject to severe soil erosion, unless control can be established.

8) Zoning map, WR and RR zones, 18.62, 18.72, 18.88 of the AMC.

IV-9 Incorporate site drainage practices that reduce runoff velocity and volume, by utilizing the natural properties of the soils and vegetation in conjunction with sound engineering practices.

9) 18.62, 18.72 and 18.88 of the AMC.

IV-10 Insure that areas of general slope over 30% are zoned for two dwelling units per acre or less, and permit total lot coverage to be no more than 20%.

10) Zoning map, WR and RR zones.

IV-11 Restrict any new partitioning or subdivision of land on slopes greater than 40%.

11) 18.62 of the AMC.

IV-12 Forbid any new development or cuts and fills on slopes greater than 50% unless absolutely necessary and scientific and geologic evidence is available showing that it may be done safety.

12) 18.62 of the AMC.

IV-13 Use development performance standards based on the natural topography, drainage, soils, lot coverage, and densities in place of arbitrary subdivision standards to ensure that natural features are an integral part of the design phase of future developments.

13) 18.62, 18.72, 18.84, and 18.88 of the AMC.

GOAL: REDUCE THE IMPACT OF URBANIZATION AND OTHER LAND USES ON THE QUALITY OF WATER IN AND AROUND ASHLAND IN ORDER TO ENSURE THAT THE CITY WATER SUPPLY IS OF THE HIGHEST POSSIBLE QUALITY AND IS DRAWN FROM DEPENDABLE SOURCES.

POLICIES

IV-14 Encourage public awareness of problems of the Ashland watershed and their causes.

14) Council policy not implemented by the land use process.

IV-15 Prevent any development or activity, future or Council existing, ' which has an adverse effect on the watershed.

15) Chapter 18.62, Zoning Map, WR zone, and policy.

IV-16 Maintain and improve the quality of both surface and groundwater resources, and prohibit new practices and developments which cannot meet water quality standards.

16) Chapter 18.62 of the AMC, WR zone.

IV-17 Cooperate with agencies, firms and citizens' use groups in improving water quality and the condition of the watershed.

17) Council policy not implemented through the land process.

GOAL: PROTECT THE QUALITY OF RIPARIAN RESOURCE LANDS, AND PRESERVE THEIR WILD- LIFE HABITATS.

POLICIES

IV-18 Identify, protect and seek conservation easements throughout significant riparian areas (streams, stream banks, and flood plain areas), and wildlife habitat areas.

18) 18.72, 18.76, 18.80, 18.84, 18.88 of the AMC.

IV-19 Encourage more public access to waterways, but define what public activities can take place. Ensure that such access does not result in water and visual pollution.

19) 18.72, 18.76, 18.80, 18.84, 18.88 of the AMC, Open Space Plan.

IV-20 Where possible, utilize water-related areas for visual relief, pockets of wildlife habitat, landscaping amenities, natural site design elements, recreational uses, bike paths, and pedestrian and jogging trails.

20) 18.72, 18.76, 18.80, 18.84, 18.88 of the AMC, Open Space Plan.

IV-21 Utilize local resources to form a technical advisory AMC committee to identify plants and animals which rely on riparian habitat for their continued existence. Retaining these areas in a natural state should be of high priority, and development should consider and accommodate the habitat utilized by these plants and animals.

21) 18.62, 18.72, 18.76, 18.80, 18.84, and 18.88 of the

GOAL: TO PRESERVE AND PROTECT SIGNIFICANT WETLANDS, AND TO MITIGATE POTENTIAL IMPACTS ON THESE AREAS DUE TO DEVELOPMENT AND CONFLICTING USES.

POLICIES

IV-22 Evaluate the quantity and quality of wetland resources inside the City Limits and within the Urban Growth Boundary through the compilation of an inventory of significant wetlands.

22) Adoption of the wetland provisions of 18.62 of the AMC.

IV-23 Develop site review procedures and performance 18.88 standards, Using buffering techniques, setbacks, and mitigation measures, to reduce the impacts of development on significant wetland areas.

23) 18.72, 18.76, 18.80, 18.84,

IV-24 The City should actively pursue the use of Transfer of Development Rights, dedications, direct-lease arrangements, and purchase or other acquisition strategies as viable methods for preserving and insuring public access to significant wetland areas.

24) Open Space Program

IV-25 Examine the Physical and Environmental Constraints AMC chapter of Ashland's Land Ordinance concerning wetland and riparian areas, and insure that existing zoning regulations maintain these valuable areas in a natural state.

25) Chapter 18.62 of the AMC

IV-26 Utilize local resources to form a technical advisory committee to identify plants and animals which rely on wetland habitat for their continued existence. Retaining these areas in a natural state should be of high priority, and development should consider and accommodate the habitat utilized by these plants and animals.

26) 18.62, 18.72, 18.76, 18.80, 18.84, and 18.88 of the AMC

GOAL: TO PROTECT LIFE AND PROPERTY FROM FLOODING AND FLOOD HAZARDS, AND MANAGE THE AREAS SUBJECT TO FLOODING TO PROTECT THE PUBLIC'S INTEREST.

POLICIES

IV-27 The City shall continue to participate in the National Flood Insurance Program, complying with all applicable standards.

27) 15.10, 18.62 AMC.

IV-28 In flood prone areas allow alternatives to urban development, such as agriculture, open space, parks, wildlife habitat, natural areas and recreational uses through the physical and environmental regulations in the City code.

28) R, C, and E zoning code, 18.62 of the AMC.

IV-29 Development in any flood prone area is not a guaranteed right, but depends upon whether the benefits to the public outweigh problems which would be caused by development, especially problems which may occur upstream or downstream during flooding.

29) City Policy used in designing flood plain regulations.

IV-30 New development (including fill) shall be allowed in floodways only upon the finding that obstruction of floodwaters is minimized. Non-structural solutions to flooding are preferable to structural solutions.

30) 18.62 of the AMC.

IV-31 Fill of flood fringe areas shall require a permit as specified in the physical and environmental constraints regulations and fill shall be engineered and compacted to City standards. Fills shall be kept to the minimum necessary to achieve project purposes.

31) 18.62 of the AMC.

IV-32 Apply special physical and environmental restrictions to all areas of Ashland which are identified as flood-prone, streams in the federal study, and other significant drainage ways.

32) 18.62 of the AMC.

IV-33 All existing natural drainage ways as identified on the physical and environmental constraints map shall be left in a natural state or modified only after City approval.

33) 18.62 of the AMC.

IV-34 As proposed with active streambeds, an analysis of potential runoff from upstream hard-surface

areas shall be conducted, and streambed profiles shall be adapted to accommodate the flow to prevent flooding of adjacent residences. The City shall acquire easements to maintain the carrying capacity of said streambeds.

34) 18.62, 18.72 of the AMC.

GOAL: PRESERVE FOREST AREAS WITHIN AND AROUND THE CITY FOR THEIR VISUAL, ENVIRONMENTAL, WILDLIFE HABITAT, AND WATER QUALITY VALUES.

POLICIES

IV-35 Require that commercial logging of forest lands within Ashland's City limits be subject to a special permit.

35) WR zoning (18.14.030(H))

IV-36 Emphasize the preservation of forest vegetation to the maximum extent possible as forested areas of the City are converted to urban uses.

36) 18.88 of the AMC.

IV-37 Use low-density zoning to ensure that development of the forested hillsides is kept at a level that maintains the forested integrity of the areas.

37) WR, RRzones.

GOAL: DIRECT DEVELOPMENT TO AREAS THAT ARE LESS THAN 40% SLOPE. ALLOW ONLY LOW DENSITY DEVELOPMENT AT LESS THAN TWO DWELLING UNITS PER ACRE ON AREAS OF GREATER THAN 30% SLOPE. PERMIT ONLY LOW INTENSITY DEVELOPMENT OF STEEP LANDS, WITH STRICT EROSION CONTROL AND SLOPE STABILIZING MEASURES.

POLICY

IV-38 Develop erosion control standards to ensure that development of these forested areas will not cause erosion problems.

38) 18.62 of the AMC.

IV-39 Restrict creation of new lots on land that is greater than 40% slope, unless a buildable area of less than 40% slope is available on each lot.

39) 18.62 of the AMC.

IV-40 Zone all lands which have a slope generally greater than 30% for development that will have no more than 2 dwelling units per acre or 20% lot coverage by impervious surfaces.

40) Zoning Map, application of the RR zone.

GOAL: TO PRESERVE EXISTING WILDLIFE HABITATS AND NATURAL AREAS WITHIN THE CITY WHEREVER POSSIBLE.

POLICIES

IV-41 Encourage educational programs documenting the value of Ashland's environmental resources and current trends in their quality.

41) Council Policy

IV-42 As a means to provide habitat, implement an open space programs that will 1) ensure open space, 2) protect scenic and natural resources for future generations and 3) promote a healthy and visually attractive environment in harmony with the natural landscape.

42) Chapter VIII of the Comprehensive Plan

IV-43 Continue to strengthen the site review process to assess accurately the environmental impact and ensure that changes in land use acknowledges limitations and opportunities of the site and have as little detrimental impact as possible.

IV-44 Some areas in the City limits cannot be urbanized. Those areas, mostly flood-prone areas and steep hillsides in the southwest area of the City, should be protected by low-density and open-space zoning. This low-density zoning designation would also provide suitable buffers between urbanized land in the City and adjacent forestlands in the County.

GOAL: PROTECT LIFE, PROPERTY AND ENVIRONMENTAL RESOURCES IN ASHLAND'S URBAN/WILDLAND INTERFACE AREA FROM THE DEVASTATING EFFECTS OF WILDFIRE. LESSEN THE POSSIBILITY OF WILDFIRE SPREADING TO THE ASHLAND WATERSHED FROM THE URBAN/WILDLAND INTERFACE AREA.

POLICIES

IV-45 Require installation and maintenance of a 40-foot fuel break around each dwelling unit or structure.

45) Chapter 18.62 of the AMC

IV-46 Require multi-dwelling unit developments to install and maintain a perimeter fuel break to prevent fire from entering the development, or to prevent a fire spreading from the development and threatening the Ashland Watershed. (Width of break is dependent on topography, aspect, vegetation, types and steepness of slopes.)

46) Chapter 18.62 of the AMC

IV-47 Where vegetation needs to be maintained for slope Education stability in a fuel break area; require plantings of fire- resistant or slow-burning plants. The City shall make a list of such plants available to the public. (See "Wildfire Hazard Management in the Urban/Wildland Interface in Southern Oregon," by Claude Curran - May, 1978.)

47) Chapter 18.62, Fire Department Program.

IV-48 Require more than one ingress/egress route or road widths wide enough to accommodate incoming fire apparatus and evacuating residents simultaneously in an emergency situation.

48) 18.62, 18.76, 18.88 of the AMC.

IV-49 Require roofs to be constructed of fire-resistant materials. Wood shake or shingle roofs would not be allowed.

49) 18.62 of the AMC.

IV-50 Encourage road placement to function as fire breaks in urban/wildland interface developments.

50) 18.62 of the AMC.

IV-51 Require chimneys of wood-burning devices to be equipped with spark arrester caps and/or screens.

51) 18.62 of the AMC.

IV-52 Install all new electrical distribution circuits in the urban/wildland interface underground if technically feasible.

52) City policy, Subdivision Standards

IV-53 The City shall encourage and support education/ information programs dealing with wildfire hazards in the urban/wildland interface. Information shall be made available through the City Building and Planning Departments to developers and builders wishing to build in the urban/wildland interface.

53) City Policy.

GOAL: MAKE A CONTINUING EFFORT TO REDUCE NOISE LEVELS, AND INSURE THAT NEW DEVELOP- MENT IS DEVELOPED IN A WAY TO MINIMIZE NOISE IMPACTS.

POLICY

IV-54 Establish a noise decibel standard both for enforcement of noise complaints from existing noise sources, and for evaluating the potential for new noise pollution.

54) Chapter 9.08.170, AMC.

IV-55 Insure that residential development is kept away from the maximum noise area around that Ashland Airport, and that new residential development near the Airport is aware of the potential for noise, and waives the right to file nuisance suits in the future.

55) Chapter 18.60, A-1 Overlay Zone

IV-56 Discourage new residential areas near the Railroad and 1-5 freeway, and where it occurs, insure that new development meets that following standards: 40dB in the sleeping quarters, 45dB in the rest of the home, 55 dB for no more than 50% of the time in the outdoor spaces, and a maximum of 70dB for occasional noise sources such as the Railroad.

56) Chapter 18.68, General Regulations.

IV-57 Use the Site Review process to insure that new development will meet the City's noise standards.

57) Chapter 18.72, Site Design

Section 13.05 Population Projections and Growth

GOAL: TO PROVIDE FOR THE NEEDS OF THE EXPECTED POPULATION GROWTH IN ASHLAND TO THE YEAR 2005, AND MAINTAIN A DIVERSITY OF INCOME, CULTURAL, AND AGE GROUPS IN ASHLAND'S POPULATION, CONSISTENT WITH OTHER PLAN GOALS.

POLICIES

V-1 Develop a growth management strategy that will exceeds monitor Ashland's size and rate of growth. If needed, develop methods to keep the growth within the expected population projection,

while accommodating the cyclical nature of growth.

1) Council Policy implemented if growth exceeds.

V-2 All other plans and projections by the City should use the same population projection, for consistency of planning, unless compelling reasons exist for using alternative projections.

2) Council Policy

V-3 Review and revise, if necessary, the population projections after data from the 1990 Census is available.

3) Planning Division work program

V-4 Strive to maintain a diversity of population groups in Ashland, especially if increased growth pressure leads to more expensive housing. Concentrate on population groups that are important to Ashland's character, such ' as students, artists and actors, employees of the city, school district, and college, service personnel who work in the tourism industry, hourly wage earners in local industries, and local residents who have not retired and live on fixed incomes.

4) Council Policy, Affordable Housing Plan.

V-5 Strive for an equal proportion of cultural minorities as a whole in both the City's population and in municipal employment.

5) Council Policy

V-6 Develop a system that derives the revenue needed Charges to pay for growth related costs from the development that is most directly responsible for the growth. Only derive the revenue from the growth that can be justified as the incremental cost that can be identified with the growth. Revenues received should only be spent on projects that will alleviate the problems associated with the growth. Take steps to reduce financial hardships caused by the growth taxing system where it adversely impacts targeted low-income groups or needed economic development.

6) Chapter 4.20, Systems Development

V-7 Monitor the proportion of tourist population to local population.

7) Council Policy

Section 13.06 Housing

GOAL: ENSURE A VARIETY OF DWELLING TYPES AND PROVIDE HOUSING OPPORTUNITIES FOR THE TOTAL CROSS-SECTION OF ASHLAND'S POPULATION, CONSISTENT WITH PRESERVING THE CHARACTER AND APPEARANCE OF THE CITY.

POLICIES

VI-1 Given the scarcity and cost of land as a limited resource, conserve land and reduce the impact of land prices on housing to the maximum extent possible, using the following techniques:

a) Use the absolute minimum street widths that will accommodate traffic adequately in order to reduce aesthetic impacts and lot coverage by impervious surfaces.

la) Chapter 18.88 (Performance Standards).

b) Allow a wide variation in site-built housing types through the use of the City's Performance Standards ordinance. The use of attached housing, small lots and common open spaces shall be used where possible to develop more moderate cost housing and still retain the quality of life consistent with Ash- land's character.

lb) Same as VI-la.

c) Consistent with policies relating to growth form, City policy should encourage development of vacant available lots within the urban area, while providing sufficient new land to avoid an undue increase in land prices. This shall be accomplished with specific annexation policies.

lc) Urban Growth Boundary; see also Urbanization goals (Chapter XII).

d) Zone lands in the single-family designation consistent with the surrounding neighborhood if the area is mostly developed. Generally, lands south of Siskiyou Boulevard-North Main should be R-1-7.5 and R-l-10, and lands south of the Boulevard should be R-l-5.

ld) Zoning Map.

VI-2 Using the following techniques protect existing neighborhoods from incompatible development and encourage upgrading:

a) Do not allow deterioration of residential areas by incompatible uses and developments. Where such uses are planned for, clear findings of intent shall be made in advance of the area designation. Such findings shall give a clear rationale, explaining the relationship of the area to housing needs, transportation, open space, and any other pertinent Plan topics. Mixed uses often create a more interesting and exciting urban environment and should be considered as a development option wherever they will not disrupt an existing residential area.

2a)Conditional uses allowed in R-2 zones (18.24).

b) Prevent inconsistent and disruptive designs in residential areas through use of a limited design review concept, in addition to using Historic Commission review as part of the site review, conditional use permit, or variance approval process.

2b) Chapter 18.74 of the AMC

c) Develop programs and efforts for rehabilitation and preservation of existing neighborhoods, and prevent development, which is incompatible and destructive.

2c) Council Policy, Zoning Code.

VI-3 Regulation of residential uses shall be designed to complement, conserve and continue the aesthetic character of Ashland through use of the following techniques:

a) Slope protection and lot coverage performance standards shall be used to fit development to topography, generally following the concept that density should decrease with an in- crease in slope to avoid excessive erosion and hillside cuts. This objective shall be used consistent with the desire to preserve land by using the smallest lot coverage possible.

3a) Zoning Map, Chapter 18.62, 18.88, AMC.

b) Site and design review shall be used to en- sure compatible multiple-family structures. Density incentives shall be used to encourage innovative, non-standardized design in single-family areas.

3b) Chapters 18.88 (Performance Standards);18.72 (Site Review).

c) Performance standards shall be used to regulate new development in Ashland so that a variety of housing types built for the site and imaginative residential environments may be used to reduce cost and improve the aesthetic character of new developments and de- crease the use of traditional zoning and subdivision standards.

3c) Chapter 18.88 (Performance Standards).

d) Street design and construction standards shall promote energy efficiency, air quality, and minimal use of land. To this end, the City shall:

3d) Chapter 18.68, 18.82, Chapters 18.88 and 18.80, Transportation Plan.

1) Adopt a master conceptual plan of future streets by size and use category.

2) Adopt minimum street width standards which provide only what is needed for adequate traffic flow and parking.

3) Incorporate bicycle and pedestrian traffic planning in street design.

4) Limit street slopes, requiring curvilinear streets along contours in steeper areas.

VI-4 Create and maintain administrative systems that will assist in all phases of housing and neighborhood planning through use of the following techniques:

a) Establish and maintain a data base system, which includes measurement of vacant land and land consumption; housing conditions; land use, land values, and any other pertinent data.

4a) Not implemented by law, Planning Department function.

b) Simplify and strengthen the processing approval mechanism so that the intent of state and local laws is fulfilled with the greatest possible thoroughness and efficiency.

4b) Chapter 18.108 (Procedures).

c) Cooperate fully with the Jackson County Housing Authority in locating low-income units in Ashland when this can be done in low-impact, relatively small developments, or through funding of individual homeowner loans or rental assistance.

4c) Council policy.

VI-5 The residential sector is the major user of energy in Ashland. Consistent with other housing goals, the City shall strive to promote, encourage or require energy-efficient design in all new residential developments.

5) Council policy, density bonuses for energy efficiency in residential zones.

Section 13.07 Economic Element

GOAL: TO ENSURE THAT THE LOCAL ECONOMY INCREASES IN ITS HEALTH, AND DIVERSIFIES IN THE NUMBER, TYPE AND SIZE OF BUSINESSES CONSISTENT WITH THE LOCAL SOCIAL NEEDS, PUBLIC SERVICE CAPABILITIES, AND THE .RETENTION OF A HIGH QUALITY ENVIRONMENT.

VII-1 Policy. The City shall zone and designate within the Plan Map sufficient quantity of lands for commercial and industrial uses to provide for the employment needs of its residents and a portion of rural residents consistent with the population projection for the urban area.

1) Zoning Map.

VII-2 Policy. The City shall design the Land Use Ordinance to provide for:

a) Land division and development within employment and manufacturing districts, and continue the employment zoning district which will provide for service, retail and light industrial uses consistent with specific performance standards relative to heavy truck traffic, noise, dust, vibration, and non-work related single- passenger vehicle trips.

2a) 18.80, 18.40, AMC

b) Controlled access along Ashland Street to ensure limited points of common access to businesses that are developing or undergoing development in this area.

2b) 18.72, AMC.

c) Specific development guidelines which will ensure that:

2c) 18.72, 18.74, 18.24, 18.28, 18.32, 18.40, 18.54, in the AMC. New development or redevelopment in the Historic District will be compatible with the character of the district.

· Development along Siskiyou Boulevard and Ashland Street will not primarily be automobile-oriented, but will also include attractive landscaping and designs that encourage pedestrian, bicycle, and mass transit forms of travel.

· Strong sign regulations exist which ensure that the number, size and placement of signs are the minimum required for recognition by the public of the business at the site.

· Retail, office, and traveler's accommodations and neighborhood shopping in residential areas, at development intensities that are appropriate to the area.

· Commercial or employment zones where business and residential uses are mixed. This is especially appropriate' as buffers between residential and employment or commercial areas, and in the Downtown.

· Medical uses as permitted uses in a designated, zoned area surrounding the Hospital and Maple Street.

· Clear and objective standards for development reviews that provide for a quick and predictable approval process with a reduced amount of uncertainty.

VII-3 Policy The City shall develop and implement an economic development program which will attempt to increase the number, variety and size of family wage retail, service, and light industrial activity employers within the urban area, with particular emphasis on employers paying wages at or above the median County wage, and employing from 5 to 100 people, or who are locally owned. The City shall work with regional economic development agencies on coordinating regional economic development activities.

3) Council Policy not implemented by the Land Use Ordinance.

VII-4 Policy - In accordance with policies VII-2 and VII-3 above, the City shall take such actions as are necessary to ensure that economic development can occur in a timely and efficient manner. Such actions may include the following:

4) Council Policy not implemented by the Land Use Ordinance.

a) Use of the Local Improvement District process to reconstruct or install public facilities to commercial, employment, and manufacturing zoned lands. Land and buildings should be suitable for use by small service and manufacturing industries of about 10 to 50 employees. Two areas of the City that would benefit from this policy are those lands designated Employment served by Exit 14 of the I-5 freeway and Hersey Street and" A" Street.

b) Utilization of available grants and loans to finance the extension of public facilities to lands zoned or planned for commercial or industrial use.

c) Inclusion within the Capital Improvement programs facilities improvements, which will help achieve long- range development goals and policies.

VII-5 The City shall encourage economic development of the local resources and enhance employment opportunities for existing residents. The City's policy is that economic development shall always have as its primary purpose the enhancement of the community's economic health.

5) Council Policy not implemented by the Land Use Ordinance.

VII-6 The City shall work with the College to encourage the growth of research and graduate programs. The City shall encourage the establishment of the Asian Studies facility, and other such facilities that provide a bridge to the international marketplace.

6) Council Policy not implemented by the Land Use Ordinance.

VII-7 The City is clearly unsuitable for the following types of businesses:

7) City Policy, Zoning Code.

a) Businesses, which use large amounts of water, especially when Ashland's water needs peak.
b) Businesses that emit large amounts of air pollution.
c) Businesses that create toxic wastes that require specialized disposal techniques not available locally.

The City shall include in the Land Use Ordinance a specific list of businesses that are prohibited from operations in the City Limits, or specific performance standards that would define uses that are unacceptable because they meet one or more of the above criteria.

Section 13.08 Parks, Open Space and Aesthetics

GOAL: TO PROVIDE THE PEOPLE OF ASHLAND WITH A VARIETY QUANTITY AND QUALITY OF PARKS, PARK FACILITIES, OPEN SPACES, TRAILS, AND VISUAL RESOURCES SUFFICIENT FOR THEIR NEEDS

POLICIES

VIII-1 Develop a parkland acquisition and development plan in accordance with community growth and projected park demand. Accomplish acquisition according to a plan developed by the City and the Parks and Recreation Commission.

1) Chapter VIII, Council and Parks Commission Policy.

VIII-2 Assist in the development of the Bear Creek Greenway, including the Ashland Creek portion of the city park system.

2) City Policy not implemented by law.

VIII-3 Encourage school-park joint developments.

2) City Policy not implemented by law.

VIII-4 Coordinate parkland acquisition and design with other agencies involved with park usage. Agencies should include Jackson County and the public school system.

4) City and Parks Commission Policy.

VIII-5 Encourage the development of private common open space areas in new residential developments to offset the demand for additional public parks.

5) Chapter 18.84, 18.88, AMC.

VIII-6 The City shall adopt an official map that will identify the planned areas for parks, new natural areas, conservation areas and t-rails. Where only a portion of the property is required for park or open space use, development can occur on the remainder of the property. When only a small portion of the property is required for a public purpose, and the new development will benefit from the public area, dedication may be required. Otherwise, the City will purchase the property, paying fair compensations. When development is possible, if the City does not have the funds available for the intended purchase within a reasonable amount of time, the City shall release the land from the Parks designation and allow the development consistent with other plan policies.

6) Parks and Open Space Map, Chapter 18.72, 18.76, 18.80, 18.84, and 18.88 of the AMC, Council and Parks Commission. Policy, Article XIX and XIXA of the City Charter.

VIII-7 Develop the system of corridors, linear park routes and trails outlined in the Park and Open Space map. Encourage interconnections between parks, open spaces, bicycle paths, easements, irrigation ditches, scenic roadway routes, railroad rights-of-way, etc. Require that commonly used trails across private property be preserved when developed.

7) Chapter 18.72, 18.76, 18.84, 18.88, and 18.82 AMC.

VIII-8 Establish, where possible, trails along non-urbanized sections of stream corridors, ensuring that stream ecology and any residences are protected. Prohibit development that would prohibit stream corridors from being utilized for trails.

8) Chapter 18.72, 18.76, 18.84, 18.88, and 18.82 AMC.

VIII-9 Require all new residential, commercial and industrial developments to be designed and landscaped to a high standard to complement the proposed site and the surrounding area.

9) Chapter 18.72, AMC.

VIII-10 Encourage improvement programs for existing areas with consideration to such items as exterior maintenance, landscaping, signs, and underground placement of utilities.

10) Council Policy not implemented by law.

VIII-11 Require high standards of design and landscaping for development adjacent to major arterials, and encourage dividers in any new access routes into Ashland.

11) Council Policy, Chapter 18.72, AMC.

VIII-12 Require, where possible, that the original vegetation be retained and require the restoration of new vegetation if it is removed.

12) Chapter 18.72, AMC.

VIII-13 Require street trees in all new residential, commercial and industrial developments.

13) Chapter 18.72, 18.76, 18.84, and 18.88 AMC.

VIII-14 Views of Pompadour Bluff, Van Dyke's Cliffs, Mt. Ashland, Grizzly Peak and the surrounding ridges are irreplaceable assets to Ashland, and should be protected through cooperation with Jackson County.

14) Council Policy

VIII-15 Insure that the Tree Commission has an opportunity to review and comment on all significant landscaping in the city, public or private.

15) Council Policy, Chapter 2.25, AMC

VIII-16 Develop an urban forest plan for the City including a street tree and a non-street tree section, a tree resource inventory, a plan for preservation and renewal of trees of stature and native species, long range maintenance plan, a plan to promote the greater use of trees and shrubs on both public and private land, and plan to educate the public regarding benefits of trees on public right-of ways.

16) Council Policy

VIII-17 Take necessary steps to annually be a Tree City, USA.

17) Council Policy

VIII-18 Establish a Plant Arboretum and/or a directory of notable trees in the City.

18) Future action

VIII-19 Increase the portion of the city covered by a tree canopy, especially parking lots and other paved areas.

19) Council Policy, Chapter 18.72, AMC.

VIII-20 Develop an urban forest interface plan to enhance the aesthetic and recreational opportunities created by this resource. The plan will also include wildlife enhancement measures and a fire control plan.

20) City Policy, future action.

VIII-21 Establish criteria and map the visual resources of Ashland, from selected points outside the city looking in, and from strategic points within the city looking out.

21) Future action, not currently implemented.

VIII-22 The City will cooperate and when necessary, negotiate with the county, USFS and BLM concerning activities within the viewshed that would impact the visual integrity of the area.

22) City Policy

Section 13.09 Public Services

GOAL: PROVIDE PUBLIC UTILITIES, SERVICES AND FACILI- TIES IN AN ORDERLY, EFFICIENT AND ENVIRON- MENTALLY SENSITIVE WAY AND IN SUFFICIENT QUANTITY TO MEET CITY NEEDS NOW AND IN THE FUTURE.

POLICY

IX-1 Provide urban areas with the level of services appropriate to the density of the settlement and resultant service demand.

1) Urban Growth Boundary and Annexation policies

IX-2 Provide services in a timely, coordinated and orderly manner that minimizes costs and inconvenience, and prevents premature, incomplete development.

2) Urban Growth Boundary and Annexation policies.

IX-3 Prevent urban sprawl and "leap-frogging" by pro- viding full services in a staged manner: first to areas within the City limits, then to the area within the Urban Growth Boundary.

3) Same as IX-2.

IX-4 Encourage the underground placement of utility lines, with any above-ground facilities designed to fit the landscape.

4) Chapters 18.80 (Subdivisions); 18.88 (Performance Standards)

IX-5 Encourage early planning and acquisition of sites for needed public facilities (e.g., fire stations, schools, roads, parks, etc.).

5) Council policy; Capital Improvement Program

IX-6 In conjunction with studies of housing, land use, downtown policies, etc., identify and implement innovative service techniques in anticipation of major trends, needs, and economic or environmental changes, rather than waiting to react when all options are closed.

6) Council policy.

IX-7 Use Capital Improvement planning to ensure that long-term public facility planning be as cost-effective as possible.

7) Same as IX-5.

IX-8 Consider system development charges to fund large capital costs caused by growth

8) Chapter 4.20 (System Development Charges).

GOAL: PROVIDE SANITARY SEWERS THAT MEET ENVIRONMENTAL STANDARDS FOR ALL AREAS WITHIN THE CITY LIMITS.

POLICY

IX-9 Encourage early planning for new sewage treatment facilities, outlining site requirements, use of sewage treatment by-products, costs and financing.

9) Council policy; Capital Improvement Program.

IX-10 Where feasible, require all development within the City to use Ashland treatment facilities.

10) Chapter 14.081020 (D)

IX-11 Encourage productive use of sewage treatment by-products.

11) Council policy.

IX-12 Consider the modification of the City's sewage treatment facility to a tertiary treatment facility as part of the City's overall Capital Improvement Plan.

12) Council policy; Capital Improvement Program.

IX-13 Require annexation or contract annexation in order to receive sewer service in unincorporated areas.

13) Existing Chapter 14.20 of Municipal Code.

IX-14 Size future sanitary sewers to provide for projected growth within the Urban Growth Boundary, based upon the City's Comprehensive Plan, and for anticipated future growth for the life of the facility.

14) Council policy.

GOAL: PROVIDE SUFFICIENT WATER SUPPLY FOR ASHLAND RESIDENTS.

POLICIES

IX-15 The City should continue to acquire priority water rights on Ashland Creek, as they become available.

15) City Council policy.

IX-16 The City should attempt to purchase additional Talent Irrigation District water from confirmed owners.

16) Same as IX-15.

IX-17 The City should further study the construction of a new impoundment on Ashland Creek at the Winburn site to augment the City's storage capacity in the watershed.

17) Council policy.

IX-18 The City should prioritize and implement needed water system improvements, as identified by the City Water Plan, as part of the City's overall Capital Improvement Plan.'

18) Capital Improvement Program.

IX-19 The City should develop water conservation measures, which can be implemented in critical water years.

19) Council policy.

IX-20 The City should exert pressure on the U.S. Forest Service to manage the watershed in ways, which are compatible and not detrimental to Ash- land's future use of the watershed as the City's water supply. Uses of the watershed which cause increased sedimentation in Reeder Reservoir should be very strongly opposed by the City.

20) Council policy.

IX-21 Ensure that the City's efforts to remove sediment from Reeder Reservoir have as little harmful environmental impacts on Ashland and Bear Creeks as possible.

21) Council policy.

GOALS: TO PROVIDE AN ADEQUATE STORM WATER DRAINAGE SYSTEM THROUGHOUT THE ENTIRE CITY OF ASHLAND.

POLICIES

IX-22 The City should fund and develop an overall storm water management plan for the entire City.

22) Council policy.

IX-23 Ensure that all new developments include a drainage system which protects adjoining property as much as possible.

23) Chapters 18.72 (Site Review); 18.92 (Parking); 18.80 (Subdivisions); 18.88 (Performance Standards); 18.62 (Physical Constraints).

IX-24 Encourage drainage systems that utilize natural drainage ways and minimize the amount and rate of surface runoff.

24) Chapters 18.88 (Performance Standards); 18.72 (Site Review);18.62 (Physical Constraints).

IX-25 Consider necessary improvements to the City's storm water system as part of the City's overall Capital Improvement Plan.

25) Capital Improvement Program.

IX-26 In all new developments, discourage the pumping of storm water drainage, including the use of sump pumps.

26) Same as IX-23; Council policy.

GOAL: PROVIDE SYSTEMATIC CONTROL OF THE SOLID WASTE PROCESS FROM COLLECTION TO STORAGE, EMPHASIZING EFFICIENCY, RESOURCE RECOVERY AND ENVIRONMENTAL PROTECTION.

POLICIES

IX-27 Encourage opportunities for recycling and resource recovery in all solid waste collection

programs.

27) Council Policy, Chapter 18.72 (Site Design)

IX-28 Encourage high environmental and aesthetic standards in the collection, resource recovery and disposal of solid waste.

28) State and Federal regulations.

IX-29 The City shall coordinate with Jackson County on the provision of solid waste disposal sites to meet current and long-range needs.

29) Council policy.

GOAL: MAKE MAXIMUM EFFORT TOWARD UTILIZATION OF PRESENT AND FUTURE EDUCATIONAL AND RECREA- TIONAL FACILITIES AND RESOURCES THROUGH PUBLIC, PRIVATE AND CITY COOPERATION.

POLICIES

IX-30 Encourage cooperation between the City and School District when new school facilities are considered or when City action affects the School District.

30) SOSC-City agreement.

IX-31 Encourage early acquisition of school sites of sufficient size for school/park facilities.

31) Capital Improvement Program.

IX-32 Assess the impact of large-scale proposed developments and their effect on the schools, which they impact.

32) Existing public notice requirements.

IX-33 The City shall coordinate with Jackson County on the provision of solid waste disposal sites to meet current and long-range needs.

33) Council policy.

GOAL: MAKE MAXIMUM EFFORT TOWARD UTILIZATION OF PRESENT AND FUTURE EDUCATIONAL AND RECREA- TIONAL FACILITIES AND RESOURCES THROUGH PUB-LICENSE, PRIVATE AND CITY COOPERATION.

POLICIES

IX-34 Encourage cooperation between the City and School District when new school facilities are considered or when City action affects the School District.

34) City Policy.

IX-35 Encourage early acquisition of school sites of sufficient size for school/park facilities.

35) City Policy.

IX-36 Assess the impact of large-scale proposed developments and their effect on the schools, which they impact.

36) Existing public notice requirements, communication with School Board.

Section 13.10 Transportation

GOAL: - PROVIDE A TRANSPORTATION SYSTEM WHICH 15 SAFE, DIVERSIFIED, COST AND ENVIRONMENTALLY EFFICIENT, EMPHASIZES ALTERNATE MODES OF TRANSPORT, MEETS THE NEEDS OF THE TRANSPORTATION DISADVANTAGED, AND ENHANCES THE LOCAL ECONOMY, SCENERY AND NEIGHBORHOODS.

POLICIES

X-1 Street Conditions

a) Coordinate the City transportation system with County, regional, State and federal plans.

la) Council policy.

b) Unpaved and poorly 'surfaced streets should be improved to provide more efficient traffic flows.

lb) Capital Improvement Program; Chapter 18.72, 18.76, 18.80, 18.84, and 18.88.

c) Prohibit the formation of new unpaved roads by forbidding development to occur on roads, which are unpaved and unopened.

lc) Chapter 18.72, 18.76, 18.80, 18.84, and 18.88.

X-2 Accidents

a) Ensure adequate visibility at all intersections for the safe flow of traffic.

2a) Chapter 18.68 (Vision Clearance).

b) Implement traffic control measures into intersections where traffic flow problems are predicted to occur.

2b) Traffic Signal Assessment Districts.

X-3 Street Dedications and Design

a) New street dedications should only take place after considering the total impact of the street on the surrounding area.

3a) Chapter I8.82 (Street & Greenway dedications)

b) Locate future arterial streets away from schools, parks and other open-space uses whenever possible.

3b)Street Dedication Map and Policies.

c) Require new street projects to ensure minimal impact on terrain and natural vegetation.

3c) Council Policy

d) Consider topography, soil characteristics, geologic conditions, drainage patterns, potential

runoff quantities, type of land uses, and purpose of streets when developing new street projects.

3d) Chapter 18.72, 18.76, 18.80, 18.84 and 18.88.

e) Evaluate Ashland's street design standards periodically and suggest improvements, which would reduce costs but maintain adequate quality.

3e) Plan update policy.

f) New streets shall be constructed to a size appropriate to the expected traffic flow.

3f) Same as X-3d.

g) Street locations and design shall preserve the character of neighborhoods.

3g) Same as X-3d.

h) Interconnections between residential neighborhoods shall be encouraged for automobile, pedestrians and bicycle traffic, but non-local automobile traffic shall be discouraged through street design, except for arterials, collectors, or subcollectors. Cul-de-sac or dead-end street designs shall be discouraged whenever an interconnection alternative exists. Development of a modified-grid street pattern shall be encouraged for connecting new and existing neighborhoods during subdivisions, partitions, and through use of the Street Dedication Map. (Ord. 2698.2/93)

3h) Same as X-3d.

i) Require landscaping and noise reduction measures in any street design or improvement adversely impacting a neighborhood area.

3i) Same as X-3d; Chapter 18.72 (Site Review)

j) Encourage efforts to landscape and beautify existing streets, ensuring adequate visibility for vehicles and pedestrians.

3j) Council Policy.

X-4 Access

a) Maintain carrying capacity and ease of movement of arterials and other streets by the use of limited access through the site review process:

4a) Chapter 18.72

b) Direct access onto streets designated, as arterials should be discouraged whenever an alternative exists or can be made available.

4b) Chapter 18.72, 18.76, 18.80, 18.84, and 18.88.

c) New direct access to arterials should be allowed only when land use and traffic patterns of the surrounding area have been considered.

4c) Chapter 18.72, 18.76, 18.80, 18.84, and 18:88.

d) Require design that combines the access of several developments to a single point in new developments.

4d) Chapter 18.72, 18.76, 18.80, 18.84, and 18.88.

X-5 Growth

a) Encourage Street design improvements, which will speed and smooth the flow of traffic.

5a) Council Policy.

b) Make timely improvements in design standards and traffic control devices.

5b) Capital Improvement Program.

c) Monitor traffic flows and determine streets and intersections where capacity problems may arise.

5c) Plan update policy.

d) Develop a master street improvement plan, which deals with problems predicted by future traffic flows.

5d) Chapter 18.62 (Street & Greenway Dedication)

e) Plan for the improvement of Hersey, Nevada and Mountain Avenue as alternative routes to the downtown area for north-south traffic.

5e) Capital Improvement Program.

f) Prepare a plan to integrate a new freeway interchange at Mountain Avenue into the present transportation network.

5f) Same as X-5e.

g) Street dedications shall be required as a condition of land development. A future street dedication map shall be adopted and implemented as part of the Land Development Code.

5g) Same as X-5d.

X-6 Pedestrians and Bikeways

a) Pedestrian traffic should be separated from auto traffic on streets and in parking lots.

6a) Chapters 18.72 (Site Review); 18.92 (Parking); 18.88 (Performance Standards).

b) Pedestrians should be separated from bicycle traffic when possible, as the two are not compatible on the same pathway.

6b) Same as X-6a, Council Policy.

c) Provide adequate pedestrian facilities in con- junction with all new street improvement projects and all new commercial, industrial and residential developments.

6c) Chapter 18.72, 18.76, 18.80, 18.84, and 18.88; Council Policy on City projects.

d) Minimize conflicts between transportation types, especially when those conflicts create a particularly hazardous area.

6d) Same as X-6a.

e) Encourage off-street pedestrian pathways to offer direct, safe routes.

6e) Same as X-6a.

f) Improve safety, convenience and efficiency of existing bikeways.

6f) Bike Commission and Bike Plan.

g) Provide appropriate bicycle facilities in con- junction with all new street improvement projects and all new commercial, industrial and residential developments.

6g) Same as X-6c.

h) Bikeways should be integrated onto existing streets in a separate lane unless safety factors dictate separation of bicycles and autos.

6h) Bike Committee and Bike Plan.

i) Recreational bikeways and walkways should be constructed using natural areas and scenic views

6i) Chapter 18-62 (Street & Greenway Dedication)

j) Provide or require secure bicycle storage in areas such as commercial centers, recreation- al areas, and employment centers.

6j) Same as X-6a.

k) Provide or require handicapped parking spaces in larger developments.

6k) Chapter 18.92 (Off-Street Parking).

X-7 Railroads

a) Encourage the use of rail transport for the movement of goods as a means of conserving energy.

7a) Council policy; Comp Plan Map (Industrial Zones);

b) Mitigate railroad noise through the use of berming and landscaping in developments adjacent to the railroad and which are impacted by railroad noise.

7b) Chapter 18.72 (Site Review)

X-8 Mass Transit

a) Encourage use and public awareness of local bus systems by City residents.

8a) Council Policy

b) Encourage the local bus system to improve accessibility and convenience for commuters through scheduling and routing programs.

8b) Council Policy.

c) Suggest changes in the present bus system to improve service and increase ridership.

8c) Council Policy.

d) Periodically evaluate bus routes and suggest changes to accommodate new growth and demand.

8d) Future Plan update.

e) Consider the special needs of the handicapped and transportation disadvantaged when developing and implementing mass transit and transportation systems.

8e) Council Policy.

X-9 Fuel Consumption and Air Pollution

a) Encourage residents of the City to use bicycling and walking as alternatives to the automobile whenever possible.

9a) Council Policy.

b) Encourage ride-sharing programs (carpooling) in both the public and private sectors.

9b) Council Policy.

c) Encourage education programs showing the energy savings and pollution reduction resulting from alternate modes of travel and ride-sharing.

9c) Council Policy.

d) Discourage the use of drive-up windows through the implementing ordinances.

9d) Council policy, Chapter 18.72 (Site Review)

X:10 Parking

a) Discourage non-residential vehicle parking in residential neighborhoods.

10a) Council policy, Chapter 11.24

b) Require new businesses to provide adequate parking spaces for employees and customers, except in the downtown area.

10b) Chapter 18.92 (Parking)

c) Re-evaluate parking space size requirements due to the increased use of smaller cars.

10c) Same as X-10b.

d) Encourage sharing of existing and future parking facilities by various nearby businesses.

10d) Same as X-10b.

e) Develop additional loading zones and bus parking spaces and encourage the use of existing facilities.

10e) Chapter 18.72

f) Develop a parking plan for the downtown area with convenient auto and pedestrian access.

10f) Downtown plan of 1988.

g) Require effective landscaping throughout continuous paved parking areas to increase shading, screening and buffering aesthetics and for percolation of water into the groundwater table.

10g) Chapters 18.72 (Site Review); 18.92 (Parking)

Section 11 Energy, Air and Water Conservation

GOALS: THE CITY SHALL STRIVE, IN EVERY APPROPRIATE WAY, TO REDUCE ENERGY CONSUMPTION WITHIN THE COMMUNITY. WATER CONSERVATION AND AIR QUALITY ENHANCEMENT SHOULD ALSO BE PROMOTED. PROGRAMS SHOULD ALSO BE PROMOTED. PROGRAMS SHOULD EMPHASIZE GREATER EFFICIENCY IN END USE, RATHER THAN SACRIFICES IN LIVING STANDARDS.

IN GENERAL, POLICIES THAT EFFECT CHANGE THROUGH A COMBINATION OF ECONOMIC INCENTIVES AND PUBLIC EDUCATION SHALL BE CONSIDERED MORE APPROPRIATE THAN POLICIES INVOLVING STRICT LEGAL REQUIREMENTS OR MANDATES.

THE CITY SHALL GIVE DUE ATTENTION TO ENERGY AND RESOURCE CONSERVATION AND AIR QUALITY ENHANCEMENT IN ALL PLANNING ACTIONS AND CITY ACTIVITIES.

POLICIES

XI-1 Information and Education

A) The City shall continue to develop clear information for the general public to help educate them on energy conservation, load shaping, water conservation and air quality enhancement.

1A) Council Policy

C) The City shall strive to ensure that policies from various City departments do not conflict with each other but enhance not only each other, but also the overall goal of fostering wise resource usage.

1C) Council Policy

D) The City shall continue to provide creditable energy information to the general public. The competitive energy markets of today should not bias City policy or the reliability of our information. We should not promote the use of one fuel over another, but strive to reduce all forms of energy and resource usage.

1D) Council Policy.

E) The City can gain invaluable information and assistance from other utilities and utility organizations. We should continue our active role and communication network with these entities. That way we can learn from their programs and experiences.

1E) Council Policy

F) The City's utility billing process provides us with a valuable means of communication with our citizens. We should continue to utilize bill inserts to inform and educate our citizens, and promote our goals and programs.

1F) Council Policy.

XI-2) Existing Housing

A) Homes already in existence will continue to constitute the vast majority of the City's housing stock. Moreover, the older, existing homes typically have a greater need for weatherization due to poorly developed insulation technology and a lack of concern for energy efficiency at the time of their construction.

2A) Council Policy

B) Weatherization of homes that heat primarily with wood heat can greatly enhance the County's air quality. Replacement of older wood stoves with new certified clean burning woodstoves should also be encouraged. The State Home Oil Weatherization program (SHOW) and the City's Save Our Livability, View and Environment (SOLVE) program provide funding mechanisms (i.e. grants and loans) to help citizens weatherize wood heated homes. The City shall make efforts to publicize and facilitate using these programs for this purpose.

2B) Council Policy

C) Program experience from other areas indicates that water conservation in existing homes can provide additional water for growth. Programs aimed at acquiring this resource shall be thoroughly evaluated on equal footing with new supply options.

2C) Council Policy

D) Energy efficient appliances represent a cost effective energy conservation resource. People should been encouraged to install energy efficient appliances. Incentive programs codes and rebates are possible ways to foster this policy.

2D) Council Policy

E) The cost of photovoltaics continues to decline. At some point in the future, they could be cost competitive with alternative forms of energy generation. The City needs to monitor this technology and accept and embrace it when it becomes cost effective for our citizens to utilize.

2E) Council Policy

F) Lighting technology is evolving quite rapidly. This area could also provide a cost-effective strategy to pursue in homes. The City shall keep updated as this technology evolves and help educate citizens who could benefit from these technological advances.

2F) Council Policy

G) Passive solar design and sun tempering has application in existing homes. Also, solar water heating technology and photovoltaic might prove to be very cost effective in the future in existing homes. Consequently, solar access protection is still very important. Therefore, we shall continue our aggressive policy of protecting solar access.

2G) 18.70 (Solar Access)

H) Energy rating and certification systems for existing homes are gaining more prominence throughout the United States. They utilize the competitive marketplace to reward energy conservation efforts. There exists potential in Ashland to encourage weatherization and appliance upgrades by such a system. We shall explore the costs and benefits of employing such a system.

2H) Council Policy

I) Solar water heaters, coupled with State tax credits, can be a cost-effective investment for some households in Ashland. We shall make tax credit information, technical assistance, and economic analyses available to Ashland citizens for whom solar water heaters are an attractive investment.

2I) Council Policy

J) Multi-family housing is difficult to weatherize because most owners do not pay heating bills, but their tenants do. Therefore, other types of motivation is necessary to encourage weatherization of multi-family units. However, utility weatherization programs, coupled with the State Business Energy Tax Credits (BETC), can sometimes sufficiently motivate owners. The City shall promote and educate landlords to the benefits of weatherization along with the BETC to reach this difficult market.

2J) Council Policy

XI-3 New Housing

A) The City's Super Good Cents new home certification program has been very successful in encouraging new energy efficient electrically heated homes to be built. We shall continue to aggressively market this program and assure its continued success.

3A) Council Policy

B) Some new homes are not built to the efficiency levels of Super Good Cents homes. Efforts shall be made to educate all builders in the benefits of energy conservation and encourage higher levels of conservation in all new homes.

3B) Council Policy

C) New homes and apartments are being built which do not utilize the latest technological advances in water consuming devices. The City shall use any legal means to insure that only water conserving equipment be installed in new construction. This should be done to accommodate growth with lesser incremental water demand and also to eliminate the need to return to these homes later to retrofit them with water conserving devices.

3C) State Building Code, Council Policy

D) Passive solar design and sun tempering are very cost effective in new home construction.

They shall be encouraged in new housing developments and individual houses.

3D) Council Policy

E) The City shall address overall energy usage of new developments instead of just looking at houses on an individual basis. Areas to be considered could be transportation energy, recycling, composting, communal gardens, water usage and solar access protection.

3E) 18.70, 18.72, 18.84, 18.88, AMC

F) Appliance efficiency shall be encouraged in new housing. This could be done through existing programs (i.e. Super Good Cents), by codes, by education or by incentive programs (i.e. density bonuses). All of these options shall be considered in trying to achieve this goal.

3F) Residential Zone Codes, 18.88

XI-4 Commercial and Industrial Sectors

A) Very little energy conservation has occurred in this sector in Ashland. BPA will be sponsoring commercial conservation programs in the next decade to begin capturing this resource. The City shall keep abreast of these developments and offer these programs to our commercial customers, as they become available.

4A) Council Policy

B) The State Small Scale Energy Loan Program and Business Energy Tax Credit can help finance energy conservation in the commercial/industrial sector. The City shall publicize their existence in conjunction with any commercial conservation programs we offer and to any other interested businesses.

4B) Council Policy.

C) The City's Energy Smart Design Assistance Program, sponsored by BPA for new commercial buildings and major commercial remodels, can have a significant effect on energy usage in commercial buildings. The City shall continue to aggressively market this service and also encourage BPA to continue the program beyond the initial three-year period.

5C) Council Policy

D) If BPA does not make a commercial energy auditing program for existing businesses available by 1993, the City shall investigate starting our own commercial energy auditing program. Such a program could rely on reliable information, education, awards, civic pride, peer pressure and possibly even financial incentives to encourage energy and water conservation in this sector.

4D) Council Policy

E) The City knows very little about the potential for water use efficiency in this sector. We need to begin gathering data about this sector so water conservation can be evaluated for businesses in Ashland.

4E) Council Policy

F) The City shall ensure that Chapter 53 of the Oregon Building Code, which deals with energy

conservation, is adequately enforced for businesses being constructed in Ashland. The City's new Electrical Inspector could be especially helpful in this by evaluating lighting systems for not only code compliance, but also for cost effective investments beyond code requirements.

4F) Council Policy

XI-5 Land Use Planning and Zoning

A) The energy efficiency density bonuses in the City's performance standard ordinance have been very successful in encouraging new homes to be built more efficiently than Oregon building code requirements. This bonus shall be preserved and maintained in future versions of this code.

5A) 18.88, AMC

B) Performance Standards' density bonuses for energy efficient housing have not been utilized in multi-family developments on R-2 and R-3 zoned land. This is because the base density is high enough that additional density is not needed. The base density in R-2 and R-3 developments shall be reduced accordingly so developers will have an incentive to building energy efficient multi-family housing.

5B) R-2 and R-3 Zone Codes

C) Many housing developments require a Conditional Use Permit because they are proposed for land not zoned residential (i.e. E-1 or C-1 land). The City shall have the policy of requiring as a condition of approval that these developments be built to the energy efficiency standards of the Performance Standards Ordinance in all of these conditional use approvals.

5C) 18.104, AMC

D) All planning applications for new commercial, industrial or large residential buildings (i.e. Site Reviews, Conditional Use Permits, Variances, etc.) shall include the following information as part of the application or prior to building permit issuance:

-Building plans to scale of the proposed structure including elevations showing all windows on all sides of the structure.

-Proposed material and levels (R-Values) of insulation of the ceiling, floor and all walls of the structure.

-Type and size of the proposed lighting and heating system for the structure.

-A description of the proposed lighting system for the structure.

-A description of any types of energy used during the production of a product or service delivered or produced by the use. (This applies mostly to industrial uses.)

-A description of the method of water heating, if any, proposed for the structure. This information shall also include your best estimate as to the total annual amount and temperature of hot water that will be required for the proposed use.

-A description of the method of refrigeration, if any, proposed for the structure. (This is usually associated with food and frozen food.) This information shall also include an estimate of the total amount of the annual refrigeration load of the proposed building.

-Any other energy information, which will aid the City's Conservation Division in computing the above items.

5D) 18.72, 18.104, AMC

XI-6 Load Control and Shaping

A) The City shall investigate the cost and benefits of various load control strategies for residential electric water heating systems and space heating systems.

6A) Council Policy

B) Our citizens have very little understanding of the distinction between energy and capacity (or demand). If properly educated on this concept, many people might voluntarily change discretionary energy usage patterns in a way, which could help shape, the Citywide electric load.

6B) Council Policy

C) Energy and demand rate structures can be used to encourage commercial/industrial consumers to reduce their total electric demand on the City's electric system. As rates are changed in the future, the goal of load management shall receive due consideration in these rate setting matters.

6C) Council Policy

D) The newly installed remote metering systems at our substations could provide instantaneous readouts of electric usage through use of a phone line, computer and modem. The City needs to investigate the cost and benefits of setting up this system.

6D) Council Policy

E) On peak and off peak electric rates and/or demand charges could give the correct pricing signals to consumers in encouraging load reductions. However, the City's present metering system does not have this capability. Any changes in our metering system should consider this capability and the cost and benefits it could provide.

6E) Council Policy

F) Load management programs should share the cost savings with citizens providing the load management savings. Also, they should be designed so as to not inconvenience the customer or reduce his standard of living.

6F) Council Policy

G) The City's largest electricity consumers could possibly alter their load patterns and result in wholesale electric bill savings for the City. We should work with these citizens and see if this is feasible and cost effective.

6G) Council Policy

XI-7 Water Conservation

A) Water rates currently are flat in the residential and commercial sector. An inverted or increased block rate · (i.e. more water usage costs more per unit) can help give the correct

pricing signals to citizens. The City shall consider changing the water rates to encourage water conservation and reduce waste.

7A) Council Policy

B) The public needs to be educated about water usage and water conservation. Typical water usage by application needs to be publicized so citizens can make more informed decisions about water usage.

7B) Council Policy

C) Irrigation is a large water usage and it also can be accomplished with lower quality water. Therefore, water conservation efforts shall be directed toward an overall reduction of water usage (conservation) and substitution of lower quality water for outdoor irrigation.

7C) Council Policy

D) Under current state law, as lands with TID irrigation rights use annexed to the City and converted to urban uses, the TID water right must be surrendered. If these uses could continue to utilize TID water for landscaping and irrigation, new water demand could be significantly reduced on newly annexed land. The City shall explore ways to see if these could be facilitated.

7D) Council Policy

E) The City shall maintain City facilities, which deliver TID water to City residents to ensure that this system is usable to the maximum extent for irrigation.

7E) Council Policy

F) The water supply portion of any future system development charge should be used to raise money to pay for increased water supply or water conservation programs.

7F) 4.20, AMC

XI-8 Future Considerations

A) There would be advantages to the City if we were to become a full energy provider. Therefore, if the gas company becomes available for sale, the City should thoroughly evaluate this option of purchasing the gas company's infrastructure within the city limits.

8A) Council Policy

B) The future will be quite dynamic and volatile in the energy arena. The City needs to actively keep abreast of new advances in technology and embrace and encourage ones, which can benefit water conservation, air quality, energy conservation or production.

8B) Council Policy

C) Smart homes, computer and other new electronic devices will require a higher level of electric service and expertise than currently required. The City has to take whatever measures necessary to ensure that this quality electric service and expertise is available for our citizens.

8C) Council Policy

D) Small scale energy production systems are becoming less expensive and more common. The City needs to make sure that we accommodate this change and integrate into our electric system so citizens will not be tempted to bypass our electric system entirely.

8D) Council Policy

E) Utilities are beginning to learn that we can no longer just sell our product. We must continue to educate people on the wise use of energy. Our responsibility no longer ends at delivering power to the meter; it extends throughout the entire process of using our product. Conservation shall serve as the foundation of programs designed to meet this new challenge.

8E) Council Policy

Section 13.08 Urbanization

GOAL: IT IS THE CITY OF ASHLAND'S GOAL TO MAINTAIN A COMPACT URBAN FORM AND TO INCLUDE AN ADEQUATE SUPPLY OF VACANT LAND IN THE CITY SO AS NOT TO HINDER NATURAL' MARKET FORCES WITHIN THE CITY, AND TO ENSURE AN ORDERLY AND SEQUENTIAL DEVELOPMENT OF LAND IN THE CITY LIMITS.

POLICIES

XII-1 The City shall strive to maintain at least a 5-year supply of land for any particular need in the City's limits. The 5-year supply shall be determined by the rate of consumption necessitated in the projections made in this Comprehensive Plan.

1) Chapter 18.108

XII-2 The City shall incorporate vacant land only after a showing that land of similar qualities does not already exist in the City limits, or if annexation is necessary to alleviate a probable public health hazard.

2) Chapter 18.108

XII-3 The City shall enter into a cooperative agreement with Jackson County. This agreement shall designate the City's and County's joint policies for land not urbanized. Generally speaking, and not in the City's urban growth boundary is to be maintained in a rural state. Land between the City limits and urban growth boundary is to be maintained in a rural state until annexed by the City. Urban-level development in the County, but within the urban growth boundary, is inappropriate to the needs and desires of the City of Ashland to implement its urbanization goal.

3) Joint City/County Urban Growth Boundary Agreement.

XII-4 The City shall develop its Capital Improvement Program to accommodate all the land within the urban growth boundary with an adequate level of urban services for the needs expressed in the City's Comprehensive Plan.

4) Capital Improvement Program, Public Facilities Plan.