

COMPREHENSIVE PLAN
FOR
THE CITY OF SUTHERLIN

PREPARED BY:
THE CITY OF SUTHERLIN
AND
THE UMPQUA REGIONAL COUNCIL OF GOVERNMENTS
PERIODIC REVIEW 1990-1991

CONTENTS

CITIZEN INVOLVEMENT ELEMENT	1
CITIZEN INVOLVEMENT COMMITTEE	1
ROLE OF THE PLANNING COMMITTEE	1
CITY COUNCIL'S ROLE IN THE COMPREHENSIVE PLAN	2
PERIODIC REVIEW	2
CITIZEN INVOLVEMENT - GOAL AND POLICIES	3
NATURAL AND CULTURAL RESOURCES ELEMENT	4
VEGETATION AND WILDLIFE HABITAT	4
FISH HABITAT	4
SPECIES AND HABITATS REQUIRING SPECIAL CONSIDERATION	5
SUTHERLIN CREEK	5
WETLANDS PROTECTION	5
SOILS	5
AGRICULTURAL CAPABILITY	6
WOODLAND SUITABILITY	6
LAND QUALITY	6
SOLID WASTE MANAGEMENT	7
MINERAL AND AGGREGATE RESOURCES	7
WATER RESOURCES	7
SURFACE WATER QUALITY	8
GROUNDWATER QUALITY	8
CURRENT WATER USE AND DEMAND	9
FUTURE WATER USE AND DEMAND	9
NOISE	9
AIR QUALITY	10
HISTORIC AND CULTURAL RESOURCES	11
HISTORIC BACKGROUND	11
HISTORIC SITES	12
OPEN SPACES	12
NATURAL AND CULTURAL RESOURCES - GOALS AND POLICIES	13
POPULATION AND ECONOMIC ELEMENT	14
POPULATION	14
POPULATION PROJECTIONS	14
DEMOGRAPHIC AND ECONOMIC INDICATORS	15
ECONOMIC ACTIVITY	27
ECONOMIC SUPPORT SYSTEMS	28
ECONOMIC OPPORTUNITIES ANALYSIS	29
INDUSTRIAL SITE INVENTORY	30
COMMUNITY DEVELOPMENT OBJECTIVES	31
SUMMARY -- STRENGTHS, WEAKNESSES, OPPORTUNITIES, THREATS	32
POPULATION AND ECONOMY -- GOALS AND POLICIES	34
PUBLIC FACILITIES ELEMENT	36
ENERGY CONSERVATION	36
PUBLIC FACILITIES -- GOALS AND POLICIES	37
HOUSING ELEMENT	43
HOUSING TYPE/CONDITION	45
HOUSING SUMMARY	54
CONCLUSIONS	54
FUTURE HOUSING NEEDS	55
HOUSING ELEMENT - GOALS AND POLICIES	57
LAND USE ELEMENT	59
EXISTING LAND USE	59
FUTURE LAND USE NEEDS	61
BUILDABLE LANDS INVENTORY	62

LOCATION OF THE URBAN GROWTH BOUNDARY	66
COMPREHENSIVE PLAN DESIGNATIONS	67
PLAN DESIGNATION ALLOCATIONS	68
LAND USE -- GOALS AND POLICIES	69
APPENDIX - URBAN GROWTH MANAGEMENT AGREEMENT.	70

CITIZEN INVOLVEMENT ELEMENT

CITIZEN INVOLVEMENT COMMITTEE

The City of Sutherlin formed a Citizen Involvement Committee that worked with the Umpqua Regional Council of Governments to draft a comprehensive land use plan by August 1980. Prior to the August 1980 deadline, the Citizen Involvement Committee in conjunction with the Sutherlin Planning Commission held public meetings on every aspect of the comprehensive planning process. The Sutherlin City Council then retained private counsel to assist with the final draft of the Comprehensive Plan.

ROLE OF THE PLANNING COMMITTEE

In order to provide a liaison body between the Citizen Involvement Committee and the Sutherlin Planning Commission, the City formed the Sutherlin Planning Committee which consisted of ten members made up of three City Council members, three Planning Commission members, and four citizens-at-large who were members of neither the City Council nor the Planning Commission. The Planning Committee directed and coordinated formation of the Comprehensive Plan by:

- Directing the development of plan and policy;
- Holding public meetings and hearings and calling for public input on alternatives;
- Proposing policies and recommendations to the Planning Commission;
- Analyzing citizen and staff input from a city-wide perspective;
- Recommending the proposed plan to the Planning Commission for adoption;
- Recommending ordinances and other implementation measures to carry out comprehensive plan policies;
- Making available information about the plan and its basis to the general public.

From September 1980 to July 1981, the Planning Committee, in conjunction with the Planning Commission, held public meetings on every aspect of the Comprehensive Plan having given notice of them in the Sutherlin and Roseburg newspapers. Such notices addressed the goals and guidelines of the particular LCDC Goals under consideration at the meeting. In addition, special notices were mailed to interested groups and landowners affected by proposed changes in land use designations or by inclusions in Sutherlin's Urban Growth Boundary.

The Planning Committee then forwarded recommendations to the Planning Commission which studied them and recommended to the City Council further revisions and amendments. After the City Council adopted the Comprehensive Plan on July 12, 1982, the Planning Commission's main responsibility was to advise the council on land use-related matters. The city forwarded the plan to the Department of Land Conservation and Development (DLCD), which recommended changes in the document necessary for compliance with state goals and guidelines. In 1982, the City Council then adopted Ordinance 702-1 which amended the plan to comply with the recommended changes. The DLCD acknowledged the plan in 1984.

Following the plan's adoption, the Planning Commission's ongoing role is to:

- Hold public meetings and hearings on land use matters as required by ordinance;
- Review and recommend revisions and amendments to the Comprehensive Plan;
- Ensure that the public receives notices and planning information as required by law;
- Inform the public about proposed Comprehensive Plan revisions;
- Advise the City Council on land use matters.

CITY COUNCIL'S ROLE IN THE COMPREHENSIVE PLAN

The continuing role of the City Council in the planning process is to:

- Initiate the planning process
- Monitor adherence to citizen involvement programs;
- Hold public hearings and consider public input;
- Provide the medium for citizen involvement in the comprehensive planning process;
- Ensure that adequate funds are available for the planning process.

PERIODIC REVIEW

The City of Sutherlin's Comprehensive Plan and implementing ordinances were acknowledged by the Department of Land Conservation and Development (DLCD) on May 31, 1984. According to the state's periodic review requirements and schedule, Sutherlin is required to review its plans and implementing ordinances and to make the revisions necessary to account for changing circumstances and new state laws and regulations. This process is called "Periodic Review."

The City of Sutherlin received its periodic review notice from DLCD on December 28, 1988. This first periodic review (1988-1991) for the City of Sutherlin was funded in two stages. The first stage began in 1989 with the city receiving a Department of Land Conservation and Development (DLCD) Periodic Review Planning Grant in the amount of \$3,688.00. The city entered into a service agreement with Umpqua Regional Council of Governments (URCOG) for development of a public facility plan, as required by DLCD for cities with a population greater than 2,500 within an urban growth boundary.

The development of the Public Facilities Plan with the Planning Commission began in the spring of 1989, following the agreement with the city to have URCOG act as staff for the plan's development. The preliminary research and development for the Public Facilities Plan was completed in the winter of 1989. The DLCD Periodic Review Planning Grant was able to cover only the public facilities plan portion of the periodic review requirements.

During the winter of 1989-90, the city, with the assistance of Umpqua Regional Council of Governments staff, applied for two grants through DLCD to provide the necessary funding to complete periodic review. DLCD offered a new grant program, called Planning Assistance Grants, which were competitive grants offered for cities with populations over 2,500. This was the first grant the city applied for to assist in the completion of periodic review. Unfortunately, DLCD had over 1 million dollars in grant requests from numerous jurisdictions. At that time, Sutherlin was not considered to have a high priority.

In March of 1990, Sutherlin's DLCD representative met with Sutherlin's mayor, planning commission chairman, city staff, and URCOG staff. The purpose of the meeting was to review the city's periodic review needs. It was suggested, due to the city's financial situation, development and growth pressures and given the amount of work urgently needed, that the city request DLCD emergency funding to complete periodic review. Following this meeting, URCOG, on behalf of the city, applied for a hardship grant in order to provide Sutherlin with the planning assistance critical to the completion of periodic review. In May of 1990, DLCD awarded the city a hardship grant in the amount of \$7,850 to complete the required periodic review.

Since August 1990, with URCOG acting as staff, the Planning Commission developed, analyzed and discussed the periodic review findings of fact, revisions to the comprehensive plan, public facility plan, and implementing ordinances. Public hearings were held with the Sutherlin Planning Commission, City Council, Douglas County Planning Commission, and the Douglas County Board of Commissioners on the periodic review material. The city completed its Periodic Review in 1991.

CITIZEN INVOLVEMENT - GOAL AND POLICIES

GOAL: To establish a framework for a planning and policy process which involves citizens and is a basis for all decisions and actions related to land use, and which ensures that an adequate factual base is available for such decisions and actions.

POLICIES:

1. Based on the City's State-approved citizen involvement program, the Planning Commission will assume the responsibility for citizen involvement upon acknowledgement of the plan by the Land Conservation and Development Commission.
2. The City of Sutherlin's Comprehensive plan shall be amended only by ordinance of the Sutherlin City Council. Recommendations for Plan amendments will be heard by the Sutherlin Planning Commission with proposed changes presented to the City Council.
3. Public hearings shall be held in accordance with state and city requirements.
4. Notices of proposed changes to the Comprehensive Plan shall be published in the local newspaper before the respective public hearings and include clarifying language and the means by which interested persons and affected agencies obtain additional information as required.
5. Citizen participation in all Planning Commission meetings shall be allowed and encouraged.
6. The land use plan shall be revised on a periodic basis to take into account changing public policies and circumstances. In the schedule recommended by the Oregon Department of Land Conservation and Development, the first periodic review is to be held 2 to 5 years after plan acknowledgement. All subsequent reviews are to be held 4 to 7 years after completion of the initial periodic review. The City of Sutherlin's first periodic review was conducted from 1989 to 1991.
7. Appeals from a decision by the City Council may be made to the Land Use Board of Appeals whenever a city land use action is claimed to have violated the intent of the Comprehensive Plan and Land Use goals.

NATURAL AND CULTURAL RESOURCES ELEMENT

Located in one of Douglas County's many valleys between the Cascade Mountains and the Coast Range, Sutherlin lies along Sutherlin Creek 12 miles north of the county seat of Roseburg.

Local mean elevation is 518 feet above sea level. The climate is mild--yearly average temperature is 54 degrees Fahrenheit. Average annual precipitation is approximately 42 inches. Yearly snowfall averages 6 inches.

The local climate is ideal for forestry and agriculture, two industries upon which Sutherlin heavily relies. Local companies harvest timber in the surrounding mountains and local farmers raise livestock, most notably sheep, on rich grasslands nearby.

Another industry, tourism, is dependent on the climate-influenced landscapes in and around Sutherlin. Tourists are attracted also by the nature observation, hunting, and fishing opportunities the abundant local wildlife provides.

VEGETATION AND WILDLIFE HABITAT

Six vegetation association types are present in the planning area:

1. Douglas-Fir/Mix Associations
2. Deciduous and Evergreen Associations
3. Riparian Associations
4. Grassland/Agricultural Associations
5. Orchards
6. Urban Vegetation/Landscaping

These areas were initially mapped by URCOG staff using a combination of field work and aerial photography.

Approximately 280 animal species inhabit the Sutherlin planning area and the areas adjacent to it. Among the species are 51 species of mammals, 202 resident and migratory bird species, and 11 amphibian and reptile species. (See charts in the SUPPORT DOCUMENT.)

The most extensive natural wildlife habitat areas are located in riparian zones along Cooper and Sutherlin Creeks. These zones are ecologically significant because they support the greatest variety and numbers of wildlife species. However, many areas along Sutherlin Creek have been developed for residential use leaving only a few riparian areas within the city. As urban development increases, it will become more and more important to protect riparian areas as special wildlife habitats.

FISH HABITAT

Fall chinook salmon, coho salmon, summer steelhead, winter steelhead, rainbow trout, brown bullhead, and cutthroat all inhabit the waters in and around the Sutherlin area. Natural streamflows in the planning area, however, are not always adequate to support these fish species. Salmonid production in Calapooya Creek in particular has been limited due to low natural flows resulting in prolonged high temperatures which discourage fish colonization.

In the course of Periodic Review, the Oregon Department of Fish and Wildlife identified non-point source pollution (mainly sedimentation) to be a major factor in fish habitat degradation. This, combined with increased runoff from extensive land development, could threaten already fragile fish habitats. As a preservation and mitigation measure, the ODFW requires that riparian areas be protected from development or damage.

SPECIES AND HABITATS REQUIRING SPECIAL CONSIDERATION

The Columbian White-Tailed Deer, an endangered species, has been observed within the Sutherlin Planning Area. The Oregon Department of Fish and Wildlife (ODFW) has adopted a management plan to preserve the Columbian White Tail Deer and will continue to adhere to it as long as the species remains endangered. In addition, both the Bald Eagle (a threatened species) and the Peregrine Falcon (an endangered species) inhabit the areas surrounding the planning area and may be seen occasionally near the City of Sutherlin.

The ODFW has observed the Oregon Chub, a threatened fish, living in the upper reaches of Calapooya Creek.

SUTHERLIN CREEK

Sutherlin Creek, where it flows through Sutherlin's city limits, is not a natural channel. It was excavated and diverted to its present course by the Luse Land and Development Company in 1906 to drain the valley for orchard cultivation.

Sutherlin Creek was modified further by the Soil Conservation Service in 1966 and a water control district was set up along the channel with users taxed to maintain the watercourse. However, over time, the channel became overgrown and natural features such as linear wetlands and riparian areas have sprung up.

The Douglas County Watermaster and the Oregon Department of Fish and Wildlife, both contacted in the process of periodic review, agree that Sutherlin Creek may be maintained by the water district as a human-altered channel provided funds are available. Both agencies foresee little impact to habitat in the streamcourse if it reverts again to intensive human management.

WETLANDS PROTECTION

The State of Oregon has enacted laws complying with the federal policy mandating no net loss in wetlands. According to the Oregon Department of Fish and Wildlife (contacted during Periodic Review), there are no large-scale wetlands identified in the planning area. Several linear and human-made wetlands have been identified in the area as part of the National Wetlands Inventory project. The Oregon Division of State Lands is currently developing a more detailed statewide inventory. Once the state inventory is completed, the city will further examine the area's wetlands to determine whether a city wetland conservation plan is called for.

Oregon law requires that all land development projects take special note of all wetlands before modifying the environment and that the Division of State Lands be contacted for appropriate permits if wetlands are encountered.

SOILS

Vital to the health and character of a region are the soils underlying it. A detailed soils map of the Sutherlin area was prepared during the initial plan development with data from the USDA Soil Conservation Service and from a field study prepared by a soils consultant. Additional soils maps showing agricultural and woodland suitability, septic suitability, and urban suitability were prepared with the technical assistance of the Soil Conservation Service and the Douglas County Health Department. All of these were analyzed during the comprehensive planning process and may be found in the Map Appendix of the Comprehensive Plan.

AGRICULTURAL CAPABILITY

Within the city limits, approximately 85% of the urban lands are covered by such urban structures as roads, parking lots, and buildings. Most non-urbanized areas on the valley floor are composed of soils with a Class I to Class IV designation. Class I soils are identified as those best for cultivated use. The ranking moves from Class I to Class IV, ranking land as Best, Good, Moderately Good, and Fairly Good for cultivated use.

WOODLAND SUITABILITY

The Sutherlin area is host to soils with Woodland Suitability Classes 2, 3, and 4 according to the USDA Woodland Site Index where soil potential productivity is based on average total height of the dominant and co-dominant trees in a 100-year-old stand according to this classification:

- Class 1: Average height equal to or greater than 186 feet
- Class 2: Average height between 156 and 185 feet
- Class 3: Average height between 126 and 155 feet
- Class 4: Average height between 96 and 125 feet
- Class 5: Average height 95 feet or less.

Although soils of classes 2, 3, and 4 occur throughout the entire area, there are no significant concentrations. However, most of the area adjacent to the city limits possesses soils that are best suited for woodlands. The exception to this is the area west of town north of Highway 138 and the area east of town south of Central Avenue north of South Side Road.

URBAN SUITABILITY

Using a four-class urban suitability rating based on the soils limitations on urban development (Good--no restrictions, Fair--minimal restrictions on urban development, Poor--significant restriction on urban development, Very Poor--Substantial restriction on urban development), the city analyzed soils within the city limits and the surrounding area during the plan development phase. The city found that soils in the Urban Growth Boundary are mostly rated Poor and Very Poor for urban suitability.

Generally, soils with Good and Fair urban suitability ratings are located in the extreme western, eastern, and southern portions of the planning area.

LAND QUALITY

As part of the initial comprehensive planning process, the city prepared a septic suitability map for the area with help from a Douglas County Health Department soil scientist. According to this map, very little of the planning area is suitable for septic drainage. The exceptions are in the extreme northwestern portion of the study area and along Interstate 5 north of the Sutherlin exit where soils exist that are suitable for septic systems. East of town, clay soils inhibit percolation and septic systems here are prone to surface leakage.

In the course of periodic review, the Douglas County Health Department expressed concern about developed areas where failing on-site sewage disposal systems create public health hazards. Three areas next to the City of Sutherlin could be experiencing surfacing sewage problems causing this departmental concern. They are in these areas: a.) west of Interstate 5, b.) along Southside road, and c.) east along Central Avenue.

The area between I-5 and Plat M is densely populated, composed of small lots with shallow clay soils, surface perched water during the winter months, and some old, poorly-designed systems. Several complaints of the area were received in the 1980's and the latest on January 11, 1990, when several failures were noted. The areas along Southside Road were brought to the Health Department's attention by Sutherlin city staff.

The Health Department has received complaints of septic failures. According to the Health Department, sewer hookups would mitigate the septic problem by bypassing the too-small, inefficient systems that are located in poor soils.

City staff is currently coordinating with County Health officials in order to rectify the situation as soon as is feasible. In the winter of 1990, the Health Department, with assistance from Umpqua Regional Council of Governments staff and the City of Sutherlin, will survey and map those areas experiencing septic problems. Following this mapping process, the County Health Department, with assistance from the state, will survey the areas to pinpoint failing systems.

Sutherlin also has experienced underground storage problems. Many storage tanks have leaked and there have been complaints of contaminated groundwater. However, an ongoing program has been set up by the state to identify and solve these problems. Most leaking tanks have been removed and replaced. (For more on Groundwater, see GROUNDWATER QUALITY below.)

SOLID WASTE MANAGEMENT

Solid waste generated from the Sutherlin area is collected at the Oakland transfer site and trucked to Douglas County's central landfill in Roseburg. Recyclables are also deposited here and picked up weekly. There is currently no tipping fee at the transfer site.

As the Roseburg landfill site reaches capacity, Sutherlin residents may be affected, particularly if the County begins charging tipping fees to offset costs.

According to Douglas County Solid Waste Management officials queried in the course of periodic review, many steps will be taken in the near future to reduce waste volume. Among these steps are expansions of the County's composting and recycling programs to allow home yard waste and more recyclables to be received at the Oakland Transfer Station.

MINERAL AND AGGREGATE RESOURCES

Sutherlin does not have any major local mineral and aggregate resources. A quicksilver (mercury) deposit was discovered and mined east of Sutherlin in the 1860's. There are no known deposits of mineral fuels in the Sutherlin planning area.

According to the Oregon Department of Transportation, which was contacted for input to the plan's periodic review, aggregates (sands and gravels suitable for use in construction) are not available in sufficient quantities for large highway, bridge, or building projects. The deposits that do exist (in bars in Calapooya Creek and in a few local quarries) must be conserved to maintain a supply for future construction needs.

WATER RESOURCES

Sutherlin is located in the North Umpqua Drainage Basin. Major watercourses in the planning area are Sutherlin Creek, Cooper Creek, and Calapooya Creek. Sutherlin and Cooper Creeks flow through the city and reach their confluence in the south central city area before meeting the North Umpqua River. Plat I Reservoir regulates Sutherlin Creek's streamflows. Cooper Creek has been designated a specially-protected subwatershed by Douglas County.

The City of Sutherlin has three points of diversion for water rights. According to the Public Facilities Plan, the first diversion point is on Calapooya Creek near Nonpareil. The second is on Cooper Creek below the Cooper Creek Dam. The third is on the North Umpqua River near river mile 15. According to the Public Facilities Plan, the city proposes to withdraw up to 3.0 cubic feet per second from this third source on the North Umpqua and pump the water 2.5 miles to the upper end of Cooper Creek. No facilities are in place for the North Umpqua diversion and because of the high cost of pumping the water, the city is retaining this water right for future use as a reserve in drought years.

SURFACE WATER QUALITY

The Oregon State Department of Environmental Quality (DEQ) has developed a Water Quality Management Plan for the Umpqua River Basin. This plan satisfies the requirements of Section 303(e) of PL. 92-500 (Federal Regulations), and was developed in accordance with the provisions Oregon Law (ORS Chapter 468). All recommendations in the Sutherlin Comprehensive Plan should comply with the DEQ Water Quality Management Plan.

Water quality within the North Umpqua Drainage Basin is generally good. However, in the course of periodic review, the DEQ has identified chronic point and non-point source water pollution problems in the area. Although a new sewage plant is working, inflow and infiltration problems continue to plague the facility, a situation common to many sewage treatment problem. The new plant cannot currently meet discharge limits in winter but an ongoing program with DEQ has been set up to correct the problem.

Sutherlin Creek experiences non-point source pollution problems because of its proximity to and use by agriculture. Water withdrawal is a severe problem and flow levels drop in the summer months and thus elevate water temperature. Algae growth is a moderate problem. Both streambank erosion and sedimentation in Sutherlin Creek are identified by the DEQ as "moderate."

Sutherlin Creek is also the receiving stream for minor industrial discharge -- mainly log pond overflow from the Georgia Pacific Company plant. Both Georgia Pacific and Murphy Lumber Co. (another industrial discharge source) have received minor industrial discharge permits under the National Pollutant Discharge Elimination System (NPDES) administered in Oregon by the DEQ. The NPDES requires that permits be issued in accordance with water quality standards, adopted river basin plans, adopted 208 plans national effluent and performance standards and minimum treatment requirements as applicable.

Calapooya Creek, like Sutherlin Creek, drains areas with intensive agricultural use. Calapooya Creek has a high incidence of coliform violation year-round. The stream experiences severe non-point source pollution problems with heavy water demand exceeding summer supply which aggravates the problem. High water temperatures are a chronic concern, as is algae growth. Streambank erosion and sedimentation are moderate problems in the area above Bachelor Creek.

GROUNDWATER QUALITY

The groundwater resource in the Sutherlin area is subject to the same seasonal fluctuations as the area's surface water resources. No sensitive aquifers have been identified in the area.

Most groundwater in the planning area is used for individual domestic purposes and is not required to comply with the same standards as municipal and group water supplies.

In the 1974 United States Geological Survey (USGS) groundwater study for the Sutherlin area, one water sample exceeded the upper limit of arsenic of 0.05 mg/l -- grounds for rejection of the supply. In three other samples, arsenic exceeded 0.01 g/l

which is the suggested limit to be used where more suitable supplies can be made available, according to the U.S. Public Health Service. Eight samples exceeded recommended limits for dissolved solids, and 10 were classed "hard" or "very hard."

Dissolved iron and manganese are slightly excessive in some areas where the groundwater is of otherwise good quality. But in some areas these minerals are significantly excessive in groundwater that also has other constituents in excess.

Six samples had more than 1 mg/l -- enough to be unsuitable for sensitive plants. Overall, there is excessive sulfate and chloride occurring where dissolved solids in the groundwater are also excessive.

CURRENT WATER USE AND DEMAND

Among the demands on the water supply in the planning area are irrigation, municipal, and industrial uses. Currently, (1990), water demands are being met by current water supply. (For a further discussion of water supply, see the PUBLIC FACILITIES PLAN.)

Approximately 2,015 acres are irrigated under existing water rights from Calapooya Creek. Those lands with rights with the oldest water rights generally have full supplies. However, more than half the irrigated lands normally do not meet their full seasonal needs.

Because streamflows often drop below levels at which water can be diverted, Sutherlin's demand for water often exceeds its supply.

Several log ponds serve the areas lumber mills and constitute the areas industrial water use.

FUTURE WATER USE AND DEMAND

According to the Sutherlin Public Facilities Plan, Sutherlin is expected to more than double its municipal water consumption to 11,000 users by the year 2010. If these predictions are correct, existing water sources will not be adequate for Sutherlin's future needs. To help meet future water needs, the Public Facilities plan recommends construction of a water impoundment upstream from the Nonpareil treatment facility. Ensuring Sutherlin's future water supply will depend on proper conservation of existing surface water sources.

The Douglas County Comprehensive Plan has identified Gassy Creek as potential water impoundment for Sutherlin's future water supply source. This would make available a storage area of approximately 9,200 acre feet for future use.

NOISE

The impacts of noise on human health and well-being are receiving greater awareness in planning. The major sources of noise are:

- Airports (civilian and military)
- Railroads and rail terminals
- Freeways and highways
- Large industrial factories
- Other local activities which have a known history of producing excessive noise.

The City of Sutherlin has received few complaints of excessive noise. However, major noise sources in the area to monitor are the Interstate 5 freeway and other traffic concentrations and the wood products processing plants within the city.

AIR QUALITY

Air quality within the Sutherlin planning area is generally good. However, Sutherlin's airshed contains some of the lowest wind velocity areas in the United States and is therefore prone to frequent temperature inversions accompanied by air stagnation. There is currently no air quality monitoring station in the area.

According to the DEQ, which was consulted during the periodic review process, Sutherlin experiences blue haze problems as a consequence of its proximity to the freeway (Interstate 5). Particulate pollution from industrial sources is an occasional concern. Particulate levels also increase from time to time when slash burn smoke and smoke from Willamette Valley field burning drifts in and hangs over the Sutherlin Valley.

HISTORIC AND CULTURAL RESOURCES

HISTORIC BACKGROUND

Fendal Sutherlin was the first white settler in the area that now bears his name. Heading north from the California gold fields, he passed through the Sutherlin Valley, then known as Camas Swale, in 1850. He was so impressed that he not only decided to settle in the area, but also wrote to his family encouraging them to join him. In 1851, Mr. and Mrs. John Franklin Sutherlin and Fendal's ten brothers and sister made the long trek from Indiana to Oregon in ox-drawn wagons, bringing with them \$20,000 in gold.

Throughout the remainder of the 1800's, the family grew wheat and other crops and raised livestock, the proceeds from which enabled them to expand their holdings. They made notable contributions to the entire state by importing the first domestic turkeys to Oregon to combat the grasshopper blight of 1855-56.

Fendal always hoped that a town could be developed, but as late as his death in 1901 very few other settlers had come to the valley and the town consisted of one general store (which also housed the post office) and a single boardinghouse.

In 1904, Fendal's son-in-law, Frank White, decided that the area was ideal for extensive cultivation in fruit orchards. Along with some outside investors, the Sutherlin family formed the Sutherlin Land Company. At this point the name of the area was finally changed from Camas Swale to Sutherlin Valley.

Calapooya Creek was dammed in 1906 to provide irrigation for orchards. In the same year, the Sutherlin Land Company sold out to J.F. Luse of Minnesota, who renamed it the Luse Land and Development Company.

After the change of ownership, a program of intense promotion for the orchard project was launched. The Sutherlin Valley was a "Garden of Allah." In 1909, the sumptuous Sutherlin Inn was built and was sold soon afterward to Luse. In response to the heavy publicity, the town began to expand rapidly. By 1910, the Luse Company had planted several thousand acres in fruit trees and was conducting a monthly tour of the valley for prospective land buyers from back east, who, of course, stayed at the Inn during their visits.

Many families bought land and began to raise fruit, and the town prospered. Two schoolhouses were built in 1910, and Sutherlin, now a bustling small town, was incorporated in 1912.

By the early 1920's, however, it became apparent that there were neither markets for the fruit nor transportation to get it out of the valley. In the ensuing scandal, the Luse Company went bankrupt, and several public officials, including the brother of a U.S. Senator, were forced to resign. For the rest of the 1920's and 30's, Sutherlin experienced a prolonged economic slump, and in that period the population did not increase significantly.

With the coming of war, however, a tremendous increase in demand for wood products gave Sutherlin the economic boost it needed. During the war years, five lumber mills located within the city limits. The Bonanza Quicksilver Mine, east of Sutherlin, also stimulated the economy. The mother lode had not been located when the mine was originally worked in the 1860's. Prompted by wartime demand for mercury and a government guarantee of \$800 per flask (78 lbs.), the Bonanza Corporation reopened the mine and found the mother lode. Bonanza became for a time the largest mercury mine in the U.S. When demand for mercury declined after the war, the mine was once again closed.

In those wartime years, industry in Sutherlin flourished, and the population skyrocketed from 500 to 2000. Almost overnight, timber had come to dominate Sutherlin's economy.

After the war, Sutherlin continued to grow at a slow but steady pace, but the economy remained totally dependent on the wood products industry. Diversification from that industry began in the late 1950's when tourist-related commercial activity began to develop next to I-5. Tourism was further promoted in 1970 by the creation of the Sutherlin Knolls Golf and Recreation Center. Completion of the Plat I Dam and the Cooper Creek Reservoir in the period from 1965 to 1975 also contributed to Sutherlin's economic health by providing a sustained domestic water source, flood control, irrigation, and recreation facilities.

The 1980's were turbulent for Sutherlin. A recession early in the decade caused mill closures and massive layoffs. Then, in late 1987, failed budget levies forced the city to shut down all administrative, police, and fire services for nearly three months. Property values plummeted. Many residents left, hoping to find work.

But by 1989, Sutherlin's fortunes had changed and the community pulled together to improve its quality of life. An upturn in the lumber market coupled with increasing economic diversification and government aid brought more people back to Sutherlin. By 1990, Sutherlin had become one of the fastest growing cities in Douglas County.

HISTORIC SITES

Sutherlin is a hub and gateway to many historic sites and structures in the surrounding area, including the Stephens and Oakland Historic Districts. Sites of historical significance in the area are listed in the Cultural and Historic Resources Inventory for Douglas County published in 1983.

Within Sutherlin's city limits, one structure, the Sutherlin Bank Building on Central Avenue, is listed in the National Register of Historic Places. The Sutherlin Bank Building was constructed in 1910 of rock-cut stone in an area not even incorporated in the city at that time. The building played a key role in Sutherlin's commercial development. In the 1930s, it closed and the building went into receivership. In the boom decade of the 1940s, the bank reopened. It was acquired by the First National Bank of Oregon in 1965 which then sold the building. The present use of the building is for office space. The Bank Building is one of only four original structures still standing in downtown Sutherlin. It is the only stone building in Sutherlin and in spite of interior changes, remains a landmark in the community.

OPEN SPACES

There are two city parks within Sutherlin. Central Park is a 4.2 acre facility located on Central Avenue and offers lighted tennis courts, a community building, children's play equipment, and shade trees and a rose garden. Hartley Park, located in the vicinity of 6th Avenue and Myrtle Avenue, is an open space park that provides a place for recreation.

In addition, 2 log ponds, open space owned by the School District, Sutherlin Knolls golf course, and numerous natural drainage ways contribute to the open spaces mosaic in the area.

NATURAL AND CULTURAL RESOURCES - GOALS AND POLICIES

A. GOAL: TO PROTECT SUTHERLIN'S ENVIRONMENT BY CONSERVING VEGETATION, WILDLIFE, AND WATER RESOURCES.

POLICIES:

1. Protect Cooper, Calapooya, and Sutherlin Creeks within Sutherlin's Urban Growth Boundary by enforcing all applicable county, state, and federal watercourse regulations and by coordinating activities affecting Sutherlin Creek with the Sutherlin Water Control District.
2. Improve the quality of the area's air, water, noise, and land resources.
3. Limit all discharges from existing and future development to meet applicable local, State, or Federal environmental quality statutes, rules, and standards.
4. Encourage Douglas County to adopt and maintain controls over watersheds in order to protect Sutherlin's future and existing water resources so as to ensure that activities in these areas would not degrade the quantity or quality of water from these sources.
5. Residential, commercial, and industrial development should be designed and located where it will not burden the area's water resources or the community's water delivery system.
6. New streets, bridges and access rights-of-way should be designed to avoid restriction of channel capacity and minimize removal of shoreline vegetation.
7. Advocate the reforestation of previously forested vacant lands.
8. Discourage radical changes to existing wildlife habitat.
9. The city shall comply with all state and federal environmental regulations.
10. The city shall update all natural resource requirements pertaining to Oregon State Planning Goal 5 as information becomes available.

B. GOAL: TO CONSERVE OPEN SPACE AND TO PROMOTE THE PROTECTION OF LANDS WITH SITES, STRUCTURES, AND OBJECTS OF HISTORIC SIGNIFICANCE.

POLICIES:

1. The city shall promote the conservation of open spaces that serve as buffer areas separating residential areas from wholesale, commercial, industrial, and other conflicting land uses through the establishment of development covenants and zone designations.
2. The city shall promote the inventory, rehabilitation, and preservation of historic sites, objects, and structures through a program that refers the landowner to the State Historic Preservation Office and that provides preferential taxation or tax incentives to property owners.
3. With regard to historic sites and structures, the city shall discourage their unauthorized alteration, relocation, or demolition.

POPULATION AND ECONOMIC ELEMENT

Nearly every aspect of the comprehensive planning process is in some way influenced by economic factors. Housing, land use, population growth, and the quality of public facilities are all affected by the economic activity in an area. The economic element, therefore, is an important part of Sutherlin's Comprehensive Plan.

Sutherlin's economy is related to the regional economy of Douglas County and is best seen as a component of this surrounding economy. Economic data for Sutherlin is limited because past studies have concentrated on the larger region. However, enough data does exist to piece together a picture of the Sutherlin economy and its present and possible future health.

POPULATION

Douglas County population trends over the past four decades have been irregular at times, but have always been tied to conditions in the lumber industry. Beginning in the 1940's, the county embarked on a period of rapid population growth created by an upsurge in the lumber market. The population more than doubled in the 1940's and continued to grow during the 1950's. Growth slackened during the 1960's as the county experienced a net out-migration.

Migration patterns reversed during the 1970's and the county added nearly 14,000 people. Sutherlin's population increased to 4560 in 1980 but dropped to 4320 by 1985. From 1988 to 1989, Portland State University estimates placed Sutherlin's growth rate at 10.4%, making it the fastest growing city by far in Douglas County.

According to early data releases from the 1990 Census of Population, Sutherlin's population is 5,020.

POPULATION PROJECTIONS

Population projections for the late 1980's fell short of Sutherlin's actual population counts. Therefore, the original population estimates contained in Sutherlin's original Comprehensive Plan (now referred to as the Source Document) through the year 2000, which were calculated from the 1950 and 1977 base populations, were adjusted upward one five-year increment each to the year 2010 according to the following table:

TABLE I
POPULATION PROJECTIONS - 1990 TO 2010 - 1950 BASE

	<u>1995</u>	<u>2000</u>	<u>2005</u>	<u>2010</u>
<u>Sutherlin</u>	<u>5,385</u>	<u>6,009</u>	<u>6,632</u>	<u>7,255</u>
<u>Douglas County</u>				
<u>High</u>	<u>N/A</u>	<u>116,183</u>	<u>N/A</u>	<u>135,949</u>
<u>Low</u>	<u>N/A</u>	<u>100,335</u>	<u>N/A</u>	<u>112,849</u>

DEMOGRAPHIC AND ECONOMIC INDICATORS

Labor Force and Employment

By official definition, the labor force consists of all persons 16 years of age and older who are either employed or unemployed. Persons are considered employed if they work for at least one hour per week for pay or for 15 hours per week as an unpaid worker in a family-operated enterprise. Persons are considered unemployed if they are out of work, available for work, actively seeking work, waiting to be recalled from a layoff, or waiting to report to a new job within 30 days.

According to the Regional Economist for the Oregon State Employment Division, contacted in the course of periodic review, Douglas County has a long-term labor force trend of steady growth that is coincident to the history of population growth in the region.

Between 1970 and 1980, the labor force in Douglas County grew by nearly 50%, according to the U.S. Census Bureau (see Table II). The county's civilian labor force participation growth rate exceeded the 31% increase in population during the same period. Two factors fed this growth. First, the entry of more women into the labor force caused the participation rate of women in the county to climb from 32.3% in 1970 to 37.4% in 1980. According to data developed in the Workforce 2000 report by the Hudson Institute for the U.S. Department of Labor, nearly two-thirds of the new entrants to the labor force will be women, minorities are expected to make up nearly 30% of the labor force, and the work force will tend to be older, with fewer young workers.

TABLE II
DOUGLAS COUNTY
POPULATION CHANGE BY AGE GROUP

AGE GROUP	TOTAL POPULATION			PERCENT OF TOTAL			PERCENT CHANGE	
	1970	1980	1989	1970	1980	1989	'70-89	'80-89
0-4	5898	7809	6209	8.2	8.3	6.5	5.0	-25.8
5-9	7459	7606	6977	10.4	8.1	7.3	-6.9	-9.0
10-14	8166	7881	6977	11.4	8.4	7.6	-13.8	-9.9
15-17	4864	5345	4319	6.8	5.7	4.6	-12.6	-23.8
15-19	6989	8433	7342	9.7	9.0	7.7	4.8	14.7
18-19	2125	3088	3023	3.0	3.3	3.2	29.7	-2.2
20-24	4237	7162	6955	5.9	7.6	7.3	39.1	-3.0
25-29	4295	7703	7138	6.0	8.2	7.5	39.8	-7.9
30-34	4171	7296	6814	5.8	7.8	7.2	38.8	-7.1
35-39	4106	5918	7041	5.7	6.3	7.4	41.7	15.6
40-44	4327	4935	6651	6.0	5.3	7.0	34.9	25.8
45-49	4412	4701	5387	6.1	5.0	5.7	18.1	8.7
50-54	4172	4836	4481	5.8	5.2	4.7	6.9	-7.9
55-59	3794	4890	4410	5.3	5.2	4.6	14.0	-10.9
60-64	3191	4413	4291	4.4	4.7	4.5	25.6	-2.8
65-69	2400	3853	4622	3.3	4.1	4.9	48.1	16.6
70-74	1771	2709	3729	2.5	2.9	3.9	52.5	27.4
75+	2355	3603	5780	3.3	3.8	6.1	59.3	37.7

Source: 1970, 1980; ^{602 14131 7209} U.S. Census Bureau. 1989; Portland State University, Center for Population Research and Census

The second factor was the aging of the "baby boom generation." By the end of the 1970's, all persons born between 1945 and 1960 were of working age and their entry into the job market, combined with the general trend toward a lower birth rate, tended to raise the proportion of the population active in the labor force. Douglas County labor force participation rates moved upward from 45.4% in 1970 to 60.8% in 1980. This increase was greater than the Oregon gain from 56.6% to 59.4% in the same decade.

No age group under 35 years of age increased appreciably in numbers between 1980 and 1989, according to U.S. Census Bureau and Portland State University figures (see Table II). The largest percentage growth of any age group was in the 75 and older category, up by 37.7%, followed by those aged 70 to 74, up by 27.4%. The largest drop occurred among those aged 0 to 4, down by 25.8%, and among those 15 to 19, down by 14.7%. The decline in numbers of teenagers and young adults may impact the local labor market as persons to fill entry level jobs become scarcer.

In terms of occupational employment, Douglas County does show several differences from the state as a whole (see Table III). Based on 1987 data, Douglas County had 21% of its employment in the managerial, professional, and technical fields, slightly less than the state average of 25%. Sales occupations comprised 9% of the total in the county, while making up 12% in Oregon. Clerical and administrative support occupations accounted for another 13% of the total in Douglas, while providing 18% of Oregon's employment. Service occupations provided 15% of the employment both locally and statewide. Agriculture, forestry, and fishing employed 7% of all workers in the county compared to 4% in Oregon. While making up only 26% of Oregon's employment base, the production, construction, operative, and maintenance occupations combined accounted for 35% of local employment.

TABLE III
1987 OCCUPATIONAL EMPLOYMENT

	Percent of Total Douglas County Oregon	
Managers, Professional, Technical	21	25
Sales Related	9	12
Clerical and Administrative Support	13	18
Service Occupations	15	15
Agriculture/Forestry/Fishing	7	4
Production/Construction/Operative/ Maintenance	35	26

Source: Oregon State Employment Division

The local outlook for the coming decade, again according to the Oregon State Employment Division, is for growth in managerial, professional, technical, sales, and service occupations, but the area's production orientation will continue to provide over a third of all employment in the coming years. During the 1980's, local labor force participation rates continued to expand despite some slippage early in the decade. Poor economic conditions lowered employment rates and forced some people to look elsewhere for work. However, according to the Oregon State Employment Division, Douglas County's unemployment rate dropped to 7.6% in 1987, the lowest for the county in 15 years. But the average unemployment rate rose steadily to 7.9% in 1990. Expectations are for slightly higher unemployment in Douglas County for the remainder of 1990 followed by a reduction in 1991.

Fluctuations in Douglas County's unemployment rate are mostly the result of swings in employment levels in the lumber and wood products industry. The health of the wood products industry has been historically tied to markets for the housing industry. This has created a "boom-and-bust" cycle with wide fluctuations in industry output and profit. In the coming decades, a more slowly growing population combined with environmental restrictions and technological innovations could dislocate many workers from traditional wood products-related jobs. Worker retraining and occupation shifting should absorb some of this displacement. But many workers may be forced to migrate out of the region in search of jobs.

According to the Oregon State Employment Division, workers in the coming decade will be competitive in the job market to the degree that they are able to learn new skills. The U.S. Department of Labor has drawn up a list of skills employers will be demanding:

1. Knowing how to learn.
2. Competence in reading, writing, and computation.
3. Communication skills in listening and in oral communication.
4. Adaptability skills in creative thinking and problem-solving.
5. Personal management skills in self-esteem, goal-setting, motivation, and personal/career development.
6. Group effectiveness skills in terms of interpersonal relations, negotiation, and teamwork.
7. Influence skills in organizational effectiveness and leadership.

Income and Wages

Income data and other money-related data such as poverty and wages are another useful way to gauge the economic health of an area. Income indicators portray an area's relative economic standard of living and are an essential element in the understanding of an area's economic well-being. A drawback to income data is that it lags behind current conditions.

The industrial restructuring that the region is now undergoing compounds the problem of gradual real income slippage in comparison to changes at the state or national level over the past several years.

According to the U.S. Department of Commerce's Bureau of Economic Analysis 1989 report, personal income in Douglas County grew steadily and strongly in the 1970's, averaging nearly 16% growth per year until the mid-1970's recession. During 1974-75, the short recession caused personal income gains to slow to 11%, still above the national average. (See Table IV.)

TABLE IV

Total Personal Income Growth Average % Change By Period

<u>Time Period</u>	<u>Douglas</u>	<u>Oregon</u>	<u>U.S.</u>
1970-1973	15.9%	12.7%	10.7%
1974-1975	10.6	12.0	9.7
1976-1979	17.7	17.0	13.8
1980-1983	6.1	6.7	9.9
1984-1987	6.2	6.8	8.2
1987	7.1	6.8	7.0

The early 1980's recession soon took hold of the local economy and income gains gradually fell to an average of 6.1% per year between 1980 and 1983. Average growth fell to two-thirds the national average. The latest available income figures from the Oregon State Employment Division indicate a gradually strengthening recovery period between 1984 and 1987.

While these income trends are not unique to Douglas County, what is different about them is their relative severity. Beginning in 1980, the region began to seriously lose ground compared with the growth of income at both the state and national levels. According to the State Employment Division, it is possible that the local economy is on the road to recovery with income gains in the late 1980's. Of Douglas County's \$816 million of earned income in 1987 (the latest statistics readily available), nearly 40% came from the manufacturing sector. Nationally, only 20% of all earned income by place of work derives from the combined manufacturing industries, an indication of the local importance of the goods-producing sector in Douglas County. (See Table V.)

TABLE V
DOUGLAS COUNTY
1987 EARNINGS BY INDUSTRY
(MILLION \$)

	<u>EARNINGS</u>	<u>% OF TOTAL</u>	<u>% CHANGE FROM '86</u>
TOTAL (FARM + NONFARM)	\$816.2	100.0	7.4
MANUFACTURING	313.6	38.4	6.2
GOVERNMENT	139.3	17.1	6.3
SERVICES	133.1	16.3	11.2
RETAIL TRADE	70.5	8.6	2.3
TRANS, COMMUN, UTILITIES	52.7	6.5	3.3
FARM	33.2	4.1	33.9
CONSTRUCTION	31.3	3.8	6.1
FIN, INS, REAL ESTATE	16.0	2.0	2.6
WHOLESALE TRADE	14.8	1.8	8.0
AG SERV, FORESTRY, FISH	8.8	1.1	22.2
MINING	2.9	0.4	-17.1

1987 SOURCES OF PERSONAL INCOME
(THOUSANDS \$)

	<u>PERSONAL INCOME</u>	<u>% OF TOTAL</u>	<u>% CHANGE FROM '86</u>
TOTAL PERSONAL INCOME	\$1,163,535	100.0	7.1
NET EARNING	750,469	64.5	7.6
TRANSFER PAYMENTS	221,348	19.0	6.4
DIVIDENDS, INTEREST, RENT	191,718	16.5	6.0

1987 PROPRIETORS' DATA

		<u>% CHANGE FROM '86</u>
NUMBER:	TOTAL	9,385
	NONFARM	7,304
	FARM	2,081
EARNINGS:	TOTAL	\$134,442
	NONFARM	103,881
	FARM	30,561
		3.7
		4.8
		0.0
		13.0
		7.5
		37.3

1987 TRANSFER PAYMENTS BY TYPE
(THOUSANDS \$)

	<u>PAYMENTS</u>	<u>% OF TOTAL</u>	<u>% CHANGE FROM '86</u>
TOTAL TRANSFER PAYMENTS	\$221,348	100.0	6.4
RETIREMENT & DISABILITY	127,470	57.6	5.7
MEDICAL	44,917	20.3	8.3
INCOME MAINTENANCE	15,293	6.9	1.9
UNEMPLOYMENT INSURANCE	9,243	4.2	23.1
VETERANS BENEFITS	9,777	4.4	-1.9
OTHER GOVERNMENT PAYMENTS	1,082	0.5	-11.1
PAYMENT TO NONPROFIT ORGS.	5,341	2.4	5.0
BUSINESS PAYMENTS TO INDIV.	8.225	3.7	13.4

Source: U.S. DEPARTMENT OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS

Per Capita and Median Family Income

Income data for Sutherlin is available from the 1980 Census and from updated census estimates for 1985 shows that both per capita and median family income is slightly lower than the County average yet higher than the national average. "Median family income" is a measure of the midpoint of the range of incomes of all family members and unrelated persons over the age of 14 living within the family. There are an equal number of families with incomes above the median and families with incomes below the median. In 1980, Sutherlin's median family and per capita incomes were, respectively, \$15,997 and \$5,691. The same figures for Douglas County in the same year were \$18,587 and \$6,680, respectively. (See Table VI and VIa)

TABLE VI
PER CAPITA INCOME
1970-1987

DOUGLAS YEAR	DOUGLAS COUNTY	STATE OF OREGON	UNITED STATES	DOUGLAS AS % OF OREGON	OREGON AS % OF U.S.	DOUGLAS AS % OF U.S.
1970	3,398	3,889	4,051	87.4	96.0	63.9
1971	3,703	4,149	4,296	89.3	96.6	86.2
1972	4,225	4,558	4,665	92.7	97.7	90.6
1973	4,552	5,066	5,182	89.9	97.8	87.8
1974	4,961	5,619	5,648	88.3	99.5	87.8
1975	5,244	6,053	6,073	86.6	99.7	86.3
1976	6,008	6,769	6,651	88.8	101.8	90.3
1977	6,624	7,413	7,294	89.4	101.6	90.8
1978	7,376	8,297	8,136	88.9	102.0	90.7
1979	8,154	9,176	9,033	88.9	101.6	90.3
1980	8,788	9,866	9,919	89.1	99.5	88.6
1981	8,980	10,448	10,949	85.9	95.4	82.0
1982	9,033	10,589	11,482	85.3	92.2	78.7
1983	10,117	11,281	12,100	89.7	93.2	83.6
1984	10,723	12,641	13,116	88.8	92.0	81.8
1985	11,068	12,641	13,899	87.6	90.9	79.6
1986	11,631	13,228	14,609	87.6	90.9	79.6
1987	12,365	14,018	15,484	88.2	90.5	79.9

Source: U.S. Department of Commerce; Bureau of Economic Analysis;
Regional Economic Information System

TABLE VIa

MEDIAN FAMILY AND PER CAPITA
INCOMES FOR DOUGLAS COUNTY
AND PLACES OF 2,500 OR MORE
1980 CENSUS

	<u>MEDIAN FAMILY</u>	<u>PER CAPITA</u>
OREGON	\$ 20,027	\$ 7,557
Douglas County	18,587	6,680
Green	18,769	6,132
Myrtle Creek	18,547	6,115
Reedsport	20,562	6,985
Roseburg	19,541	7,488
Sutherlin	15,997	5,691
Tri City	18,564	6,231
Winston	17,538	5,863

By 1985, Department of Commerce estimates placed Sutherlin's per capita income at \$7,585 -- the fifth highest city per capita income in Douglas County, but 13% below the county average of \$8,732.

According to the Oregon State Employment Division, per capita income levels for Douglas County will rise, pushed by the same forces that contributed to the State of Oregon's per capita increase of 6.9% in 1988 -- greater than the national increase of 6.2%.

However, per capita income can be adversely affected by unusual circumstances that impact the earning power of residents. Events such as market fluctuations and environmental constraints in the lumber industry may drastically reduce per capita incomes in the future.

WAGES

Payroll in Douglas County generally showed an upward trend during the past decade. After 1982, following a payroll drop of 8.0%, several years of employment expansion brought steady growth in total covered payroll. By 1988, payroll had grown by nearly 50% over 1982 levels to a record high of \$626 million. (See Table VII.)

TABLE VII
DOUGLAS COUNTY
COVERED EMPLOYMENT AND PAYROLL DATA

Year	# of Firms	Ave Cov Employment	Total Covered Payroll	Ave Pay per Job	% Change
1979	2,421	31,406	\$429,163,564	\$13,665	---
1980	2,408	30,495	450,222,840	14,764	8.0
1981	2,347	28,254	435,006,669	15,396	4.3
1982	2,204	26,348	417,779,127	15,856	3.0
1983	2,195	28,413	479,777,783	16,886	6.5
1984	2,220	29,656	520,914,345	17,565	4.0
1985	2,219	29,292	525,044,704	17,925	2.0
1986	2,244	30,691	553,073,086	18,021	0.5
1987	2,292	31,762	588,170,753	18,518	2.8
1988	2,344	32,605	625,824,940	19,194	3.7

Source: Oregon State Employment Division, 1988

Average pay per job also grew steadily throughout the county, up by 21.1% between 1982 and 1988 to \$19,194. The inflation rate during this same period was slightly faster at 22.6%. Despite local growth in average pay per covered job, Douglas County continued to lag behind the state and national averages in 1988. According to the Oregon State Employment Division, only once in the past ten years has the change in Douglas County's average covered wage exceeded the change in the national consumer price index, a sign of the reduced buying power of the area's workers.

Average pay by industry for 1988 shows Douglas County approximately 12% below the national average for all industries but only 2% below the state average. This income gap is due in part to recent industrial restructuring associated with employment trends. Most new jobs are created in the high-growth areas of trade and services, sectors that traditionally experience lower pay and more part time hours. For example, in 1988, the average lumber and wood products job paid \$26,650 compared to \$14,650 in services and \$9,800 in retail trade (See Table VIII). In 1988, the county's highest-paid jobs continued to be found in manufacturing.

TABLE VIII

ANNUAL AVERAGE PAY BY INDUSTRY; 1988

INDUSTRY	UNITED STATES	OREGON	DOUGLAS COUNTY	DOUGLAS AS % OF U.S. OREGON	
TOTAL PRIVATE	\$21,649	\$19,167	\$18,827	87.0	98.2
MINING	34,341	25,547	22,881	66.6	89.6
CONSTRUCTION	24,432	22,728	20,593	84.3	90.6
MANUFACTURING	26,916	25,039	25,882	96.2	103.4
TRANS/COMMUN/UTILITIES	28,201	26,462	21,471	76.1	81.1
WHOLESALE TRADE	27,843	25,286	16,720	60.1	66.1
RETAIL TRADE	11,965	11,439	9,797	81.9	85.6
FINANCES/INS/REAL EST.	27,691	21,970	16,367	59.1	74.5
SERVICES	19,984	17,046	14,654	73.3	86.0
GOVERNMENT	23,021	21,894	20,691	89.9	94.5
TOTAL, ALL INDUSTRIES	\$21,871	\$19,637	\$19,194	87.8	97.7

Source: Oregon State Employment Division, 1988

POVERTY

Poverty data are available only through Census Bureau reports and are generally not reflective of current conditions, especially at the local level. The latest poverty figures for Oregon are from the 1980 Census (See Tables IX and IXa).

TABLE IX

Poverty Rates for Families
and Persons in Douglas County
and Places of 2,500 or more
1980 Census

	% Below Poverty	
	<u>Families</u>	<u>Persons</u>
Oregon	7.7%	10.7%
Douglas County	8.6	11.1
Green	8.5	10.8
Myrtle Creek	9.0	10.4
Reedsport	6.8	8.1
Roseburg	7.4	9.6
Sutherlin	12.0	13.4
Tri City	9.4	10.1
Winston	13.6	16.3

TABLE IXa

1989 Poverty Income Guidelines
For All States
(Except Alaska & Hawaii) and the
District of Columbia

<u>Size of Family</u>	<u>Poverty Guideline</u>
1	\$ 5,980
2	8,020
3	10,060
4	12,100
5	14,140
6	16,180

For each additional family member add \$2,040.

As the data in the table indicate, Douglas County had a greater incidence of poverty by both families and persons than Oregon as a whole. In 1980, Sutherlin experienced the second-highest poverty rates in the county, exceeded only by Winston. Sutherlin's rate was 12.0% of families and 13.4% of persons in the area population who lived below the poverty level. It should be kept in mind, however, that the data used for these computations were from 1979 income figures and do not reflect the income problems encountered during the 1980-82 recession in Douglas County.

Recent poverty data are only available at the national level. In 1983, the number of Americans living below the poverty standard peaked at 15.3%, up from 15.0% in 1982 and 14.0% in 1981. In 1988, an estimated 13.1% of Americans were living in poverty, down from 13.4% in 1987. This is the fifth straight year the poverty rate has declined. The rates for Oregon can reasonably be expected to parallel the national trends, according to the Oregon State Employment Division.

Another measure of relative poverty is the percentage of persons whose incomes fall under the classifications of "low" or "moderate." According to Housing and Urban Development (HUD) definitions, a Low and Moderate Income Person is a member of a family having an income equal to or less than the Section 8 "lower" limit of 80% or less of the area median. Unrelated individuals are considered as one person families for this purpose.

A Low Income Person or "Very low" Income Person is a member of a family having an income equal to or less than the Section 8 "very low" income limit established at 50% or less of the area median.

In 1985, 47.42% of Sutherlin residents lived below the county median income of \$18,587. By 1989, 49.69% qualified as low and moderate income persons. Both of these are higher than the county rates of 39.25% for 1985 and 41.24% for 1989.

TABLE IXb

LOW/MODERATE INCOME PERCENTAGES
DOUGLAS COUNTY CITIES
(1980 CENSUS DATA)

	1985	1988
Douglas County (Median Income \$18,587)	39.25	41.24
Canyonville	48.10	50.63
Drain	43.31	45.58
Elkton	51.66	52.32
Glendale	49.35	50.94
Myrtle Creek	32.25	35.32
Oakland	42.60	44.92
Reedsport	37.02	38.50
Riddle	41.75	43.59
Roseburg	39.10	40.93
Sutherlin	47.42	49.69
Winston	44.70	46.21
Yoncalla	46.97	49.49

SOURCE: Department of Housing and Urban Development 1985 and 1988 Printouts.

ECONOMIC ACTIVITY

According to the 1989-90 Oregon Business Directory, Sutherlin is host to 191 businesses of many types (including schools, churches, government, and self-employed persons). The Directory of Oregon Manufacturers for 1989-90 lists 21 manufacturing businesses in Sutherlin that responded to the State Economic Development Department survey.

The predominant industry in Sutherlin, as for the rest of Douglas County, is timber resource-related. Numerous small logging companies in the area employ Sutherlin residents but these are adversely affected by lumber market recessions.

Sutherlin School District 130 is major employer in the area with 158 persons employed.

Sutherlin's local businesses are following the national trend of shifting to more service-oriented endeavors. Capitalizing on increased tourism to the area, the city is host to numerous eating and drinking establishments and retail stores.

Many Sutherlin residents commute to employment in the Roseburg area. South of Sutherlin, several existing manufacturing plants and at one new aluminum manufacturing plant promise greater employment opportunities.

Agriculture remains a "quietly important" industry in Douglas County. Farming receives relatively little attention because of its low employment opportunities. But

despite a decrease in number of farms between 1982 and 1987, the market value of all agricultural products from Douglas County farms increased from \$24.9 million to \$26.5 million, according to the 1987 Census of Agriculture. However, two trends -- the aging of farm operators and the decline of farm values -- threaten to adversely affect agriculture in Douglas County. Sutherlin, with its surrounding hay and livestock farms, will feel the effects of these trends as well. (See Table X for Douglas County Farm Statistics.)

TABLE X
DOUGLAS COUNTY
FARMS, FARM SIZES, AND FARM SALES

	1987	1982
# OF FARMS	1753	1844
AVE. SIZE; ACRES	250	224
AVE. VALUE/ACRE	\$911	\$992
AVE. AGE OF OPERATOR	53.9	51.4
FARMS BY SIZE (%):		
1-9 ACRES	11.0	11.2
10-49	33.8	33.5
50-179	26.7	26.4
180-499	18.4	18.8
500-999	5.3	6.4
1000+	4.8	3.8
FARMS BY VALUE OF SALES (%):		
LESS THAN \$2,500	43.4	48.0
\$2,500-\$4,999	18.9	17.0
\$5,000-\$9,999	13.9	13.3
\$10,000-\$24,999	11.8	11.9
\$25,000-\$49,999	5.4	4.2
\$50,000-\$99,999	3.6	2.8
\$100,000+	3.0	2.8

Source: 1987 Census of Agriculture; U.S. Bureau of Census

ECONOMIC SUPPORT SYSTEMS

Transportation

Sutherlin is located near several important transport routes. The city straddles Interstate 5, the major north-south thoroughfare on the west coast, and Highway 138, one of the state's main connectors to seaports and recreational areas on the coast. Access to the Cascade Range is available by way of Highway 138 east through Roseburg.

Air service is available 15 miles away at the Roseburg Airport. Although the facility is adequate to accommodate intermediate passenger and cargo service, such service is not provided on a regular basis. Regularly scheduled national passenger and cargo service is available 60 miles to the north at Eugene.

North-south rail freight service is provided by Southern Pacific Railroad.

Financial Stability

Sutherlin's ratio of Bonded Indebtedness to Assessed Value was .8% in 1990, about average for Douglas County cities. Cities are held by state law to a ratio limit of 3.0%.

Public Facilities and Utilities

The availability and reliability of facilities and utilities is essential to economic development. These items are discussed in detail in the Sutherlin Public Facilities Plan. It is the city's policy to construct and maintain public facilities of suitable capacity for industrial and commercial uses.

Schools and Health Care

There are 2 public and 2 private elementary schools in Sutherlin, as well as a junior high and high school. Post-secondary education is available nearby at Umpqua Community College.

Three doctors, one chiropractor, three dentists, and two veterinarians had practices in Sutherlin in 1990. Hospital care is available nearby in Roseburg.

Enterprise Zone

Sutherlin is part of the Sutherlin/Oakland Enterprise Zone. The Enterprise Zone Program is a state endeavor to create new jobs by encouraging business investment. Businesses that wish to expand as well as new businesses may qualify for investment incentives. In 1990, 75 companies in 18 Oregon counties received enterprise zone property tax exemptions on \$226 million of qualified property. Over 2056 new jobs were created by these companies.

The way the Enterprise Zone program works is by offering property tax exemptions to eligible business firms that make an investment in qualified property. The property tax exemption is 100 percent for 3 years. The city and the county sponsoring a zone may also offer additional incentives.

The Sutherlin/Oakland Enterprise Zone to date has attracted a Bayliner boat manufacturing plant, an Alcan cable plant, and three wood products manufacturing plants.

ECONOMIC OPPORTUNITIES ANALYSIS

Review of National, State, and Local Trends

Projections by the Oregon State Employment Division indicate continuation of growth in most industrial sectors but at a slower pace. Economists predict that some form of national business cycle slowdown will occur sometime between 1990 and 1993. If the slowdown is accompanied by strongly rising interest rates and a cessation of building activity, Oregon's lumber industry could contract severely, causing rising unemployment and economic disruption.

Several types of industrial and commercial companies could reasonably be expected to relocate to Sutherlin. The area has historically been home to a number of timber-related manufacturing firms and the trend over the past ten years up to 1989 has been a decrease in the number of manufacturing firms located in Sutherlin. However, aggressive marketing of the Sutherlin area to potential industrial companies has managed to turn that trend around and new manufacturing firms are beginning to relocate to Sutherlin and its environs.

Tourism will continue to grow as a lucrative industry. Sutherlin, with its proximity to Interstate 5, can "fish the stream," so to speak, by encouraging service-oriented business to locate near the interchange. This trend is already occurring, as dining establishments, motels, and a shopping plaza have located or are in the process of locating in this area. As the city continues its program of beautification, especially along Central Avenue, more visitors may be further enticed to journey into the central business district.

According to a report prepared for the Oregon Tourism Division (OREGON TRAVEL AND TOURISM: Visitor Profile, Marketing, and Economic Impacts. Portland and Pacific Palisades: Dean Runyan Associates with The Lyon Group, 1989), the average out-of-state traveling party in Oregon spends a total of \$134.72 per day. Visitors who stay primarily in commercial accommodations such as hotels, motels, resorts, or bed and breakfasts spend an average of \$166.25 per party per day.

Travelers overall, according to the report, spend about a quarter (26.3%) of their expenditures on accommodations and another quarter or so on eating and drinking (23.3%, not counting purchases in grocery stores). They spend another 14.4% on vehicles and 14.8% on shopping. Travelers who stay away from home overnight have about the same spending pattern to out-of-state visitors.

Marketing and product development recommendations from the tourism report include:

- Creating thematic zones throughout the state and tying local attractions into these themes with marketing and product development programs;
- Focusing on welcoming and assisting tourists in every way possible, especially through local travel establishments;
- Promoting local Oregon travel resources to residents of the state.

For all tourist development, it is crucial that projects be undertaken with an emphasis on high quality that will reflect the area's image as a place where environmental quality is valued and preserved.

Sutherlin, and the surrounding area, contains much that is attractive to tourists. Cooper Creek Reservoir and the nearby North Umpqua River offer numerous recreation opportunities. Sutherlin is a hub for and gateway to several historic sites. At least two community festivals, the Blackberry Festival and Timber Days, attract visitors every year.

As the nation's population ages, services that cater to retired persons will come into demand. Sutherlin already is home to two recreational vehicle parks that are used by senior citizens. Health services are readily available both within the city and nearby in Roseburg.

Agriculture, especially small-scale diversified agriculture, will continue to grow in importance. The Oregon Department of Agriculture reports that specialty agricultural crops and organically-produced crops in particular constitute the single fastest-growing sector of the Oregon agricultural market. Sutherlin can facilitate the growth of agriculture by encouraging farmers markets and festivals and by encouraging agricultural distribution industries to locate in the city.

INDUSTRIAL SITE INVENTORY

The Douglas County Planning Department maintains an inventory of industrial sites within the county. Although the latest update is dated 1984, the Planning Department has stated that information for the Sutherlin area has experienced no significant changes since that year except the conversion of the Sutherlin Municipal Airport to an Industrial Park. The Sutherlin Industrial Park, a 119 acre parcel, is owned and administered by the Douglas County Industrial Development Board.

Five sites within Sutherlin's Urban Growth Boundary are identified in the Industrial Sites Inventory as suitable, vacant, and readily available for industrial relocation or expansion:

- Site 35, between Highway 99 and the railroad, contains 92 acres. Forty-four acres are vacant and suitable for building. The remainder is occupied by 2 maintenance shops, 4 residences, and various storage and commercial users.
- Site 38, the old Georgia-Pacific mill site south of Hastings Avenue, covers 99.3 acres. However, a log pond covers half the site.
- Site 40. This is the former Tye Timber site straddling the railroad and Highway 99 and abuts the southeastern edge of the Urban Growth Boundary. It has 5.5 acres vacant.
- Site 45 consists of 71 acres near the sewer plant off Highway 138 on the western edge of the city and is a good heavy industrial-classed site that is presently used agriculturally. However, it has hilly topography which could limit some types of development.
- Sutherlin Industrial Park. This is the former site of the Sutherlin Municipal Airport and adds 119 acres to Sutherlin's industrial lands.

Approximate total acreage of these vacant serviceable sites is 306 acres, which amounts to 48.6% of the total industrial land within Sutherlin's Urban Growth Boundary. Total industrial land area equals 630 acres.

The lands inventoried here have been mapped by the Douglas County Planning Department. Maps and descriptions are found in Appendix I.

A survey of existing firms in the area indicates that the area contains enough industrial-zoned land with suitable soils and easy access to transportation to support new or expanding manufacturing endeavors. This, combined with a ready supply of inexpensive labor, access to natural resources, and the existence of favorable taxing structures make the area attractive to manufacturing firms.

INDUSTRIAL LAND NEEDS FORECAST

According to data collected during initial plan development and during periodic review, these are the current ratios of industrial land to persons:

<u>Heavy Industrial:</u>	<u>2.22 acres per 100 persons</u>
<u>Light Industrial:</u>	<u>.78 acres per 100 persons</u>

These figures are derived from 1990 population levels and data from the Land Use Element. Year 2010 projected land use allocations are derived from assuming a constant ratio of industrial land needs to persons with Sutherlin's total population doubling to 10,000 in 20 years. These figures are summarized according to the following table:

TABLE XI
INDUSTRIAL LANDS FORECAST (ACRES)

<u>Designation</u>	<u>Total Planned</u>	<u>Total Used</u>	<u>Total Vacant</u>	<u>Projected Need by 2010</u>	<u>Net Increase by 2010</u>
<u>Light Industrial</u>	<u>189</u>	<u>39</u>	<u>150</u>	<u>78</u>	<u>39</u>
<u>Heavy Industrial</u>	<u>441</u>	<u>111</u>	<u>330</u>	<u>222</u>	<u>111</u>

Virtually all of Sutherlin's vacant industrial land is serviceable. While there is no way to accurately predict how quickly this land will be used up, the abundance of

industrial sites makes it unlikely, given historical economic trends, that there will be a shortage within the planning period, given population projections.

COMMERCIAL LANDS INVENTORY

The following vacant, serviceable, commercially-designated sites are found within the Urban Growth Boundary and are available for development:

Site A: 8 acres fronting the Weyerhaeuser Road right-of-way.
Site B: Nearly 2 acres fronting Central Avenue, adjacent to the Seventh Day Adventist School.
Site C: 8 acres along Interstate 5 with access off Comstock.
Site D: 2 acres fronting Duke Street and adjacent to the Industrial Park.
Site E: 22 acres in 5 parcels adjacent to the Hi-Way Haven RV Park along the Elkton-Sutherlin Road.
Site F: 32 acres in 1 parcel fronting South Side Road.
Site G: 4 acres in 2 parcels along Calapooya at Miner's Corners.
Site H: 3 acres in 2 parcels near the southern I-5 interchange.

These sites are mapped and included in Appendix II.

COMMERCIAL LAND NEEDS FORECAST

According to data collected during initial plan development and during periodic review, the current land-to-person ratio is 1.61 acres per 100 persons. These figures are derived from 1990 population levels and data from the Land Use Element. Year 2010 projected land use allocations are derived from assuming a ratio increase to 1.68 acres of commercial land needed per person with Sutherlin's total population doubling to 10,000 in 20 years. These figures are summarized according to the following table:

TABLE XII
COMMERCIAL LANDS FORECAST (ACRES)

<u>Designation</u>	<u>Total Planned</u>	<u>Total Used</u>	<u>Total Vacant</u>	<u>Projected Need by 2010</u>	<u>Net Increase by 2010</u>
<u>Commercial</u>	<u>212</u>	<u>85</u>	<u>127</u>	<u>168</u>	<u>83</u>

All of Sutherlin's vacant commercial land is serviceable. While there is no way to accurately predict how quickly this land will be used up, the abundance of commercial sites makes it unlikely, given historical economic trends and population projections, that there will be a shortage within the planning period. The projected net increase allows for 4 acres to be developed every year over the next 20 years. Even if development exceeds this rate, which is unlikely, the City's additional commercial land can accommodate a growth rate of 6.35 acres per year without exhausting current commercially designated land.

COMMUNITY DEVELOPMENT OBJECTIVES

The city has identified these types of commercial and industrial uses desired by the community:

- Tourist-related businesses.
- Light, medium, and heavy industry of high quality.
- Businesses that cater specifically to persons of retirement age and businesses that provide complete services to persons of all ages.

REGIONAL STRATEGIES PROGRAM

As of December, 1991, actions to implement for Douglas County's Regional Strategies Program are still being formulated. Once these plans are finalized, the city will bring its economic strategy into conformance with Douglas County's.

SUMMARY -- STRENGTHS, WEAKNESSES, OPPORTUNITIES, THREATS

STRENGTHS

1. Sutherlin was one of the fastest-growing cities in Douglas County in the 1980's. Since 1980, the city has experienced a net increase of 460. Coincident with this increase, the labor force has been steadily growing.
2. Sutherlin is a gateway to the vast natural resources of the Cascade Range.
3. Sutherlin contains an ample amount of developable commercially-and-industrially-zoned land to meet projected economic trends.
4. Sutherlin has easy access to the state's major transport networks and provides a central location to serve the entire west coast market area as well as overseas markets in the Pacific Rim.
5. Sutherlin presently has adequate public facilities to service the primary industrial lands identified within its urban growth boundary.
6. Sutherlin is part of the Sutherlin/Oakland Enterprise Zone.
7. Sutherlin property owners presently have low property tax rates.
8. Sutherlin is a gateway to several tourist destination places. Tourists are attracted to the outstanding environmental quality of surrounding recreation sites.
9. Sutherlin is near a community college and near the county seat, Roseburg. Both offer enhanced educational, cultural, and economic opportunities to Sutherlin Residents.
10. Sutherlin's surrounding agricultural land is some of the finest in western Oregon.

WEAKNESSES

1. Sutherlin's economy is heavily dependent on a few large timber resource-based manufacturing firms located in and around the city. The industry is inherently unstable and is susceptible to national market fluctuations and environmental constraints. The overwhelming dominance of one industry in a region contributes to fewer employment opportunities.
2. Sutherlin has a lower per capita income and a higher poverty rate than the county average.
3. Sutherlin's work force has a high percentage of labor-intensive workers. This class of workers has historically been the recipient of lower than average wages and, in case of unemployment, is less able to transfer job skills than skilled technical workers.

OPPORTUNITIES

1. Contraction of the lumber industry will force local entrepreneurs to diversify their businesses.
2. The abundance of low-skilled workers makes the area attractive to manufacturing industries.
3. Sutherlin's relative proximity to the Coos Bay and Portland seaports, Interstate 5, and airports combined with the area's low cost of living and low overhead costs makes the community attractive to export companies.
4. Sutherlin can further capitalize on the tourist industry by advertising it's scenic qualities and historic and recreational areas, and by encouraging businesses providing tourist amenities to locate near Interstate 5. Current (1990) plans call for construction of a shopping mall near the I-5 interchange north of Central Avenue.
5. The city can promote itself to families seeking a small-town atmosphere.
6. Available industrial land combined with the tax incentives of the Sutherlin/Oakland Enterprise Zone is attractive to industry.
7. Agriculture, particularly intensive diversified agriculture, in the surrounding area provides opportunities to pursue regional self-sufficiency as well as increased agricultural export.
8. Production by area handcrafters could strengthen the economy by providing exports and drawing tourists.
9. The national trend of an increasingly aging population combined with Sutherlin's access to transportation and health care facilities in the Sutherlin/Roseburg area creates opportunities for promotion of the community as an ideal retirement location.

THREATS

1. Prompted by environmental regulations and market downswings, the lumber manufacturing sector in Sutherlin may be forced to end operations suddenly, leaving large numbers of people unemployed with few employment alternatives.
2. The continuing expansion of retail space in regional shopping centers in Roseburg and Eugene may lead to further weaknesses in the local retail community and may cause some existing firms to fail or to cut back, unless local retailers can design and implement an effective strategy to counteract these forces.
3. The lingering school finance crisis in Oregon is especially difficult for communities experiencing contraction in major industries and may adversely affect Sutherlin's economy.
4. The state trend toward property tax limitation measures could damage Sutherlin's ability to provide governmental services, public facilities, and education to its residents.

POPULATION AND ECONOMY -- GOALS AND POLICIES

A. GOAL: TO BROADEN, IMPROVE, AND DIVERSIFY THE ECONOMY
OF SUTHERLIN WHILE ENHANCING THE ENVIRONMENT

POLICIES:

1. The city shall encourage a community-based task force to organize and to study the key issues and factors specifically affecting the local economy and shall develop a long-range economic development strategy in cooperation with this task force.
2. The city shall encourage programs that provide educational and job search skills to local residents.
3. The city shall promote industrial and commercial development with local capital, entrepreneurial skills, and skills and experience of the resident labor force while continuing to attract outside investments.
4. The city shall supply an adequate amount of land with suitable soil and drainage qualities in order to accommodate projected industrial and commercial needs.
5. The city shall diversify the manufacturing sector of the local economy by encouraging the establishment of low-polluting, low-energy-using industrial activities.
6. The city shall evaluate proposals for business ventures that require commitment of city assets within the urban growth boundary according to the venture's viability and environmental impacts.
7. The city shall identify and preserve sites for future industrial development.
3. The city shall encourage research and development of products and markets that support more efficient use of under-utilized renewable and nonrenewable resources.
9. The city shall maintain and expand the capacity of its water, drainage, sewerage, and transportation systems to ensure that a proper infrastructure attractive to industry is in place.
10. The city shall support the Sutherlin/Oakland Enterprise Zone.
11. Subject to the Enterprise Zone guidelines, the city shall provide certain property tax exemptions, regulatory flexibility, fee reductions or exemptions, and other incentives to attract new investment and create jobs.
12. The marketing and management of the Enterprise Zone shall be reviewed annually to make any necessary management adjustments and to evaluate the success and strategy of the zone.
13. The city will continue to apply for any public or private grants that may exist to promote and enhance tourism and Enterprise Zone Marketing.
14. The city endorses the Douglas County Regional Strategy for Economic Development.
15. The city shall ensure that adequate land areas are designated for development of regional community retail trade and services.
16. To diversify and improve local employment opportunities, the city shall promote tourism and encourage expansion of existing businesses, including both timber-related and non-timber-related industries.

17. The city shall take an active role in promoting economic development by supporting the activities of the Douglas County Industrial Development Board, the Coos-Curry-Douglas Business Development Corporation, and other public and private agencies that aid potential tenants by assisting with business location, business finance, and by servicing suitable property for the benefit of the regional economy.
18. The city shall encourage the revitalization of Sutherlin's central business district through a program designed to attract and retain a greater proportion of the area's retail trade.
19. The city shall take an active role in promoting the area as a desirable retirement community through advertisement and enhancement of housing, recreation, health, and transportation opportunities for senior citizens.
20. The city shall review and adopt Douglas County's Regional Strategies list of items to implement once those items become available.

PUBLIC FACILITIES ELEMENT

The services required for a community to function properly are called public facilities. This broad title includes such systems as water, sewer, transportation, drainage, solid waste, emergency services, parks and recreation, as well as other public facilities. As a community grows, these services must necessarily expand. The policies in this element are designed to provide for needed service expansion in an orderly manner.

Oregon law [ORS 197.712(2)(e)] requires public facility plans for storm sewer, sanitary sewer, water, and transportation systems for land uses shown in the Comprehensive Plan. This law applies to areas with populations over 2500 within urban growth boundaries.

In addition, Oregon Administrative Rule (OAR) 660, Division 11, requires that public facilities plans list proposed public facility projects and map their locations and provide policies or an urban growth management agreement that designates the provider of each service. Also, the rule specifies that the Public Facility Plan provide an inventory and general assessment of the public facilities, rough cost estimates of each project, an estimate of when the project will be needed, and a discussion of existing funding mechanisms.

The updated Public Facilities Plan for Sutherlin prepared in 1990 includes the elements required by Oregon law and administrative rules. To prevent duplication, the Sutherlin Public Facilities Plan is the document of reference for both general and specific aspects of Sutherlin's public facility systems. However, the goals and policies of the Public Facilities Plan are retained in this element. Both documents work to outline Sutherlin's community aims.

ENERGY CONSERVATION

Energy conservation is not directly addressed in the Public Facilities Plan. But despite the fact that the city has control over only a few activities that relate to energy use and conservation, these few areas are significant.

Included among the energy-conserving policies the city has adopted are planning for alternative transportation methods by resolving to study a bike route system and requiring sidewalks in new developments. The city encourages zero lot line zoning to increase structure density and heat retention. Infilling of vacant lots is encouraged to keep distances to the City's commercial areas as short as possible. The city requires new requires new construction to meet state standards for weatherization and energy conservation. And waste recycling is encouraged as the city coordinates with Douglas County solid waste management policies. Energy conservation policies are found on page 41, below.

PUBLIC FACILITIES -- GOALS AND POLICIES

A. GOAL: TO PROVIDE EFFICIENT PUBLIC FACILITIES AND SERVICES IN AN ORDERLY, PLANNED MANNER SO AS TO MEET THE NEEDS OF SUTHERLIN'S RESIDENTS AND BUSINESSES.

POLICIES:

1. The city shall ensure that appropriate support systems are installed prior to or concurrent with the development of a particular area. Costs of constructing water and sewer ties to new developments shall be borne by the developer.
2. All large construction projects shall be planned to meet ISO recommended fire flow requirements.
3. The city shall implement the projects necessary to satisfy projected water supply needs.
4. The city shall promote community awareness of water conservation.
5. The city shall continue to upgrade the existing water distribution system in an effort to minimize water losses.
6. The city shall identify ways to reduce and eventually eliminate the community's existing subsurface drainage problems.
7. The city shall establish appropriate and equitable funding systems in order to generate revenue for construction of public facilities.
8. The city will cooperatively work with the local school district to plan for enrollment levels.
9. The city shall encourage the expansion of vocational/technical programs and both Sutherlin High School and Umpqua Community College.
10. The city shall continue the agreement with the Douglas County Library system which makes available county library resources to the city library.
11. The city shall comply with all state and federal environmental quality regulations.
12. The city shall provide sewer and water service to areas within the Urban Growth Boundary.
13. The city shall require utilities to use the public right-of-way for future service ways and require utilities to coordinate activities in order to prevent unnecessary duplication.
14. Ensure that as new development occurs, public facilities and services to support the development are available or will be available within a reasonable time.
15. All public facility improvements in the Sutherlin Urban Growth Boundary shall be consistent with this plan.
16. Establish a priority system for evaluating competing demands for public facility improvements to help the budget committee rank projects, and to demonstrate to the public that projects are budgeted in an open, rational manner. This priority system should be based on both a short term and long term plan that is evaluated on an annual basis.

17. The criteria to indicate whether a project should be on the public facility improvement project list are:
- Frequency or duration of the problem;
 - Threat to public health or safety;
 - Injuries or damage to public private property that may result from failure or lack of the system;
 - Any other unintended negative consequences;
 - Service disruption from repairs;
 - Cost of the solution.
18. The criteria to indicate whether a project should be funded, as opposed to only be listed as a possible public facility improvement project, are:
- The importance of the need, especially the health and safety impact.
 - The degree to which the project responds to the need.
 - Impact on other facilities.
 - Conformance to the Comprehensive Plan or other plans.
 - Operation and maintenance costs.
 - Energy Requirements.
 - Environmental impacts (including economic, natural, and aesthetic features).
 - Cost.
 - Financial suitability.
 - Property value increases.
 - Job creation or retention.
 - Offsetting revenue generated or other leverage brought about.
 - Cost advantages from scheduling.
19. This plan and all public improvements are based on these assumptions:
- A. An improvement is most cost effective when installed at the proper time.
 - B. The financing of Public Facilities would be equitable: costs should, all other things being equal, reflect use, wear, ability to pay, and past efforts.
 - C. People should benefit, or benefit in the future, from their efforts to pay.
 - D. Costs to property owners should be proportional to who benefits from the project (the property owner mainly or the general public), how much of the cost has already been borne by the property owner, and how long the facility will be used.
20. New development, including but not limited to subdivisions, residential, or commercial, or industrial construction, should be responsible for constructing, paying for, or depositing funds for an improved street with curbs, gutters, and sidewalks, as well as sewer, water, storm drainage facilities, fire hydrants, and street lights, in addition to all utilities. This may be modified somewhat where there are other public benefits or improvements.
21. Payment of "in lieu of" fees is appropriate where the facilities are impractical to install when development occurs. Such fees shall be reserved for such improvements in the future.
22. Where existing or partial development is being utilized, as in construction on an existing lot which fronts or gains access from a sub-standard street, for example, full improvement as specified in Policy 7 above for new development is not always practical or appropriate. Instead, partial improvement "in lieu of" fees or agreement to participate in future Local Improvement Districts (LID's) is warranted.

23. Consistent with other policies of this Plan and the comprehensive Plan, improvements are to be provide by the agency and financed as follows:

SEWER COLLECTION SYSTEM

Provider/Owner: City

New Lines: Developer

Oversizing: City

Repair of Existing: City

Expansion of Existing: Varies by purpose

Facility to Serve One Area Only (such as a lift station): LID

SEWAGE TREATMENT SYSTEM

Provider/Owner: City

Expansion or new: City

WATER DISTRIBUTION SYSTEM

Provider/Owner: City

New: Developer

Oversizing: Developer

Replacement of Existing: City

Expansion of Existing: City

Facility to Serve One Area only (such as a booster pump):

WATER TREATMENT SYSTEM

Provider/Owner: City

Expansion or New: City

STORM DRAIN AND COLLECTION SYSTEM

Provider/Owner: City, County, and State; Sutherlin Water Control District

New: Developer

Oversizing: City or Owner of Particular Section

Repair of Existing: Owning Agency

Replacement of Existing: Owning Agency

Expansion of Existing: Owning Agency

Facility to Serve One Area Only: LID or Owning Agency

In Conjunction with Street Improvements: Owning Agency, LID

STREETS (PUBLICLY DEDICATED BUT NOT NECESSARILY PUBLICLY MAINTAINED)

Provider/Owner: City, County, or State highway Division

New: Developer or Agency

Oversizing: Owning Agency

Repair of Existing Paved: Owning Agency or Agency with Maintenance Responsibilities

Repair of Existing Unpaved: Owning Agency

Repaving: Owning Agency, LID

Widening Only (for abutting property owners benefit): LID

Widening Only (for through traffic): Owning Agency

Widening and Repaving Whole Street (for abutting property owners benefit): LID

Widening and Repaving Whole Street (for through traffic: Owning agency

Curb and Gutter (part of project cost): If LID, may waive or city assist

Sidewalks (part of project cost): If LID, may waive or city assist

BIKEPATHS/ROUTES

Provider/Owner: City, County, or State highway Division

New: Right-of-way Owner

PARKS

Provider/Owner: City

New: City (Sutherlin Parks and Recreation Association may initiate)

Improvement or expansion of existing: City or Parks & Recreation Association

Facility to Serve One Area Only (such as a tot lot): City or Neighborhood

SCHOOLS

Provider/Owner: Sutherlin School District or Private Provider

New: District or Private Provider

Repairs: District or Private Provider

Replacement of Existing: District or Private Provider

Expansion of Existing: District or Private Provider

OTHER PUBLIC BUILDINGS

Provider/Owner: Various

New: Agency

Repair, Expansion, or Replacement of Existing: Agency

24. The city should strive to have a complete set of public facility standards which complies with the standards of the American Water Works Association (AWWA) and other nationally-recognized agencies. The standards should be jointly adopted by all agencies to help coordinate installation and repair of facilities, as well as improve public or developer access and understanding. In addition, the city should periodically review all standards for public facilities.
25. Any expansion of the UGB or public facility systems must either be advantageous for residents (or future residents of the city) or to the city itself, as a means to that end.
26. A technical review committee composed of all affected agencies should be formed to coordinate and carry out the plan. Such a committee should review proposals from the private as well as public sector, as well as to meet regularly to work on common problems and review each member agency's plans for improvements.
27. The Planning Commission should make sure every interested and affected party, both staff and Board, has available at least one copy of the Plan and is familiar with the plan, its policies, and the impact of it on both long range and immediate operations. Non-agency parties may be charged a fee to cover printing costs of the Plan.
28. The City of Sutherlin shall be responsible for the preparation, adoption, and amendment of the Public Facility Plan, pursuant to OAR 660-11-015(1).

B. GOAL: TO PROVIDE AND ENCOURAGE A SAFE, CONVENIENT, AESTHETIC, AND ECONOMICAL TRANSPORTATION SYSTEM.

POLICIES:

1. Encourage the expansion of the street improvement program and also coordinate the program with the future street plan, and thus ensure that those streets that have been designated to carry high volumes of traffic (arterials and collectors) are in satisfactory and safe condition.

2. Support the development of an additional east-west limited access arterial thoroughfare.
3. Actively assist the State Highway Department in upgrading U.S. Highway 99 to a four-lane road and removing the jogs in the highway at Central Avenue and south of town in the vicinity of the Pacific Railroad tracks.
4. Require the installation of street lights in new developments.
5. Encourage the Southern Pacific Railroad to put up railroad crossing arms at railroad crossings and to use indicator lights on high traffic streets.
6. Develop a street systems plan which identifies the function of each street in the community.
7. Future streets and major improvements to existing streets shall satisfy the following applicable developmental criteria:

	<u>Local</u>	<u>Collector</u>	<u>Arterial</u>
<u>Minimum right-of-way</u>	<u>56 ft.</u>	<u>60 ft.</u>	<u>102 ft.</u>
<u>Minimum Pavement Width</u>	<u>36 ft.</u>	<u>40 ft.</u>	<u>70-82 ft.</u>

8. Discourage direct residential access onto existing and future arterials, in particular Central Avenue west of Sherwood Street.
9. Develop a system of sidewalks in the existing core city with emphasis on linking the community's major activity nodes.
10. The city shall coordinate with the county to plan and develop an area bikeway.
11. The city shall encourage the development of alternative modes of transportation to the automobile.
12. The city shall require sidewalks in all new subdivisions.
13. The city shall work with the Oregon Department of Transportation and Douglas County to improve the city's transportation system to a level consistent with the goals and policies of the Comprehensive Plan and the Public Facilities Plan.
14. The city shall require new development to install appropriate and pleasing landscaping along arterial streets.

C. GOAL: TO CONSERVE ENERGY RESOURCES AND ENCOURAGE UTILIZATION OF RENEWABLE ENERGY RESOURCES.

POLICIES:

1. Sound energy conservation principles, including the economical use of insulation, shall be considered in the placement of new structures, improvements to existing structures or other energy consumptive land uses.
2. New developments and subdivisions shall incorporate energy conservation principles into their planning and design.
3. The use of zero lot line zoning shall be promoted where appropriate to provide opportunities for increasing density and heat retention of dwellings.

4. Sutherlin will encourage the use of solar heating systems and landscaping in new construction in order to reduce heating and cooling energy needs.
5. Sutherlin shall continue to require that new construction meet State standards for weatherization and energy conservation.
6. "Mixed Use" areas that combine residential uses with neighborhood commercial activities will be encouraged.
7. Promote development of energy-efficient planned unit developments within designated residential areas.
8. Redevelopment of large lots and infilling and development of undersized lots will be encouraged where appropriate.
9. Residential development will be encouraged on non-collector streets.
10. Industries that provide secondary wood products processing will be encouraged.
11. Cogeneration techniques shall be encouraged to produce electricity and to process steam and low grade steam for hot water and space heating.
12. Industries will be encouraged to use renewable energy for applicable uses.
13. Diverse consumption of economical renewable energy forms will be encouraged.
14. The recycling of waste materials shall be encouraged.
12. The city shall coordinate solid waste disposal with Douglas County in order to accommodate current and future needs.

HOUSING

Housing is the dominant land use of most cities. It takes up the largest amount of land, makes up a large percentage of the assessed property values, and is the one use of land all persons have in common. Although everyone needs a place to live, the housing needs of people change over time. Variety in the housing market is essential to meet the changing needs of people.

Data on Sutherlin's housing stock comes from 3 different sources:

- The 1970 and 1980 Census of Population and Housing;
- A 1977 windshield survey of Housing conditions conducted by the Umpqua Regional Council of Governments.

Data from the 1990 Census was unavailable at the time of the 1990 Periodic Review process.

The windshield survey of the exterior physical condition of Sutherlin's housing stock was undertaken in September of 1977. The purpose of this survey was to rate the exterior physical condition of every dwelling unit in the city and the unincorporated part of the Study Area with respect to the other houses in the community. The method of using the existing housing stock as a base to evaluate the housing condition, rather than a set list of criteria for "standard housing", was used because of the tremendous diversity in the character of communities within Douglas County. It was felt that the housing condition should reflect the local situation of the community, rather than the community's position with relation to a set of minimum standard housing criteria.

There is one shortcoming of using the windshield survey technique. That is, that the survey does not consider any factors related to the interior of the housing unit in determining its rating. The assumption that then must be made, which has been displayed frequently in housing surveys which consider both interior and exterior criteria, is that the exterior condition of a dwelling unit is reflective of the interior condition of the unit.

The factors that were considered in evaluating the exterior condition of houses are divided in major and minor factors. The major factors were the roof, foundation, walls/siding, porch, and paint, and the minor factors taken into consideration were the windows, screens, doors, and chimneys.

Each dwelling unit was given one of four ratings, which are as follows: Standard; substandard minor, substandard major; and dilapidated. Following is the definition for each of the four possible ratings.

Standard - A dwelling unit that satisfies a majority of the evaluating criteria. There may exist one defect but it is of such a nature that it can be corrected by the average homeowner in the course of regular maintenance:

Substandard Minor - A dwelling unit that is basically sound but that is suffering from neglect in at least two minor factors or one major factor of consideration. These defects are still of such a nature that the average homeowner can repair them;

Substandard Major - A dwelling unit in need of extensive repair in either the minor or major factors of consideration. These repairs are beyond the capabilities of the average homeowner and could not be rectified in regular home maintenance. Extensive rehabilitation efforts are required to bring these structures up to a standard rating.

Dilapidated - A dwelling unit suffering from so many deficiencies as to be unsuitable for habitation and economically unfeasible to rehabilitate and consideration should be made to remove them from the community's housing stock.

A different set of criteria was used to evaluate the standards of mobile homes. Because of the nature of mobile homes and the placement techniques, the existence of the tie downs and skirting were considered along with the mobile homes' roof and siding in the rating.

The definition set of four rating categories for mobile homes is as follows:

Standard:	A mobile home in good condition with proper tie downs and acceptable skirting;
Substandard Minor:	A mobile home lacking proper tie downs and/or acceptable skirting or inadequate in one of the other evaluating criteria;
Substandard Major:	A mobile home which is not properly tied down and skirted and/or inadequate in one of the other evaluating criteria;
Dilapidated:	A mobile home that is not suitable for habitation due to its overall deteriorating condition.

There are a few points that need clarification concerning the rating of mobile homes. First, any unit that had a mobile home as an integral part of the dwelling unit structure was classified as a mobile home. Also, since when a mobile home is skirted it is impossible to see if it is tied down, it is assumed that skirted mobile homes are also properly tied down. Last, a new mobile home that was not properly skirted and/or tied down was given a substandard minor rating.

At the same time the housing conditions within the city were being taken, a condition survey for dwelling units in the unincorporated portion of the Study Area was also being made, using the same criteria as described above. The results of that survey are displayed in the following table. Because of the rural nature of the Study Area a Housing Condition Map was not generated for the unincorporated portion of the Study Area. Specific site location for each dwelling unit in association with a condition rating is not available.

The housing conditions derived from the windshield survey are presented for the entire city and in subareas. The boundaries for each particular subarea are as follows:

Subarea 1	-	North - City limits West - Railroad tracks South - Central Avenue East - City limits
Subarea 2	-	North - Central Avenue West - Railroad tracks South - City limits East - City limits
Subarea 3	-	North - City limits West - City limits South - Central Avenue East - Railroad tracks
Subarea 4	-	North - Central Avenue West - City limits

South - City limits
East - Railroad tracks

The unincorporated portion of the Study Area was also divided into subareas for the purpose of presenting the housing condition information. Subarea 1 is the entire unincorporated western portion of the Study Area. Subarea 2 is best described as the Union Gap area, while Subarea 3 is the entire eastern portion of the Study Area, from the eastern city limits to east of Fair Oaks. Subarea 4 is the area immediately adjacent to Deady.

HOUSING TYPE/CONDITION

1980 Census figures show that 1,716 dwelling units were in Sutherlin in 1980 and that these units were composed of 1,194 (69.6%) single family units, 220 (12.8%) multi-family units, and 300 (17.5%) mobile homes. 1980 Census figures for Douglas County show 73.7% single family units, 10.5% multi-family units, and 14.9% mobile homes.

The September 1977 windshield survey results indicate there were 1,573 dwelling units in the city, comprised of 1,079 (68.2%) single family units, 189 (12.01%) multi-family units and 305 (19.39%) mobile homes. Of these 1,573 units, 1,276 or 81.12% were given a standard rating on their condition, 205 or 13.03% were rated substandard minor, 88 or 5.59% were rated substandard major and 4 or 0.26% were determined to be dilapidated.

The following tables give a breakdown of the housing type and condition by the four subareas of the city as previously discussed. Following is a brief summary of the information presented in the tables for each subarea.

Subarea 1: Subarea 1 possesses more dwelling units than any other subarea, 581 units, of which approximately 86% of them received a standard rating, compared to 81% for the city as a whole. The rating of the remaining 14% of the housing stock in this area was 9.6% substandard minor, 4.13% substandard major and 0.34% dilapidated. Within Subarea 1 you will find 43.47% of the entire city's single family housing stock (469 units), 50.27% of the multi-family units (95 units) and 5.57% (17 units) of the mobile homes.

There are three relatively distinct areas within this subarea that are identifiable. The first of these is the area west of the high school and in the vicinity of the city's downtown areas. Within this area you will find most of the subareas's less than standard rated dwelling units. There are also a number of multi-family dwelling units scattered throughout this area.

The second distinct area is immediately east of the junior high school up to Sherwood Street. Except for a scattering of duplexes and a concentration of three four-plexes, this area is composed of standard single family dwelling units.

The last area is out at the northeastern edge of the city. This area is predominantly made up of newer standard single family residences. The only exception to this is a number of standard duplexes that are located adjacent to Central Avenue.

Subarea 2: Subarea 2 possesses the fewest number of dwelling units, 263 units, within any of the subareas. It also possess a slightly lower percentage of standard houses (79.09%) than the city as a whole (81.12%) and a higher percentage in each of the less than standard housing condition rating, substandard minor 14.07% compared to 13.03%, substandard major 6.08% compared to 5.59% and dilapidated 0.76% compared to 0.26%.

The area maintains 13.81% of the city's single family dwelling units, 8.99% of the multi-family units and 31.8% of the mobile homes. For the most part, these dwelling units are scattered throughout the area and thus the area has a very low density. The only exception to this is the 96 mobile homes located in one mobile home park.

The less than standard dwelling units are located throughout the area, with a small concentration of units in the area of the city hall and post office.

Subarea 3: Subarea 3 maintains 353 of the city's dwelling units. Of these 353, 83% (293 units) were rated standard compared to 81.12% citywide, 12.18% (43 units) were rated substandard minor compared to 13.03% citywide, 4.82% (17 units) substandard major compared to 5.59% citywide and no dilapidated units compared to 0.26% citywide. A vast majority of the less than standard dwelling units in this subarea is located south of 6th Avenue.

Within the area is 22.98% of the city's single family dwelling units, 29.63% of the city's multi-family units and 16.07% of the mobile homes.

The 56 multi-family dwelling units are comprised of the city's largest multi-family dwelling unit development, 24 units north of 6th Avenue, with the remainder of the units scattered throughout the area in a variety of unit sizes.

There is one bonafide mobile home park in the area which supports 39 mobile homes. The remaining 10 mobile homes are concentrated in one area, but to classify this area as a mobile home park may be questionable.

Subarea 4: Subarea 4 maintains 376 dwelling units within its boundaries. Of these units, 73.4% were rated standard, 18.35% substandard minor, 8.25% substandard major, without any units receiving a dilapidated rating. In each of the ratings that did appear in this subarea, the subarea was in a negative position as compared to the city as a whole. The difference in standard dwelling units in this subarea versus the city as a whole is approximately 8% less standard dwelling units, with the difference in substandard minor being approximately 5%; and substandard major 2.5% more than the city as a whole. All but one of the subarea's mobilehomes are located within one of four mobile home parks.

Another distinct characteristic of this area is the displacement of housing in the area. This area possesses the second largest number of dwelling units of the four subareas, with these units being concentrated in a relatively small area, resulting in a fairly high density.

CITY OF SUTHERLIN - HOUSING TYPES

	<u>Number</u>	<u>Percentage of Total</u>
Single Family	1,194	69.60
Multi Family	220	12.80
Mobile Home	300	17.50
Total	1,716	100.00

CITY OF SUTHERLIN - HOUSING CONDITIONS - 1977 SURVEY

	Single Family	%	Multi Family	%	Mobile Homes	%	Total	%
Standard	913	58.04	142	9.03	221	14.05	1,276	81.12
Substandard Minor	114	7.25	39	2.48	52	3.30	205	13.03
Substandard Major	48	3.05	8	.51	32	2.03	88	5.59
Dilapidated	4	.26	--	--	--	--	4	.26

Unincorporated Area Housing Condition

The unincorporated portion of the Study Area supports 598 dwelling units. These units are comprised of 455 (76.09%) single family structures, 20 (3.34%) multi-family structures, and 123 (20.57%) mobile homes, according to the 1977 Housing Survey.

Each of these structures was evaluated for a condition rating using the same set of criteria that the houses within the city were judged. The results of this survey are present in the following table. In summary, the survey revealed that 72.91% of the housing was in standard condition, 19.56% substandard minor, 5.52% substandard major and 2.01% dilapidated.

This information is presented in further detail by the previously defined areas in the following table. The highlight of these tables is that Area 3 possesses a large majority of each type of dwelling unit categorized, with a total of 66.56% of the total amount of housing found in the unincorporated portion of the Study Area. Of the 398 dwelling units located in this area, 314 were single family units (78.89%) and 80 (20.10%) were mobile homes. As might be expected because of the dominance Area 3 has on the total number of dwelling units, the percentage condition ratings for the area are extremely close to the total percentage condition ratings for the entire unincorporated area.

UNINCORPORATED SUTHERLIN AREA - HOUSING TYPE
(1977 Survey)

	<u>Number</u>	<u>Percentage of Total</u>
Single Family	455	76.09
Multi Family	20	3.34
Mobile Home	123	20.57
Total	598	100.00

UNINCORPORATED SUTHERLIN AREA - HOUSING CONDITIONS - 1977

	Sngl Fam	%	Mlti Fam	%	Mbl Hmes	%	Ttl	%
Std	339	56.69	10	1.67	87	14.55	436	72.91
Substd Minor	78	13.04	6	1.00	33	5.52	117	19.56
Substd Major	30	5.02	0	---	3	0.50	33	5.52
Dilapidated	8	1.34	4	0.67	---	---	12	2.01
Total	455	76.09	20	3.34	123	20.57	598	100.00

UNINCORPORATED SUTHERLIN AREA - HOUSING CONDITION - 1977

AREA 1

	Single		Multi		Mobile		Ttls	
	Family	%	Family	%	Homes	%		%
Standard	60	52.63	4	3.51	18	15.79	82	71.93
Substd Minor	20	17.54	-	--	8	7.02	28	24.56
Substd Major	4	3.51	-	--	-	--	4	3.51
Dilapidated	-	--	-	--	-	--	-	--
Totals	84	73.68	4	3.51	26	22.81	114	100.0%
% of Total Units in Subarea		14.04		0.67		4.35		19.06

AREA 2

Standard	29	42.03	2	2.90	10	14.49	41	59.42
Substd Minor	6	8.70	6	8.69	2	2.9	14	20.30
Substd Major	7	10.14	-	--	-	-	7	10.14
Dilapidated	3	4.35	4	5.80	-	-	7	10.14
Totals	45	65.22	12	17.39	12	17.39	69	100.0%
% of Total Units in Subarea		7.53		2.00		2.00		11.54

AREA 3

Standard	240	60.30	4	1.01	54	13.57	298	74.87
Substd Minor	50	12.56	-	-	23	5.78	73	18.34
Substd Major	19	4.77	-	-	3	0.75	22	5.53
Dilapidated	5	1.26	-	-	-	-	5	1.26
Totals	314	78.89	4	1.01	80	20.10	398	100.0%
% of Total Units in Subarea		52.51		0.67		13.38		66.56

AREA 4

	Single Family	%	Multi Family	%	Mobile Homes	%	Ttls	%
Standard	10	58.82	-	-	5	29.41	15	88.24
Substd Minor	2	11.77	-	-	-	-	2	11.76
Substd Major	-	-	-	-	-	-	-	-
Dilapidated	-	-	-	-	-	-	-	-
Totals	12	70.59	-	-	5	29.41	17	100.0%
% of Total Units in Subarea		2.01				0.83		2.84

Persons per Household

The 1980 Census shows a population of 4,396 and a housing count of 1,710 for Sutherlin. This gives an average household size of 2.6 persons per household. Countywide figures for the same year show a population of 93,748, a housing count of 35,644, and a household size of 2.6 persons per household--identical to Sutherlin's.

The September 1977 survey figure of 1,573 units and the 1977 population projection from Portland State University of 4,650 persons, assuming a 2% vacancy rate, results in an average of 3.01 persons per household. This is a decrease from the 1970 figure but this could be expected, considering the national trend in a lower birth rates and smaller family units.

Households

The 1980 Census counted 1600 households in Sutherlin. Of these, 258 or 16.1% were 1 person households, and 1342 (83.9%) contained two or more persons.

According to Census information, in 1980, 153 (9.7% of total) households in Sutherlin were female-headed, of which 148 had children younger than 18 years of age.

The 1980 Census also provides specific information on the household status of two other distinct segments of the community, persons 65 years and older and persons 18 years and younger. The following tables present this information in detail compared with 1970 figures.

Relationship of Persons Under 18 Years (HOUSEHOLDS)

	<u>1970</u>	<u>1980</u>
Persons under 18	1,195	1,610
Head or wife of head	7	7
Own child of head	1,115	1,432
In husband-wife families	1,010	1,130
In families with female head	88	302 (Single Parent)
Other relatives of head	62	43
Other	11	36

<u>Persons 65 Years and Older</u>	<u>1970</u>	<u>1980</u>
Head of family	108	189
Wife of head	52	128 (Spouse)
Other family members	11	25
Primary individual	74	103
Not related to head of household	6	4

The major information that this table reveals is that there are 108 households in the community with household heads of 65 years or older and that there are 74 individuals that are "primary individual", which means that there are 74 persons 65 years and older living by themselves. This statistic increased by 139% in 1980 with 103 persons over 65 living alone. 1990 figures can be expected to be higher, given the overall aging of the population.

The information on persons younger than 18 years old reveals a fact that most individuals would think obvious but which is still important to have documented when a community is trying to determine its future housing needs. This is that of the 1,195 persons in 1970 that were younger than 18 years old, only 7 were identified as head or wife of head of households. What this means is that almost all individuals under 18 are in some manner lower members of household, rather than primary (heads or spouse of heads) members. However, the 1980 Census recorded a significant growth in the numbers of single parents.

Tenancy

The 1970 Census indicates that of the 958 occupied dwelling units in the city, 650 or 67.85% were owner occupied, while 308 or 32.15 were renter occupied. In 1980, Census figures recorded that 1190 or 74.4% of the 1600 occupied dwellings were owner-occupied, while 410 or 25.6% were renter-occupied.

The Countywide 1970 Census figures for the 22,560 occupied housing units show that 70.6% were owner occupied, while 29.4% were renter occupied. 1980 County-wide Census figures show occupied housing units with 76.1% of them owner-occupied and 23.1% renter-occupied.

Household Income, Owner Costs, Rent

Although in the City of Sutherlin's case it cannot be documented, the national trend during this period has been that incomes have not kept pace with the increases in housing cost. Therefore, the relationships that are being shown in 1980 probably reflect a better situation with regards to the amount of an individual's income that is spent on providing shelter than exist today.

RENTER-OCCUPIED HOUSING UNITS BY HOUSEHOLD INCOME IN 1979 BY GROSS RENT AS A PERCENTAGE OF INCOME (1980 U.S. CENSUS)

<u>Income</u>	<u>HOUSING UNITS</u>
LESS THAN \$5,000	
Less than 20%	5
20% to 24%	6
25% to 34%	-
35% or more	116
Not computed	18
\$5,000 TO \$9,999	
Less than 20%	-
20% to 24%	14
25% to 34%	21
35% or more	57
Not computed	-
\$10,000 TO \$14,999	
Less than 20%	21
20% to 24%	21
25% to 34%	42
35% or more	-
Not computed	-
\$15,000 TO \$19,999	
Less than 20%	19
20% to 24%	-
25% to 34%	9
35% or more	-
Not computed	-
\$20,000 OR MORE	
Less than 20%	72
20% to 24%	-
25% to 34%	-
35% or more	-
Not computed	-

OWNER-OCCUPIED HOUSING UNITS BY HOUSEHOLD
INCOME IN 1979 BY OWNER COSTS AS A
PERCENTAGE OF INCOME
(1980 U.S. CENSUS)

<u>Income</u>	<u>HOUSING UNITS</u>
LESS THAN \$5,000	
Less than 20%	5
20% to 24%	5
25% to 34%	5
35% or more	35
Not computed	5
\$5,000 TO \$9,999	
Less than 20%	46
20% to 24%	11
25% to 34%	12
35% or more	64
Not computed	-
\$10,000 TO \$14,999	
Less than 20%	58
20% to 24%	25
25% to 34%	16
35% or more	35
Not computed	-
\$15,000 TO \$19,999	
Less than 20%	92
20% to 24%	33
25% to 34%	46
35% or more	25
Not computed	-
\$20,000 OR MORE	
Less than 20%	301
20% to 24%	24
25% to 34%	25
35% or more	8
Not computed	-

The 1980 Census indicates that the median rent figure for Sutherlin was \$255.00. The real value of this information is when it is compared with the income of renters in the community. In essence, this is what is done in the "Income & Gross Rent as % of Family Income For Renter Occupied Units".

For renters, the same sort of association between a person's income and what they spend on rent exists as with household income and owner costs. With this in mind, individuals should be spending approximately 25% or less of their annual income on rent. Upon examining this table, it becomes apparent that the lower income households are having a difficult time finding rentals in a price range which allows them to meet this standard rule. The table also reveals that there is a considerable number of families which could afford to live in a more expensive rental. Whether they actually would, would depend upon their personal preferences.

Age of Structure

In the past, the age of structure information has been valuable as an indicator of the possible degree of deterioration that a community's housing stock may be experiencing solely based on the age of a house. It was also helpful in gauging the future life expectancy of the housing within a community and therefore providing an indicator as to a replacement factor that a community must be anticipating. To a certain degree this is still true, but no nearly to the level that it has been in the

past. The reason for this is a nationwide interest in rehabilitating older homes. This interest has been brought about by a number of factors, which include such things as the cost of new housing, construction techniques and materials currently being used, and the increasing nostalgia for older homes, just to name a few.

In 1980, 6.1% of the community's housing stock was constructed prior to 1940. At this time, 31.3% of the community's housing was constructed during the time period of 1940 through 1959, as the following table shows.

SUTHERLIN HOUSING STATISTICS:

YEAR STRUCTURE BUILT--1980 CENSUS

	<u>Number</u>	<u>Percentage of Total</u>
1979 to March 1980	91	5.3
1975 to 1978	438	25.6
1970 to 1974	318	18.6
1960 to 1969	222	13.0
1940 to 1959	536	31.3
1939 or earlier	105	6.1
<u>TOTAL</u>	<u>1710</u>	<u>100.0</u>

Information derived from the 1970 Census and incorporated into the original comprehensive plan reveals that 20.77% of the city's housing stock was built prior to 1940 and thus at this time the newest of these house would be a minimum of 30 years old. This table also shows that during the period between 1940 through 1959, 63.7% of the city housing stock was built.

The information from this table was then subjected to the following building permit information in an effort to update the community's age of housing figures. The two assumptions that had to be made in order to do this were: (1) There were no building permits for 1970 issued prior to March of 1970 and therefore the total 1970 building permit information can be used; and (2) all demolished structures were in the oldest age categories.

A fact that also must be understood is that building permits are not issued for mobile home placements. Therefore, the increase in number of mobile homes from 1970 to 1977 of 239 units all appear in one category.

Total Building Permits Issued 1970 to September 1977:

Single Family	328 units
Multi-Family (28 permits)	133 units
Mobile Home Placements	239 units

Residential construction slacked, however, during the recession years of the 1980's. Data on building permits issued between 1977 and 1986 is unavailable. Because very little changed in the way of housing during the 1980's, the projections were considered to be unchanged as well.

HOUSING SUMMARY

This element presents the best information available related to the current housing situation in the community and also projects the future housing needs of the community to support 10,000 persons. (1)

Current Housing

A survey in September of 1977 by the Umpqua Regional Council of Governments indicated that the 368 acres of residentially developed land in the City of Sutherlin supported 1,573 dwelling units. Of the 1,573 total dwelling units, 1,079 or 68.6% were single family, 189 or 12.0% were multifamily, and 305 or 19.4% were mobile homes.

This survey also rated the condition of each dwelling unit. Four condition categories were used to rate each structure: Standard, Substandard Minor, Substandard Major, and Dilapidated. A detailed definition of each of these categories appears in the Housing Study in Appendix A. The major factors considered when evaluating the soundness of a structure were the roof, foundation, wall/siding, porch, and paint. Minor factors considered were windows, screens, doors, and chimneys. As for mobile homes, skirting and tie downs were major factors considered in their structural evaluation.

The survey revealed that 1,276 units or over 81% of the total current housing stock was in standard condition, while approximately 13% (205 units) and 5.5% (88 units) of the dwelling units were rated as substandard minor and major respectively. Less than 1% of the dwelling units were considered to be dilapidated.

A detailed breakdown of the results of the condition survey by geographically defined areas appears in the Housing Study in the Appendix. This information could be extremely beneficial to the city in either future planning efforts or in attempts to secure federal funds for community development projects.

Household Characteristics

The 1970 and 1980 U.S. Censuses provide a considerable amount of information on not only the physical condition of housing with a community, but also the social characteristics of households. Although this information may seem to be somewhat dated, it is still the best information available on the social character of Sutherlin's households, and therefore can be used in determining what the housing needs of the residents of the community are.

Since Sutherlin experienced a relatively high rate of residential growth during the 1970's, an update of the age of housing in the community was in order and accomplished by using available building permit information.

The 562 dwelling units constructed during 1970 to 1977 resulted in over 35% of the total current housing stock being less than 7 years old. As might be expected, the 1970's residential building activity has considerably added to Sutherlin's housing stock.

Conclusions

The relative newness of much of the community's housing stock results in the community having a high level of standard rated houses. But the newer houses alone could not generate the high standard rating of the housing stock, and it can be assumed that several of the "older" homes in the community are kept in good condition and should be expected to be an integral part in satisfying the community's future housing needs.

following chart summarizes the division of single family housing needs and manufactured housing:

<u>Single Family Housing</u>	<u>% Split</u>	<u>Unit Dwellings</u>	<u>Gross per Acre</u>	<u>Acres Needed</u>
Conventional	63	1181	6	197
Manufactured or Conventional	<u>37</u>	<u>694</u>	6	<u>116</u>
All Single Family	100	1875		313

In light of the above-mentioned considerations, the following chart displays Sutherlin's existing and future housing needs for 10,000 persons to the Year 2000 by housing.

	<u>1977</u>		<u>2010</u>		<u>Additional Units Needed</u>	
					<u>1977 - 2010</u>	
Single Family	1079	69%	2260	51%	1181	41%
Manufactured	(Data N/A)		694	16%	694	24%
Multifamily	189	12%	890	20%	701	24% ←
Mobile Homes	<u>305</u>	19%	<u>604</u>	14%	<u>299</u>	10%
Total	1,573		4448		2,875	

It appears that Sutherlin is experiencing the same trend as the remainder of the nation, an increase in the number of households, but a smaller number of persons per household.

Due to the tremendous change in certain factors of our national economy during the 1970's and 1980's and the direct influence these factors have on housing, the value of the 1970 and 1980 Census in assessing Sutherlin's future housing needs with regards to housing cost compared to household income, is marginal at best.

Future Housing Needs

Because less than expected housing construction occurred during the 1980's, the housing projections made in the original Comprehensive Plan are considered to be still valid. The only changes made during Periodic Review in 1990 were to extend the projection period to the year 2010 and to bring the housing mix into compliance with state manufactured housing regulations.

The community has decided to strive for a year 2010 housing mix of 60% single family, 20% multifamily, and 20% mobile homes. The decision to strive for this housing makeup was based on the assumption that the community should have a variety of housing available in an effort to accommodate all household income levels. Due to the above mentioned inadequacies in the available household income information and the rising cost of housing, an effort to identify the price range of this housing over such a long period of time would have been an exercise of little benefit to the community.

Instead of determining future housing needs by income or cost of housing, it was decided that the future housing needs should attempt to eliminate the community's current major identifiable deficiency in the housing market which is the lack of vacancies in both rental and owner occupied units. In order to assure that the future housing needs for Sutherlin include a certain percentage of vacant dwelling units, the Department of Housing and Urban Development (HUD) standards for acceptable levels of vacancy in a community's housing stock were used. The HUD vacancy standards are 1.5% for single family and 6.5% for multi-family. Mobile homes were subjected to the 1.5% factor. Other criteria used were a $1\frac{1}{2}$ replacement factor and a 2.49 person average household size.

The 1989 Oregon Legislature enacted new planning requirements for manufactured housing on lots outside of manufactured housing subdivisions. ORS 197.303 defines as a needed housing type, "Manufactured homes on individual lots planned and zoned for single-family residential use that are in addition to lots within designated manufactured home subdivisions." This definition applies to Sutherlin and the city must comply by zoning sufficient buildable land in order to meet the need. These requirements must be met by January 1, 1991 or at a jurisdiction's periodic review, whichever comes first.

During the 1990-91 Periodic Review, the City of Sutherlin complied with this requirement by using the Department of Land Conservation and Development's standard methodology to calculate needed manufactured housing.. Beginning with the need for housing already projected in the Comprehensive Plan, the number for single family housing was split using Douglas County's calculated percentage of the number of people likely to buy manufactured housing based on their income, housing cost, and population. For Douglas County, this percentage is 37%.

The number of needed single family dwellings was combined with the number of manufactured housing projected for inclusion in mobile home subdivisions. Next, the number of single family dwellings was split between conventional and manufactured homes using the Douglas County percentage of people likely to buy manufactured homes. These numbers were divided by an average of 3.5 dwellings per acre to derive the total acreage required to meet the need with the assumption that all manufactured housing construction will take place on buildable lands of 0 to 12% slope. The amount of land allocated as a result of this projection is found in the LAND USE ELEMENT. The

HOUSING ELEMENT -- GOALS AND POLICIES

GOAL: TO ENSURE THAT SUTHERLIN'S HOUSING STOCK IS MAINTAINED AT A STANDARD LEVEL.

POLICIES:

1. Encourage the quick replacement of all dilapidated or inadequate housing.
2. Encourage the rehabilitation of deteriorating housing through an incentive program which would reward maintenance and repair.
3. Consider adopting a housing code with minimum standards that would protect residents but allow for new and innovative techniques to reduce the cost of housing and reduce the rate of deterioration.
4. Require new manufactured homes to be tied down and completely skirted or placed on a conventional foundation.
5. As funds become available, the City shall actively pursue methods of undertaking a rehabilitation program for houses which need work in order to remain safe dwelling units.

B. GOAL: TO ENABLE ALL MEMBERS OF THE COMMUNITY TO LIVE IN HOUSING APPROPRIATE TO THEIR NEEDS.

POLICIES:

1. Investigate the feasibility of deferring increases in assessed valuation on the homes of the elderly (and others on fixed incomes) until the property changes ownership.
2. Encourage innovative designs for various types of multi-family housing in order to meet the diverse needs of smaller households such as those of the elderly and young families.
3. Explore all public and private means of providing needed housing for the elderly and low income households.
4. The city encourages and recognizes government-assisted housing as a source of affordable, safe, and sanitary housing opportunities for low, moderate, and fixed income households.

C. GOAL: TO LOCATE FUTURE HOUSING SO THAT AVAILABLE LAND IS BOTH USED EFFICIENTLY AND DEVELOPED FOR A HIGH DEGREE OF LIVABILITY.

POLICIES:

1. Encourage infilling of the existing residential areas by incentives for new construction in already-serviced areas.
2. Provide buffer zones between residential areas and conflicting lands uses. (i.e., industrial, certain kinds of commercial, residential, etc.) in order to protect the overall liveability of those areas.
3. Ensure that city ordinances provide the maximum opportunity for a variety of housing types by using innovative residential development techniques such as planned unit development and cluster development.

LAND USE ELEMENT

EXISTING LAND USE

A detailed land use survey of the city and urban growth area was conducted by URCOG in November, 1977. The categories used in this land use identification process were Residential, from which single family, duplexes, multifamily and manufactured homes were each distinguished; Commercial, Industrial, Public, which included schools, government facilities; and, semi-public which includes all churches, cemeteries, clubs, etc., and rights-of-way, including all roads and land used for railroad lines.

The survey was updated during the 1990 periodic review using building permits records, aerial photographs, and site inspections. Although the building permit record is incomplete and lacks data from 1977 to 1986, by a detailed analysis of the other methods it was determined that little besides residential construction has taken place in Sutherlin since the original draft of the Comprehensive Plan. The following chart reflects the update of the 1977 survey.

The acreage totals were generated by designating the actual physical use of the land identified during both surveys onto the City's base map and then scaling off the areas. When a parcel of land was being used in more than one land use, both uses were identified and in the most practical manner available, an acreage for each use was established. The most common instance where this had to be done was when a residential dwelling unit was located on a large parcel of land which was also being used either for agricultural purposes or was open land. The residence was entered on the map and an amount of land ranging between 10,000 square feet and one acre, depending on the density of the surrounding area, was credited to the residential acreage figure with the remainder falling in the open land acreage total.

SUTHERLIN
EXISTING LAND USE BY ACREAGE
(1990)

	City Limits	% of Developed Land (City Limits)	UGA	Gross Total	% of Area
Residential					
Single Family	<u>331</u>	<u>22.2</u>	40	<u>371</u>	<u>10.3</u>
Multifamily	<u>15</u>	1.0	0	<u>15</u>	<u>0.4</u>
Mobile Homes	<u>81</u>	<u>5.4</u>	21	<u>102</u>	<u>2.8</u>
Commercial	<u>64</u>	<u>4.3</u>	<u>21</u>	85	<u>2.4</u>
Industrial	<u>150</u>	<u>10.0</u>	0	<u>150</u>	<u>4.2</u>
Public	153	<u>10.2</u>	4	157	<u>4.4</u>
Semi-Public	270	<u>18.1</u>	0	270	<u>7.5</u>
Rights-of-Way	430	<u>28.8</u>	20	450	<u>12.5</u>
<u>Net Developed Area</u>	<u>1494</u>	100.0%	<u>106</u>	<u>1600</u>	<u>44.5</u>
Open Land	<u>1789</u>		<u>206</u>	<u>1995</u>	<u>55.5</u>
<u>Gross Area</u>	<u>3283*</u>		<u>312</u>	3595	

* Includes the 62 acres annexed to the City between 1977 and 1990 and the redesignation of the site of the former airport to vacant industrial land.

The following table depicts similar land use statistics for other Oregon cities for comparative purposes.

Land Use in 33 Oregon Cities

<u>Use</u>	<u>Percent of Developed Land Area Cities with 2,500 to 10,000 Population</u>
Residential	36.8%
Single Family	34.7%
Multifamily	2.1%
Commercial	4.2%
Industrial	11.2%
Public and Semi-public	15.4%
Street Right-of-Way	32.4%

A review of the City of Sutherlin and the Urban Growth Area Land Use Maps reveals the following:

- A. There are two very distinct service commercial areas in the city, the Interstate 5/Central Avenue area and the downtown area. The I-5/Central Avenue area is characterized by commercial uses associated with the interstate and automobiles, while the downtown possesses diverse commercial interest and other services.
- B. Central Avenue, the city's only through east/west street, continues to be developed in a strip fashion with both residential and commercial uses having direct access onto and off of the street;
- C. There are two very definite residential concentrations within the city. The first is the area immediately to the east of I-5, and the second is the area surrounding the schools in the northeast section of the city. Outside these areas the city is relatively sparsely populated.
- D. Industrial land is concentrated along the railroad and, because it is primarily related to wood products, a small number of firms take up a considerable amount of land. Conversion of the municipal airport to an industrial park in 1990 added 119 acres to Sutherlin's industrial land base.
- E. Within the city, mobile homes are located in mobile home parks or in concentrated areas, with 8 mobile homes located on individual lots.

Future Land Use Needs

The projections contained within this Plan indicate that Sutherlin will grow by as many as 2095 acres over the next 20 years. Approximately 88% of the City's future land use needs (1853 acres) will be accommodated inside the city limits. This includes 94% of the future residential, 100% of the future commercial and 59% of the City's future industrial land use needs. The following table indicates the amount of land both within the city limits and the unincorporated portion of the urban growth boundary which is planned to accommodate this future growth.

BUILDABLE LANDS INVENTORY
(UPDATED DURING PERIODIC REVIEW 1990)

	<u>Inside City Limits</u>	<u>Urban Growth Area</u>	<u>Total</u>
Developed	<u>1494</u>	<u>106</u>	<u>1600</u>
Undeveloped			
Buildable			
0-11% Slope	775	180	955
12-24% Slope	204	26	230
25%+ Slope	810	0	810
Unbuildable	<u>0</u>	<u>0</u>	<u>0</u>
Total	<u>3283</u>	<u>312</u>	<u>3595</u>

RESIDENTIAL LANDS

As indicated in the Housing section of this Plan, up to an additional 2875 housing units will be needed to accommodate Sutherlin's growth over the next twenty years. A total of 1416 buildable vacant acres have been designated for this new construction and to accommodate future public and semi-public uses (discussed later in this element). Of this total, 1330 acres are located within the City and 86 acres are located in the unincorporated portion of the Urban Growth Boundary. (These totals do not include the 120 acres that are outside the UGB but inside city limits and designated Forest use.)

Multifamily and Manufactured Homes.

The Housing Element of this Plan indicates that future residential development in Sutherlin is anticipated to follow recent trends in housing types. The increased cost of single family detached homes beyond the affordable range of many home buyers will result in increased demand for manufactured homes and multifamily housing. These latter housing types are often more affordable due to lower construction costs per unit as well as lower land costs due to reduced land area per unit. The City recognizes this housing need and intends to accommodate it through the provision of adequate amounts of land designated for these housing types.

All of the future need for multifamily housing (701 units) is expected to be located within the City's Medium and High Density Residential Zoning Districts. There are 38 acres of vacant land planned for high density residential use. Assuming a density of 12 dwelling units per acre, this land would accommodate 456 multifamily units or 65% of the need for that housing type. The remainder of the multifamily need would be accommodated on property planned for medium density residential development, consuming 31 acres at a density of 8 units per acre.

Future manufactured home development within the City and Urban Growth Boundary is expected to occur within mobile home parks and in subdivisions. It is anticipated that approximately 49% of future manufactured home placements (286) will occur within subdivisions. The other 299 placements will occur in new or expanded manufactured home parks. Manufactured home subdivisions will require approximately 82 acres assuming a density of 3.5 units per acre (consistent with other single family development). The development of new or expanded manufactured home parks will require approximately 37 acres, assuming a density of eight units per acre (consistent with existing development of this type.)

The 188 acres needed to accommodate these housing types should be located so as to minimize construction costs associated with their development. The topography of such areas should be as flat as possible. Also, such areas should be located adjacent to or near existing roads, water and sewer lines as added means of minimizing development costs.

Single Family

Single family development is planned to occur on the remainder of the residentially designated land within the Urban Growth Boundary. This includes lands with slopes less than 20% and in areas where slopes exceed 20% as well. Assuming that all of the projected multifamily and mobile home need and that 76% of the public and semi-public need (76 acres, the remainder of the public and semi-public need would be accommodated in commercial areas) occurs on slopes less than 12%, an additional 232 acres of land of similar slope would be available for single family use. Assuming an average density of 3.5 dwellings per acre, this acreage could be expected to provide sites for approximately 813 single family homes, or 51% of the single family need.

In order to comply with planning requirements enacted by the 1989 Oregon Legislature for needed manufactured housing as stated in ORS 197.295 through 197.313, projections based on a standard methodology approved by the Oregon Department of Land Conservation and Development are included both here and in the HOUSING ELEMENT. A manufactured home is a manufactured dwelling which has been certified to meet 1976 HUD requirements. ORS 197.307(3) requires cities and counties to zone sufficient buildable land to meet the need.

The percentage of manufactured homes that make up the needed housing requirement was calculated using a percentage split between conventional and manufactured homes based on the percentage of households with incomes above \$15,000 and between \$15,000 and \$26,000. Acreages required to meet the projected need for manufactured housing were calculated and inserted into the following table. (See the HOUSING ELEMENT for a full discussion of the methodology used to meet this requirement.)

The following table summarizes the residential land use acreage needs calculated by this Plan.

FUTURE RESIDENTIAL LAND USE NEEDS BY 2010

	<u>Units</u>	<u>Acres</u>
Single Family		
0-11% Slope @ 3.5 units per acre	1099	314
12-24% Slope @ 2.0 units per acre	460	230
25%+ Slope @ 1.0 unit per 2.25 acres inside UGB	304	684
25%+ Slope @ 1.0 unit per 10.0 acres outside UGB (<u>Forest Use</u>)	12	120
Mobile Homes		
- in parks @ 8 units per acre	299	37
Multifamily Units		
- @ 12 units per acre	456	38
- @ 8 units per acre	<u>245</u>	<u>31</u>
Total	2875	1454

Commercial Lands

The distinct nature of the commercial lands within the community results in two future commercial land use designations to satisfy the various types of future commercial land needs.

It is the community's intent to maintain the central business district (CBD) as the major service area for Sutherlin. In order to accomplish this, a concerted effort by the community to improve traffic and pedestrian circulation, provide adequate off-street parking and encourage a broad cross section of land uses will have to be made. It is expected that higher density residential development will be a compatible land use in the periphery of the CBD. Twelve acres of vacant land have been designated to accommodate future commercial uses in the CBD. The Community Commercial designation has been applied to all existing and planned commercial development. This designation is intended to recognize and address two commercial situations.

First, it is intended to recognize the linear nature of the development that has occurred along Central Avenue. The Community Commercial designation is intended to limit commercial development along Central Avenue to those areas already committed to such development. Infilling and redevelopment in these areas should be encouraged with the idea of clustering commercial activities when possible, improving the visual attractiveness of the area and minimizing the conflict between ingress and egress from these commercial activities and the transportation function of Central Avenue. Land uses in this commercial area should be evaluated based on their compatibility with the land uses immediately adjacent to them, insurance that the proposed use will be located on parcels large enough to provide adequate off-street parking, that existing points of ingress and egress be used whenever possible, and that the proposed activity does not adversely affect the CBD. A total of 18 vacant, buildable acres of land are available in this area for commercial uses. These acres are primarily larger tracts adjacent to medium or high density residential nodes.

The second intent of the Community Commercial designation is, in part, to slow the "trade drain" from Douglas County. Trade and service centers which are readily accessible to several growth centers could serve to provide new retail development and attract consumer dollars formerly spent in adjacent counties.

Such areas should also be developed in compact centers and provide both neighborhood convenience shopping facilities and retail activities which may require the support of the regional community. In evaluating the suitability of commercial activities in the community commercial areas, considerable care should be taken to ensure that these areas will not detract from the CBD, that traffic conflicts are minimized, that adequate measures are taken to buffer commercial activities from adjacent residential land uses, and that its area be limited so as not to create an over abundance of commercial lands that cannot be supported by the community.

Due to the regional nature of this type of commercial land, a total of 87 vacant buildable acres within the city have been designated for such purposes. These lands are adjoining I-5 and are compatible with surrounding uses for this purpose.

It is anticipated that, consistent with existing development, approximately 24 acres of this vacant commercial land will be developed for public or semi-public use. As a result there will be 93+ acres of land available for commercial development. Development of this vacant acreage will result in a total of 168 acres of commercial use within the city limits and UGB or 1.68 acres of commercial development per 100 persons at the Year 2010 (assuming a Year 2010 population of 10,000). This ratio approximates the existing ratio of 1.61 acres per 100 persons.

Industrial Land Needs

The economy of Sutherlin is, in actuality, a segment of the economy of Central Douglas County. Future industrial development within the Sutherlin Urban Growth Boundary is determined to a considerable extent by the future economy of the central part of the county. For an inventory and discussion of industrial lands and an economic opportunities analysis, see the ECONOMIC ELEMENT.

During May and June, 1980, a detailed soil survey was made on 638 acres within the Sutherlin study area. The purpose of the survey was to assess selected areas for their ability to function as industrial sites. The soil survey was done in accordance with Soil Conservation Service standards with special emphasis being given to the bearing strengths of soil.

This soils analysis included an evaluation of most of the potential sites identified in previous inventories as well as three additional areas west of I-5 along Highway 138, within the study area.

The soils analysis revealed that all of the potential industrial sites within the city possessed soils series with estimated bearing strengths of 1500 lbs/sq. ft. or less. These soils are generally unsuitable for heavy industrial uses.

Two sites within the study area west of the city limits were found to have soils series with estimated bearing strengths of 3000 lbs/sq. ft. These soils are generally acceptable for heavy industrial uses.

In April, 1981, the city staff conducted an in-depth analysis of all previously proposed potential industrial sites, as well as other sites suggested through the planning process.

As part of this analysis, potential sites were designated for either light or heavy industrial uses based on the application of the soils survey data. The criteria used in designation are shown on the following table.

Criteria was then established to further classify each potential site as either a primary or secondary site. Once primary sites are identified, policies can be developed toward protecting those sites from non-industrial development. The criteria used to determine primary and secondary sites is established on the chart in this section.

Due to the location of I-5 and the Southern Pacific Railroad within the study area, all potential sites were classified as having approximately equal major transportation access.

A total of 630 acres of land have been designated by this Plan for future industrial development. Of this total, 470 acres are located in the city limits and 160 acres in the unincorporated portion of the Urban Growth Boundary. Two-hundred eighty-one acres inside the city limits are designated for heavy industry and 189 acres are designated for light industry. All of the industrially designated land outside of the city is intended for heavy industrial use. Of this unincorporated acreage, 17 and 10 acres are presently in residential and commercial use, respectively, and are proposed for conversion to industrial use.

The community is more concerned with having quality industrial sites with all services available to the site than just a large quantity of marginal industrial sites.

Public and Semi-Public Lands

An additional 100 acres of public and semi-public land are estimated to be required by the Year 2010. This amount of growth would result in an overall decrease in the number of acres of such uses per 100 persons by the Year 2010. This 100 acre estimate, however, recognizes the existence of many public and semi-public uses which will not require additional land area to serve population growth. Furthermore, it is not possible to precisely locate where all such uses will occur in the future. The Future Land Use Map reflects what areas can now be identified for such uses.

Due to the nature of the activities that are associated with public and semi-public uses and consistent with past trends, it is assumed that these uses will locate in the areas identified for commercial and residential land uses. The projections of this Plan assume that such uses will consume 24 acres of commercially designated land and 53 acres and 23 acres of land designated for low and medium density residential use, respectively (consistent with the existing development pattern of semi-public uses).

A 57 acre vacant parcel has been designated for public use. This property, which is under school district ownership, consists of a log pond. Due to the structural limitations to the future use of this parcel, it has not been included in the calculation of land available to satisfy future public land use needs.

LOCATION OF THE URBAN GROWTH BOUNDARY

The final alterations in the preliminary UGB study area were made primarily on the basis of physical and natural features of the area. A series of map overlays were prepared that indicated the location of the soils suitable for primary industries, steep slopes and other known hazards, existing land uses and existing sewer and water lines.

By reviewing the overlays in various combinations, it was possible to compare specific areas for their desirability for urbanization. In attempting to reduce the size of the preliminary urban growth boundary to more accurately reflect the projected need, factors relating to public service costs, existing land use patterns, and community attitudes took on added significance.

Citizen involvement played an important role in determining the final configuration of the UGB. This procedure is detailed in the Citizen Involvement element.

In recognition of the City's future land use needs and the topographic constraints to development and servicing certain undeveloped properties within the city limits, a 120 acre parcel at the southern limits of the city has not been included within the urban growth boundary. This parcel is located on slopes in excess of 25%

and is extensively forested. This parcel has been designated for resource for residential use. Property divisions in this area will be restricted to 10 acre minimum parcel sizes and urban level services will be extended to this area.

COMPREHENSIVE PLAN DESIGNATIONS

A total of 11 designations have been utilized on the Comprehensive Plan Map to guide land use within the Sutherlin city limits and urban growth boundary. Following is a description of each of these designations and their intent.

High Density Residential. This designation has been applied to areas of existing high density multifamily residential use and to areas planned for residential use of this type. Development in these areas is expected to occur at densities up to 33.5 dwellings per acre.

Medium Density Residential. This designation is intended to accommodate lower density multifamily development such as triplexes, four-plexes, etc. and mobile home parks. It has been applied to areas so developed and to areas considered to be appropriate for future development of these types. Development in these areas is expected to occur at densities up to 14.52 dwellings per acre.

Low Density Residential. This designation is intended to accommodate a majority of the City's family residential development. It has been applied to areas so developed and undeveloped areas with slopes less than 12% which are well suited for low density development. Development of these areas is expected to occur at densities up to 7.26 dwellings per acre.

Residential Hillside. This designation is intended to accommodate residential development on a limited basis due to topographic constraints. This designation has been applied to areas of existing or planned residential development where slopes are of 12% or greater. Development of these areas is to be limited to no more than 3.63 dwellings per acre.

Residential-Agriculture/Forestry. This designation has been applied on a limited basis to property inside the city limits yet outside of the urban growth boundary. Resource use (agriculture or forestry) is to be allowed in this area, as is residential development up to one dwelling per 10 acres. It is not intended that urban levels of service be provided to this area.

Central Business District. This designation has been applied to the City's central business district. It is intended to accommodate light retail and service commercial uses, thereby satisfying the daily needs of city residents.

Community Commercial. This designation is intended to accommodate a full range of heavy retail and service commercial uses and tourist-oriented commercial uses. It has generally been applied to areas where uses of these types exist. Future tourist-oriented uses are encouraged to locate at or near the I-5/Highway 138 interchange, while heavier commercial uses are intended for the Central Avenue corridor between I-5 and the CBD.

Heavy Industrial. This designation has been applied to areas of existing heavy industrial development and to areas well suited for future uses of this type. A major determinant in application of this designation has been the soil bearing capacity of a site.

Light Industrial. This designation has been applied to areas of existing light industrial development such as manufacturing from previously prepared materials, lumber yards, plumbing shops, etc. and to areas well suited for future uses of this type.

Public. This designation has been applied to most of the publicly owned property within the city limits and UGB. It is intended to allow for continuation of the existing public uses on these properties and to reserve vacant property for future such uses.

The total acreage to which each of these designations has been applied (both inside the city limits and within the unincorporated portion of the urban growth boundary) is shown in the following table. These acreage figures include land which is presently developed as well as vacant land intended for development consistent with the corresponding plan designation. Acreage for existing rights-of-way have been included so that the totals will include all acreages within the boundaries of each designation.

PLAN DESIGNATION ALLOCATIONS
(UPDATED 1990 TO INCLUDE
ANNEXATIONS FROM 1977 TO 1990 AND
REDESIGNATION OF THE AIRPORT TO AN INDUSTRIAL PARK)

	<u>Inside City</u>	<u>Outside City</u>	<u>Total</u>
High Density Residential	<u>66</u>	<u>0</u>	<u>66</u>
Medium Density Residential	288	0	288
Low Density Residential	<u>674</u>	<u>90</u>	<u>764</u>
Residential Hillside	929	26	955
Forestry	120	0	120
Central Business District	50	0	50
Community Commercial	<u>146</u>	<u>16</u>	162
Heavy Industry	<u>281</u>	160	<u>441</u>
Light Industry	<u>189</u>	0	<u>189</u>
Public	110	0	110
Rights-of-Way	<u>430</u>	<u>20</u>	<u>450</u>
Total	<u>3283</u>	<u>312</u>	3595

LAND USE -- GOALS AND POLICIES

- A. GOAL: TO ENSURE THAT THE DEVELOPMENT OF SUTHERLIN IS PROPERLY PHASED AND ORDERLY SO THAT URBAN SPRAWL IS AVOIDED, LIVABILITY IS ENHANCED, AND ENOUGH SUITABLE LAND IS AVAILABLE FOR FUTURE DEVELOPMENT.

LAND USE POLICIES:

1. Conversion of urbanizable land to urban uses shall be based on consideration of;
 - A. Orderly, economic provision for public facilities and services;
 - B. Availability of sufficient land of various use designations to ensure choices in the market place;
 - C. Conformance with statewide planning goals;
 - D. Encouragement of development within urban areas before conversion of non-urban areas.
2. Work toward development of "open" lands identified as suitable for development within the existing city limits before annexing additional lands.

Residential Land Use Policies

1. Promote development involving varied housing types at medium and high densities adjacent to the community's two service areas.
1. Provide incentives to enable medium and high density infilling within existing neighborhoods.
3. Advocate innovative development schemes, including planned unit developments, to provide varied housing types and densities on those large parcels of open land which have been identifies as suitable for urban development.
4. Provide areas and clear standards for manufactured homes for new parks and subdivision development.

Commercial Land Use Policies

1. Support the retention of the CBD as the community's major commercial and service area.
2. Encourage the location of a broad cross-section of land uses in the CBD which are compatible with each other and the surrounding residential neighborhoods. In certain instances multifamily residential may be a suitable land use in the CBD.
3. Support the improvement of traffic and pedestrian circulation in the CBD along with the development of adequate off-street parking.
4. Require that infilling of vacant land in the areas designated for linear commercial be done in such a fashion so as to encourage the clustering of commercial activities, improve the visual attractiveness of the area, and minimize the points of ingress and egress on Central Avenue. Whenever

possible, joint driveways to different commercial establishment would be encouraged.

Industrial Land Use Policies

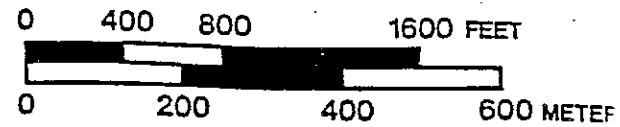
1. Provide appropriate public facilities in a timely manner to support industrial development in major manufacturing areas and other compatible locations.
2. Encourage industrial uses to locate in the Industrial Park in order to reduce site development costs, maximize operating economies, and achieve a harmonious land use pattern.

APPENDIX I:

INDUSTRIAL LANDS INVENTORY MAPS



SCALE

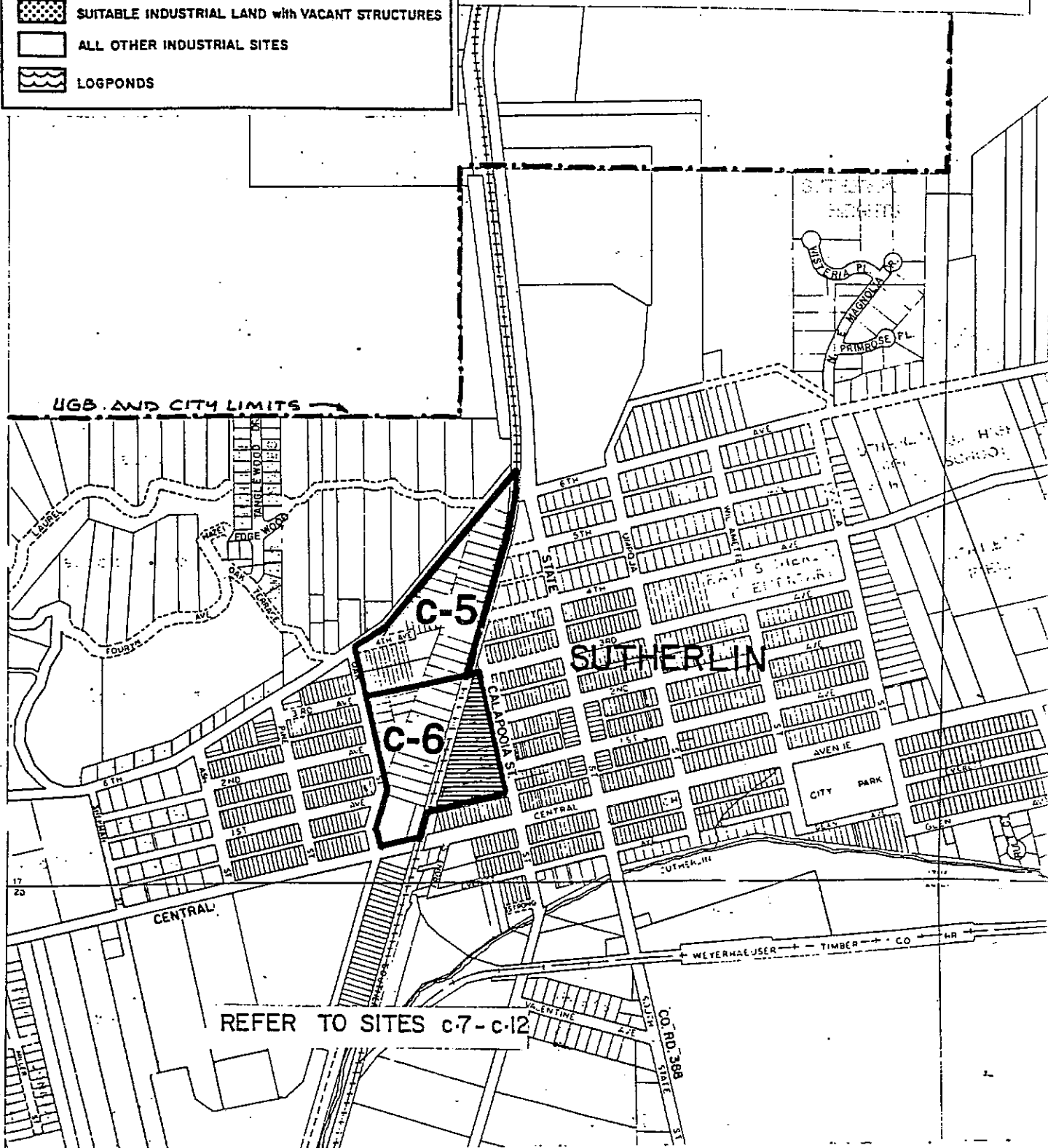


T25S, R5W, Sec. 17

CALAPOOYA MAP C






LEGEND

- VACANT and SUITABLE INDUSTRIAL LAND
- DEVELOPED with INDUSTRIAL USE
- SUITABLE INDUSTRIAL LAND with VACANT STRUCTURES
- ALL OTHER INDUSTRIAL SITES
- LOGPONDS



T25S, R5W, Sec. 17, 19, 20, 29, 30
Scale: 1" = 800'

LEGEND

-  VACANT and SUITABLE INDUSTRIAL LAND
-  DEVELOPED with INDUSTRIAL USE
-  SUITABLE INDUSTRIAL LAND with VACANT STRUCTURES
-  ALL OTHER INDUSTRIAL SITES
-  LOGPONDS

SUTHERLIN

c-9

c-8

c-7

c-10

REFER TO SITES
c-13 - c-14

c-11

c-12

UGB AND CITY LIMIT

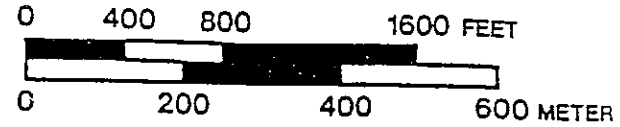


CALAPOOYA MAP D

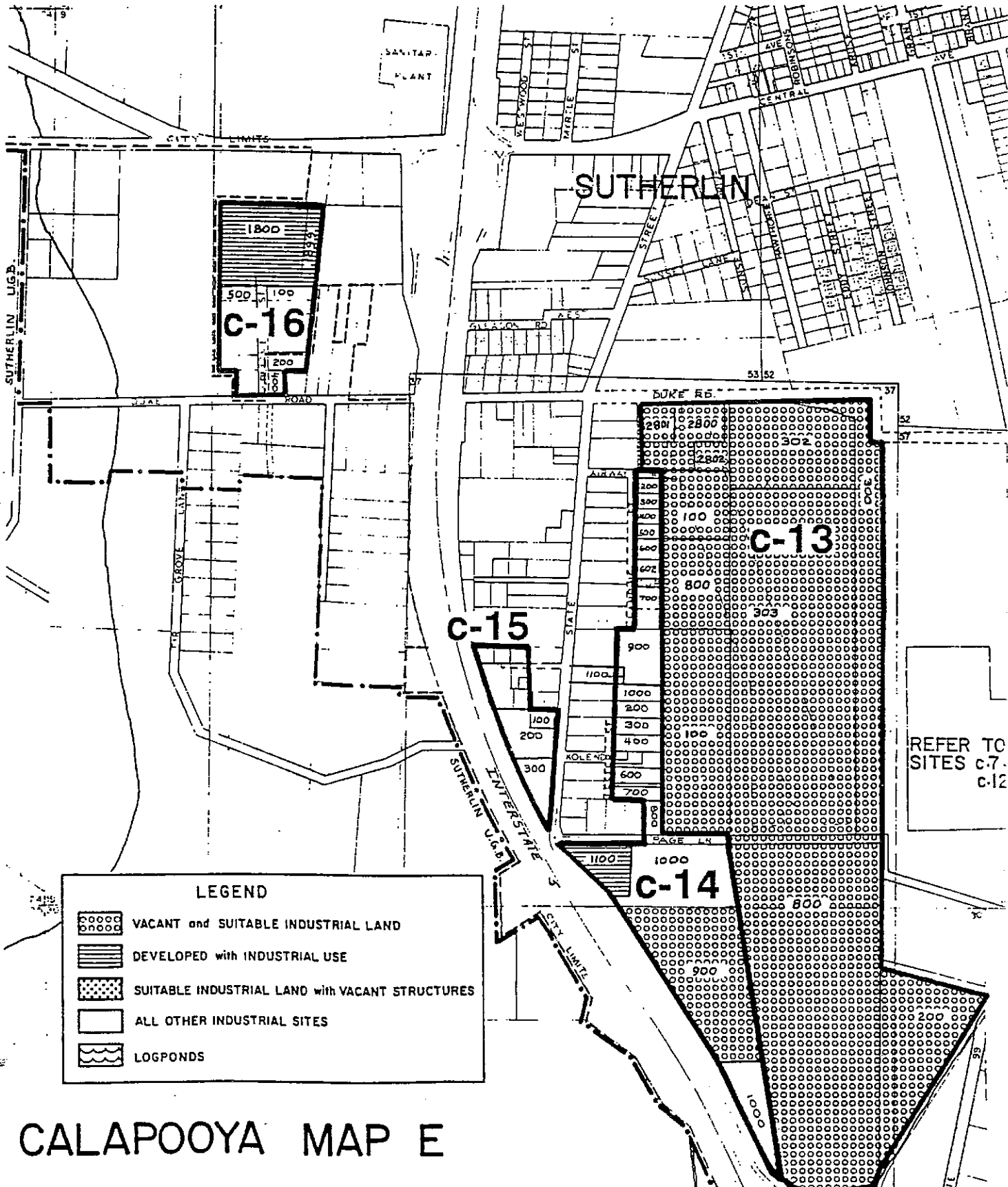
DOUGLAS COUNTY PLANNING DEPARTMENT



SCALE



T25S, R 5 W, Sec. 19, 30



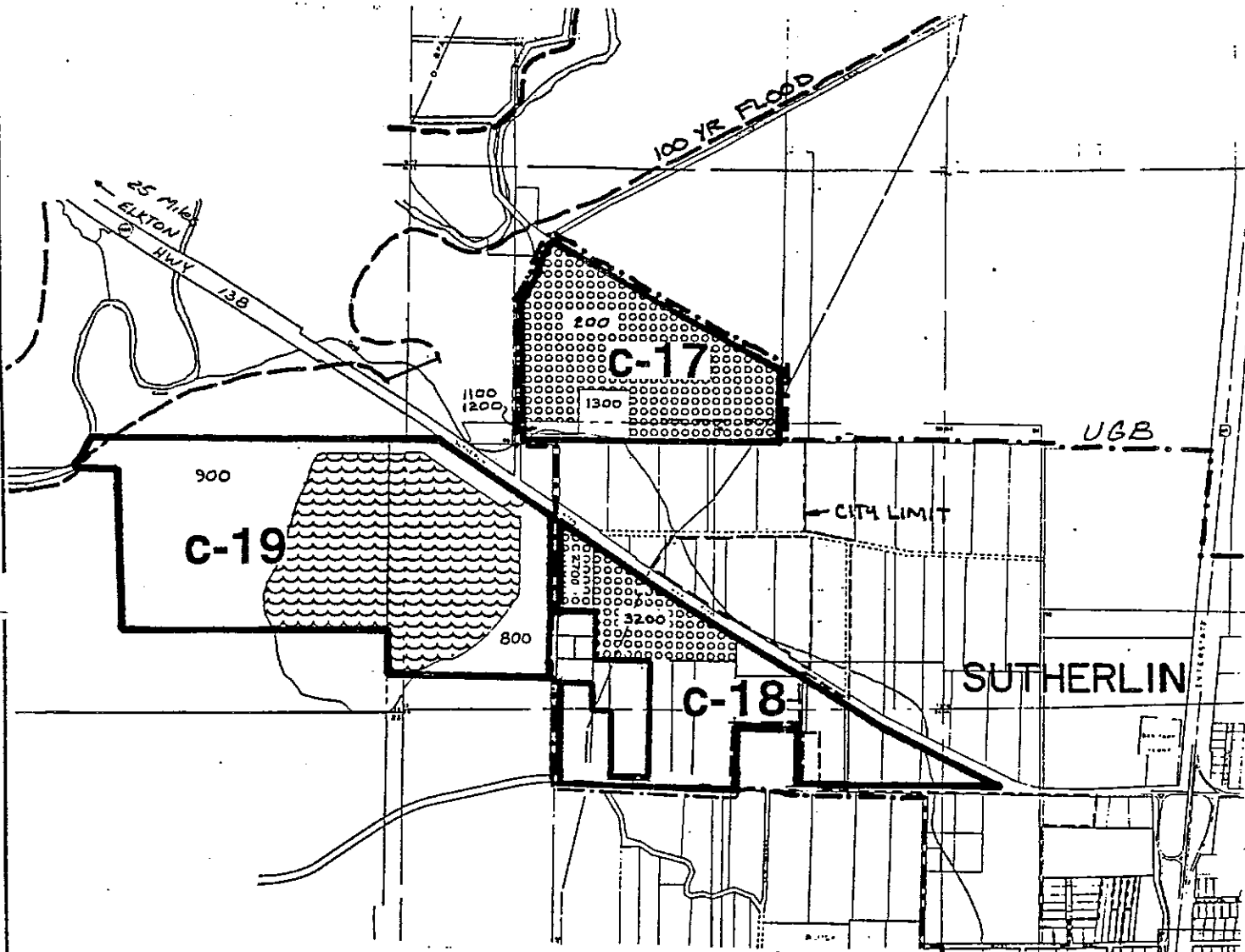
CALAPOOYA MAP E








SCALE

0 800 1600 3200 FEET
0 400 800 1200 METERS

T25S, R 6 W, Sec.13,14 & 24



LEGEND

-  VACANT and SUITABLE INDUSTRIAL LAND
-  DEVELOPED with INDUSTRIAL USE
-  SUITABLE INDUSTRIAL LAND with VACANT STRUCTURES
-  ALL OTHER INDUSTRIAL SITES
-  LOGPONDS

CALAPOOYA MAP F

DOUGLAS COUNTY PLANNING DEPARTMENT

Calapooya Planning Area

Site Section c

<u>Acct. No.</u>	<u>Tax Lot</u>	<u>Ownership</u>	<u>Acres</u>	<u>Present Use</u>
<u>Site c-1</u>		(24-5-29)		
4630.02	pt. 400	Groves	10.0	Metz Hill Trade Center (furniture sales) Quality Horses Stables 1 DU
<u>Site c-2</u>		(25-5-3BA)		
5647.10	800	Whitaker	10.2	Don Whitaker Logging (truck maintenance yard)
<u>Site c-3</u>		(25-5-8)		
5699.00	100	Engle	12.8	Evergreen Forest Products
5723.00	101			
5743.00	1800	Engle, Morgan, Fugate	16.9	Vacant with log pond
<u>Site c-4</u>		(25-5-8)		
5745.03	1300	Engle, Morgan, Fugate	9.3	Vacant
5745.31	1400	Pacific Power & Light	.2	Substation
<u>Site c-5</u>		(25-5-17CA)		
	700-1100	Various	1.1 ^{1.4}	DUs
		(25-5-17CD)		
33586.00	100	City of Sutherlin	2.6 ^{2.9}	Vacant
35339.00	pt. 200	Biglione	2.5	Vacant
35344.00	300	City of Sutherlin	.7	Vacant
	400-600	Jacobson	.4	DUs

Calapooya Planning Area

<u>Acct. No.</u>	<u>Tax Lot</u>	<u>Ownership</u>	<u>Acres</u>	<u>Present Use</u>
<u>Site c-5, cont.</u>		(25-5-17DB)		
35307.00	7900	Gage	1.2	1 DU
35298.00	7800	Biglione	1.8 6.5	Vacant
<u>Site c-6</u>		(25-5-17CD)		
35339.00	pt. 200	Biglione	6.5	Sutherlin Auto Service CWP - Del Truck Parking Station House Tavern
		(25-5-17DC)		
36143.00	800	North Douglas Machine	.5	North Douglas Machine Co. (welding, machine work, fabrication)
36148.00	3000	Stone	.2	Metal storage building
36150.00	3200	BMG Corp.	.5	Norman Stone Welding
36154.00	3100	O & C Railroad Co.	1.1	Storage
36429.00	5900	Knight & Wiley	.2	Parking area
36425.00	6000	Shoufler	.2	True Value Hardware warehouse
36420.00	6100	Kesner	.4	Scrap Lumber
36419.00	6200	City of Sutherlin	.1	Vacant
<u>Site c-7</u>		(25-5-20AB)		
	100-300	Various	1.3	DUs
35648.01	500	Jennings	.5	Marshall's Towing
35648.04	600	Crouse	.7	Gift Shop
35649.04	701	Boyer	.3	Vacant

Calapooya Planning Area

<u>Acct. No.</u>	<u>Tax Lot</u>	<u>Ownership</u>	<u>Acres</u>	<u>Present Use</u>
<u>Site c-7, cont.</u>				
	700 800	Douglas County	3.1	Christian Equipment Co. woodworking shop CPA office, 1 DU
	801	Boyer		
	900	Hodge (25-5-20BA)		
36761.04	100	Bennett	2.5	Beverage distributor
36761.01	200	Bennett	1.6	Vacant
36761.02	300	Kesner	1.7	Lumber storage
35650.02	400	Douglas County	.8	Vacant
35650.01	500	USA	4.1	BLM maintenance shop
35651.01	600	Shepard and Shaw (25-5-20B)	4.4	Maintenance shop
35652.00	100	Seehawer	4.6	Vacant
35653.00	200	Ricatto	4.6	Vacant
35654.00	300	Hannan Bros. (25-5-20C)	13.8	Vacant structure
35657.00	1800	Hannan Bros.	13.8	Vacant
35660.00	1700	Knapp	4.6	Vacant
35661.00	1600	Gordon	9.2	Vacant
35663.01	1500	Lakin	2.3	1 DU
35663.02	1400	Cranford	2.3	1 DU
35664.00	1300	Powers	4.6	Vacant

Calapooya Planning Area

<u>Acct. No.</u>	<u>Tax Lot</u>	<u>Ownership</u>	<u>Acres</u>	<u>Present Use</u>
<u>Site c-7, cont.</u>				
35665.00	1200	Powers (25-5-29B)	4.61	DU
35666.00	100	Wilson (25-5-20B)	7.1	Duplex
<u>Site c-8</u>				
35026.02	pt. 400	School Dist. 130 (25-5-20BA)	^{65.3} 62.5	School Dist. 130 Administration Office, bus storage, log ponds, 13 acres vacant
35002.00	700	Murphy Plywood Co.	12.7	Plywood plant
<u>Site c-9</u>				
35124.00	100	McWilliams (25-5-19AD)	6.6	Vacant
35124.01	pt. 200	Your Neighborhood Church of Christ	4.3	Vacant
35124.02	pt. 201	City of Sutherlin (25-5-19D, 20C)	.2	Right-of-way
<u>Site c-10</u>				
35727.00 35751.00	100 1900	Douglas County	99.3	Vacated veneer plant
35729.02 35756.02	200 2100	Waller	4.9	1 DU
35757.02	2000	Leenders	5.6	Vacant
<u>Site c-11</u>				
33928.01	100	Sherman (25-5-30)	8.0	Vacant, orchard
<u>Site c-12</u>				
33930.00	300	H & R Oil Co., Inc.	5.5	Vacant

Calapooya Planning Area

<u>Acct. No.</u>	<u>Tax Lot</u>	<u>Ownership</u>	<u>Acres</u>	<u>Present Use</u>
<u>Site c-12, cont.</u>		(25-5-29B)		
33922.00	1000	Tyee Timbers, Inc.	7.1	1 DU
33923.00	1100	Johnson	11.4	1 DU Orchard
33925.00	1101			
33926.00	1200	Johnson Family Partnership	3.8	Vacated fruit stand
35712.02	500	Stroup	4.6	Vacated laminated beam manufacturing facility
35712.03	400	Stitcher	1.5	Cabins
<u>Site c-13</u>		(25-5-19AC)		
35645.00	2800	Douglas County	1.2	<i>Majority of</i> Entire site, totalling 119 acres, is ^{currently} vacant (previously Sutherlin Airport site) The Douglas County Industrial Development Board is currently promoting the site as suitable for light medium or heavy industrial uses.
35645.04	2800 A1	Orencia	1.4	
35645.01	2801	S & W Investors Inc.	1.3	
35645.02	2802	Davenport	1.3	
		(25-5-19D)		
35725.00	300	City of Sutherlin	6.9	
35725.02	302	Davenport	8.4	
35725.03	303	Douglas County	34.8	
		(25-5-19DB)		
35646.00	100	Douglas County	1.4	
35646.01	100 A1	Orencia Systems, Inc.	2.0	
35646.02	101	Davenport	.5	
35647.00	800	Douglas County	3.4	
35647.01	800 A1	Orencia Systems	.2	

Calapooya Planning Area

<u>Acct. No.</u>	<u>Tax Lot</u>	<u>Ownership</u>	<u>Acres</u>	<u>Present Use</u>
<u>Site c-13, cont.</u>		(25-5-19DC)		
35733.00	100	Douglas County	11.1	
		(25-5-30)		
33929.00	200	Douglas County	40.5	
5851.09	801			
5851.03	800	City of Sutherlin	2.7	
<u>Site c-14</u>				
	Various	Various	9.5	Residential
5851.02	1100	Douglas County	1.7	Sutherlin Maintenance Shop
5851.04	1000	Hunt	5.3	Hangar facility
		(25-5-30)		
5851.06	900	Greufe & Day	9.7	Vacant
5851.61	1000	Egbert	2.4	Mr. E Auto Sales
<u>Site c-15</u>		(25-5-19CA)		
5844.00	2700	Davis	.4	1 DU
5844.31	3100	Tilley	1.5	1 DU
5843.00	2800	Oberman	.2	
		(25-5-19CD)		
5845.01	200	Campbell	1.7	Campbell's Nursery
5845.00	100	Bennett	.3	1 DU
5850.02	300	Lynch	1.1	Discount Feed
<u>Site c-16</u>		(25-5-19BC)		
34145.00	100	Weyerhaeuser	3.1	DUs
34139.00	500		2.9	Vacant

Calapooya Planning Area

<u>Acct. No.</u>	<u>Tax Lot</u>	<u>Ownership</u>	<u>Acres</u>	<u>Present Use</u>
<u>Site c-16, cont.</u>				
34150.00	200	Hase	.5	DUs
34151.00	400	Franklin	.3	
		(25-5-19B)		
5813.00	1800	Weyerhaeuser	6.1	Mfg. logging equipment
<u>Site c-17</u>		(25-6-13)		
5968.00	pt. 200	Crouch	71.0	Agriculture
5968.02				
5968.23				
5968.04	1200	City of Sutherlin	6.7	Sewage treatment plant
5968.21	1300			
5968.01	1100	Bennett	.5	1 DU
<u>Site c-18</u>		(25-6-13)		
34077.01	2600	West	.3	Vacant
34059.01	2700		7.0	Vacant
34060.03	3200		20.8	Vacant (1 acre Calapooya RFPD)
		(25-6-24)		
34057.02	300	Vandehey	2.3	1 DU
34058.01	500	Aderholt	7.2	Vacant
		(25-6-24A)		
34044.01	100	Gospodor	9.9	Vacant
34045.01	200			
34051.04	300	Leatherwood and Paynter	7.1	Vacant
34051.01	400	Hi-Way Haven	2.5	Vacant

Calapooya Planning Area

<u>Acct. No.</u>	<u>Tax Lot</u>	<u>Ownership</u>	<u>Acres</u>	<u>Present Use</u>
<u>Site c-18, cont.</u>				
34052.05	600	Sulffridge	3.3	1 DU
34052.06	700		3.3	1 DU
34052.01	800	Hounshell	20.5	DUs
34054.00	900			
34055.01	1000			
34055.02	1100	Johnson	6.8	1 DU
		(25-5-19B)		
34041.01	400	Gospodor	3.1	Vacant
		(25-6-13, 14)		
<u>Site c-19</u>				
5972.31	800	Roseburg Forest	199.3	Log Pond
5972.32	900	Products		
5975.00				
5975.01				
<u>Site c-20</u>				
		(25-5-32B)		
5891.00	1200	Roseburg Resources	8.9	Equipment storage and
5891.01				maintenance yard
<u>Site c-21</u>				
		(25-5-32)		
5893.00	pt. 200	Crawford	95.0	Agriculture
5893.02				
<u>Site c-22</u>				
43453.01	1000	Glide Lumber Products Co.	22.8	Lumber shipping facility and log pond, 10 acres vacant
<u>Site c-23</u>				
		(26-5-6D)		
7197.00	pt. 100	Russell & Miller	7.0	Vacant
7199.00	200	Glide Lumber	17.0	Vacant
43453.00	pt. 400	Products Co.		

SITE EVALUATION SHEET

SITE REFERENCE

CALAPOOYA PLANNING AREA
SITE SECTION C

	c-5	c-6				
LOCATION						
within city limits	Yes	Yes				
within UGB	Yes	Yes				
SIZE (in acres)						
	7	10				
TRANSPORTATION ACCESS						
rail adjacent to site	X	X				
adj. to major arterial						
fwy. access within 2 miles	X	X				
airport within 5 miles						
UTILITY ACCESS sewer and water service: X = within 500'; * = within 1500'						
sewer	X	X				
water	X	X				
natural gas (see introduction)	X	X				
DEVELOPMENT STATUS						
fully developed						
partially developed	X	X				
vacant						
PRESENT USE OF SITE						
industrial		X				
commercial		X				
residential	X					
public						
vacated mill/log pond						
no current use						
TOPOGRAPHY						
Slope: flat		X				
slight rise	X					
gently rolling						
hilly/steep						
within floodplain						
SURROUNDING LAND USE						
residential	X	X				
commercial	X	X				
industrial	X	X				
public						
resource						
LAND USE DESIGNATION						
	LI	LI				
PRESENT ZONING						
	M-1	M-1				

SITE EVALUATION SHEET

SITE REFERENCE

CALAPOOYA PLANNING AREA SITE SECTION c	c-7	c-8	c-9	c-10	c-11	c-12
LOCATION						
within city limits	Yes	Yes	Yes	Yes	Yes	Yes
within UGB	Yes	Yes	Yes	Yes	Yes	Yes
SIZE (in acres)						
	93	78	11	110	8	34
TRANSPORTATION ACCESS						
rail adjacent to site	X	X		X		X
adj. to major arterial	X			X	X	X
fwy. access within 2 miles	X	X	X	X	X	X
airport within 5 miles						
UTILITY ACCESS sewer and water service: X = within 500'; * = within 1500'						
sewer	X	X	X	X		
water	X	X	X	X	X	X
natural gas (see introduction)	X	X	X			
DEVELOPMENT STATUS						
fully developed						
partially developed	X	X		X		X
vacant			X		X	
PRESENT USE OF SITE						
industrial	X	X				
commercial	X					
residential	X					X
public						
vacated mill/log pond		X		X		X
no current use			X		X	
TOPOGRAPHY						
Slope: flat	X	X	X	X	X	X
slight rise						
gently rolling						
hilly/steep						
within floodplain						
SURROUNDING LAND USE						
residential	X	X	X	X	X	X
commercial	X	X				
industrial	X	X				
public			X	X		
resource			X			
LAND USE DESIGNATION						
	LI	HI	LI	HI	LI	HI
PRESENT ZONING						
	M-1	M-2	M-1	M-2	M-1	M-2

35 36 37 38 39 40

SITE EVALUATION SHEET

SITE REFERENCE

CALAPOOYA PLANNING AREA
SITE SECTION c

	c-13	c-14	c-15	c-16		
LOCATION						
within city limits	Yes	Yes	Yes	Part		
within UGB	Yes	Yes	Yes	Yes		
SIZE (in acres)						
	7 119	9 28	5	13		
TRANSPORTATION ACCESS						
rail adjacent to site						
adj. to major arterial			X			
fwy. access within 2 miles	X	X	X	X		
airport within 5 miles						
UTILITY ACCESS sewer and water service: X = within 500'; * = within 1500'						
sewer	X	X		X		
water	X	X	X	X		
natural gas (see introduction)				X		
DEVELOPMENT STATUS						
fully developed			X			
partially developed	X	X		X		
vacant						
PRESENT USE OF SITE						
industrial		X		X		
commercial			X			
residential		X	X	X		
public						
vacated mill/log pond						
no current use	X					
TOPOGRAPHY						
Slope: flat	X	X	X	X		
slight rise						
gently rolling						
hilly/steep						
within floodplain						
SURROUNDING LAND USE						
residential	X	X	X	X		
commercial	X					
industrial	X		X			
public						
resource	X					
LAND USE DESIGNATION						
	HI LI	LI	LI	LI		
PRESENT ZONING						
	M-2 M-1	M-1	M-1	M-1		

4: 42 43 44

SITE EVALUATION SHEET

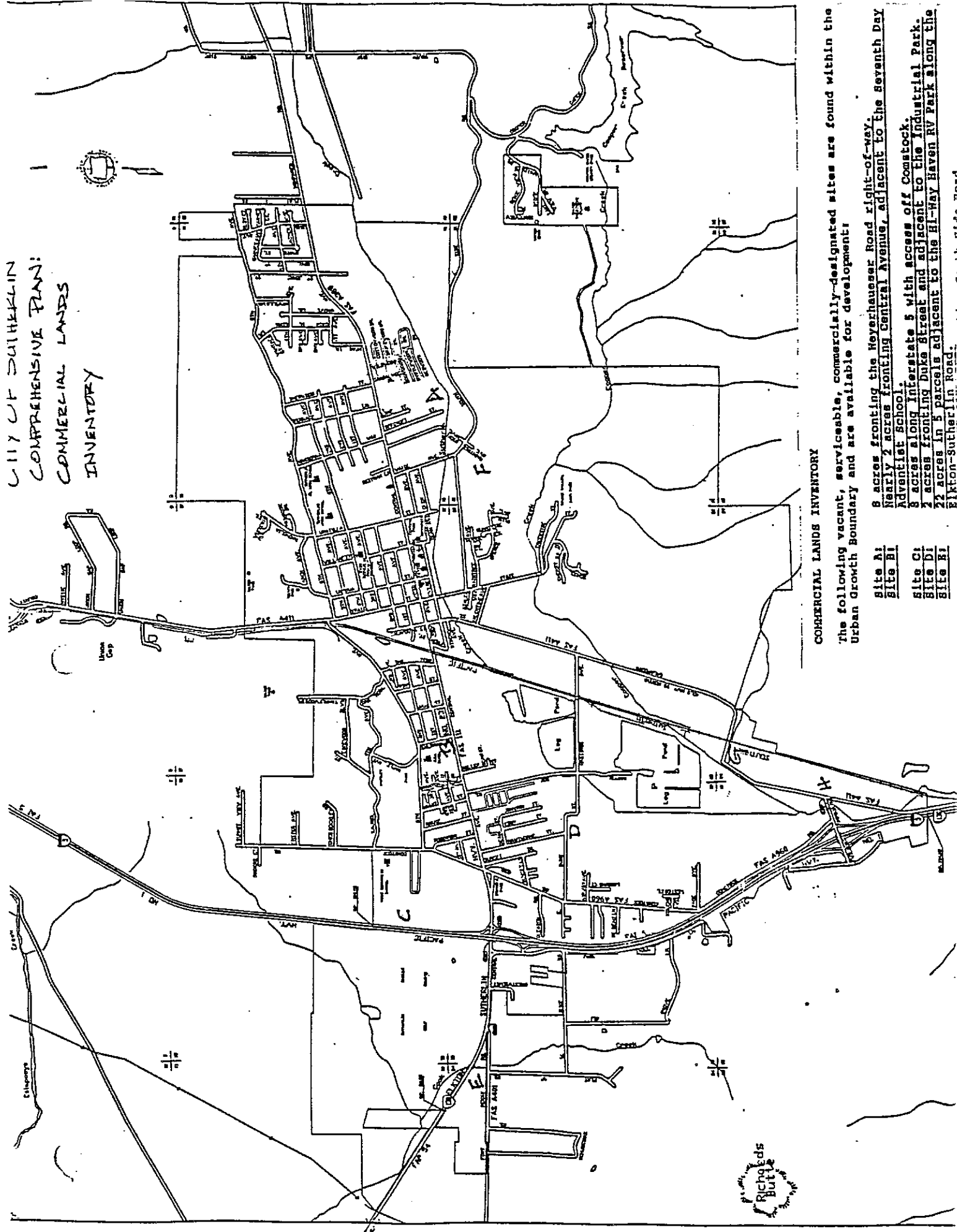
SITE REFERENCE

CALAPOOYA PLANNING AREA SITE SECTION c		c-17	c-18	c-19			
LOCATION							
within city limits	No	Part	No				
within UGB	Yes	Yes	No				
SIZE (in acres)	78	0.113	199				
TRANSPORTATION ACCESS							
rail adjacent to site							
adj. to major arterial		X	X				
fwy. access within 2 miles	X	X	X				
airport within 5 miles							
UTILITY ACCESS sewer and water service: X = within 500'; * = within 1500'							
sewer	X	X	X				
water	X	X	X				
natural gas (see introduction)	*	X	*				
DEVELOPMENT STATUS							
fully developed							
partially developed	X	X					
vacant			X				
PRESENT USE OF SITE							
industrial							
commercial		X					
residential		X					
public		X					
vacated mill/log pond			X				
no current use	X		X				
TOPOGRAPHY							
Slope: flat	X	X	X				
slight rise	X	X					
gently rolling							
hilly/steep							
within floodplain							
SURROUNDING LAND USE							
residential		X	X				
commercial							
industrial							
public							
resource	X	X	X				
LAND USE DESIGNATION	HI	HI	IND				
PRESENT ZONING	FG	M-2 M-3	M-3				

APPENDIX II:

COMMERCIAL LANDS INVENTORY MAPS

CITY OF BUTTE COMPREHENSIVE PLAN: COMMERCIAL LANDS INVENTORY



COMMERCIAL LANDS INVENTORY

The following vacant, serviceable, commercially-designated sites are found within the Urban Growth Boundary and are available for development:

- Site A1 8 acres fronting the Meyerhauser Road right-of-way.
- Site B1 Nearly 2 acres fronting Central Avenue, adjacent to the Seventh Day Adventist School.
- Site C1 8 acres along Interstate 5 with access off Comstock.
- Site D1 2 acres fronting Duke Street and adjacent to the Industrial Park.
- Site E1 22 acres in 5 parcels adjacent to the Hi-Way Haven RV Park along the Elkhart-Sutherland Road.



APPENDIX III:
URBAN GROWTH MANAGEMENT AGREEMENT
BETWEEN
THE CITY OF SUTHERLIN
AND
DOUGLAS COUNTY

1982 JUL 28 PM 4:40

may be used
DORIS L. WADSWORTH
DOUGLAS COUNTY CLERK

JUL 107 PAGE 576

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, OREGON

AN ORDINANCE ADOPTING THE CITY OF)	
SUTHERLIN COMPREHENSIVE PLAN, URBAN)	O R D I N A N C E
GROWTH BOUNDARY AND APPROVING THE)	No. 82-7-1
URBAN GROWTH MANAGEMENT AGREEMENT)	
BETWEEN THE CITY OF SUTHERLIN AND)	
DOUGLAS COUNTY))	

It appearing to the Board of Commissioners that the City of Sutherlin has transmitted its comprehensive plan and implementing regulations to Douglas County in the spirit of cooperation and coordination as authorized and required by ORS 197.005 to 197.430; and

It further appearing to the Board of Commissioners that ORS 197.255 requires review of the City Comprehensive Plan and implementing ordinances by the County governing body and the County review should accommodate City and County interest through mutually adopted plans and growth strategy; and

It further appearing to the Board of Commissioners that the Douglas County Planning Commission has reviewed the City of Sutherlin Comprehensive Plan and implementing ordinances pursuant to its responsibility for advising the Board of Commissioners and that the Planning Commission has recommended adoption of the Plan and implementing ordinances; and

It further appearing that legal notice as required in the Statewide Planning Goals and ORS 215.060 and ORS 92.044 to 92.048 have been given for the adoption of the City of Sutherlin Comprehensive Plan, implementing ordinances and urban growth management agreement.

THE BOARD OF COUNTY COMMISSIONERS ORDAINS AS FOLLOWS:

SECTION I: The Comprehensive Plan for the City of Sutherlin is hereby adopted. A copy of the comprehensive plan is attached as Exhibit A and by this reference incorporated herein.

SECTION II: The Urban Growth Management Agreement between Douglas County and the City of Sutherlin is hereby adopted and ratified. A copy of the Urban Growth Management Agreement is attached as Exhibit B and by this reference incorporated herein.

SECTION III: The City of Sutherlin Comprehensive Plan, implementing ordinances and urban growth management agreement shall be sent to the Land Con-

servation and Development Commission for the State of Oregon with a recommendation for acknowledgement pursuant to ORS 197.251 upon adoption of this ordinance.

DATED this 28th day of July, 1982.

BOARD OF COUNTY COMMISSIONERS
OF DOUGLAS COUNTY OREGON

Doug Robertson
Doug Robertson, Chairman

J. B. Long
J. B. Long, Commissioner

Bill Vian
Bill Vian, Commissioner

Debra Mendenhall
Recording Secretary

AGREEMENT BETWEEN THE CITY OF SUTHERLIN, OREGON AND DOUGLAS COUNTY, OREGON, FOR THE JOINT MANAGEMENT OF THE SUTHERLIN URBAN GROWTH BOUNDARY, THE PLAN FOR THE SUTHERLIN GROWTH AREA AND THE SUTHERLIN AREA OF MUTUAL INTEREST.

WHEREAS, the City of Sutherlin, Oregon and Douglas County, Oregon, are authorized under the provisions of ORS 190.003 to 190.030 to enter into inter-governmental agreements for the performance of any or all functions that a party to the agreement has authority to perform; and

WHEREAS, ORS 197.175, 197.190, 197.250, 197.275, and 197.285 and OAR 660-03-010 requires counties and cities to prepare and adopt comprehensive plans consistent with statewide planning goals, and to enact ordinances or regulations to implement the comprehensive plans, and

WHEREAS, Statewide Planning Goal Number 14 requires that establishment and change of urban growth boundaries shall be a cooperative process between the city and the county that surrounds it; and

WHEREAS, the City of Sutherlin and Douglas County recognize a common concern regarding the accommodation of population growth and utilization of lands adjacent to the City; and

WHEREAS, the City of Sutherlin and Douglas County have adopted and coordinated and consistent comprehensive plans which establish an Urban Growth Boundary, a plan for the Urban Growth area, and policies related to urban development and the provision of urban services within the Urban Growth Area; and

WHEREAS, the City of Sutherlin and Douglas County recognize that as their comprehensive plans and implementing ordinances are amended from time to time, that they shall remain consistent and coordinated with each other; and

WHEREAS, the City of Sutherlin and Douglas County recognize that it is necessary to cooperate with each other to implement the urbanization policies of their comprehensive plans.

NOW THEREFORE, THE PARTIES DO MUTUALLY AGREE AS FOLLOWS:

1. Intent of Agreement:

- a. The City of Sutherlin and Douglas County hereby agree to establish a procedure for the implementation of the Sutherlin Urban Growth Boundary and the plan for the Sutherlin Urban Growth Area, both of which form an integral part of the City of Sutherlin Comprehensive Plan and the Douglas County Comprehensive Plan. For purposes of this agreement, the Sutherlin Urban Growth Area shall be defined as the area between the Sutherlin City Limits and the Sutherlin Urban Growth Boundary. The Urban Growth Boundary and the plan for the Urban Growth Area are incorporated herein by reference as Exhibit "A".

- b. The procedures for implementation of the Urban Growth Boundary and the plan for the Urban Growth Area shall be as specified hereinafter in this agreement.
 - c. The provisions of this agreement, the City of Sutherlin Comprehensive Plan and the Douglas County Comprehensive Plan, as amended, shall establish the procedure for review and action on comprehensive plan amendments, implementing ordinances, land use actions, public improvement projects, and other related matters which pertain to the Urban Growth Area.
 - d. The County shall utilize County ordinances to implement the City of Sutherlin Comprehensive Plan within the Urban Growth Area.
 - e. All actions as specified by this agreement shall be taken to assure that the City and County comprehensive plans remain consistent and coordinated with each other.
2. Comprehensive Plan Amendments:
- a. An amendment to the comprehensive plan text and/or map as it pertains to the Urban Growth Area, the Urban Growth Boundary and urbanization policies shall be enacted only after agreement by both parties in accordance with plan and ordinance amendment procedures as established by each jurisdiction.
 - b. All amendment requests shall be initially processed by the City. Within 15 days after the request has been initiated, the City shall forward the request to the County, and shall give the County 90 days to complete its review and make an initial decision on the request. Additional time may be provided at the request of the County and with the concurrence of the City. In making its decision, the City shall consider the decision of the County regarding the amendment request.
 - c. If the initial decisions of the City and County indicate agreement to approve without any change from the original submittal, the initial decision of each jurisdiction shall be final.
 - d. If the initial decisions of the City and County differ, a joint meeting, or meetings, of the City Council and the Board of County Commissioners, or their designees, shall be held to resolve the differences. A maximum of 45 days from the date of initial action by the City shall be allotted to resolve the differences.
 - e. If, after the 45 day period is over and concurrence cannot be achieved, the amendment request shall be considered denied. Either party may seek review of the denial from the Land Use Board of Appeals.
 - f. If both parties agree to approve the amendment, the City and County shall then formally amend their comprehensive plans or implementing ordinances to reflect the agreed on change.

3. Review Process for Land Use Actions. The City and County shall use the following process for review and action on proposed land use actions which are being considered in the Urban Growth Area.

a. The provisions of this section shall apply to the following land use actions which are being considered in the Urban Growth Area:

- 1) Amendments to the zoning map.
- 2) Conditional use permits.
- 3) Planned unit developments.
- 4) Subdivisions.
- 5) Major and minor land partitions.
- 6) Road dedications and vacations.
- 7) Variances requiring public hearings.
- 8) Other land use actions similar to the above.

b. All land use action requests shall be initially processed by the County. The County shall forward each request affecting the Urban Growth Area to the City, and shall give the City 13 days to complete its review and recommend action. Additional time may be provided at the request of the City and with the concurrence of the County. The review shall address consistency of the proposals with the comprehensive plan as well as its possible impact on the immediate area, the neighborhood, and the entire urbanizing area.

c. No response by the City to the request shall be presumed to mean no comment regarding the proposal.

d. In making its decision, the County Hearings Officer or Planning Commission shall consider, and is obligated to respond to, as appropriate, all comments made by the City with regard to the request. The County shall notify the City in writing of all land use decisions within the Urban Growth Area. If the decision of the County differs from the recommendation of the City, both parties shall be given an additional 15 days from the date of City receipt of the notice of County action in order to arrive at an agreement. If no agreement can be reached, the decision of the County shall become final. The City shall have standing to appeal such actions consistent with the appeals process specified in the County Land Use and Development Ordinance.

4. Review Process for Other Land Use Activities. The City and County shall use the following process for review and action on public improvement projects, and similar programs, projects, or proposals which will apply to the Urban Growth Area.

a. The County shall seek a recommendation from the City with regard to the following items which are within, or adjacent to, or directly impact, the Urban Growth Area and for which the County has ultimate decision-making capacity:

- 1) Capital improvement programs.
- 2) Major public works projects sponsored by the County for transportation facility extensions or improvements; establishment,

- development, or major improvement to a park or recreation area; public facility construction or improvement; acquisition of property; or other similar activity.
 - 3) Functional plan, or amendment thereto for utilities, drainage, solid waste, transportation, recreation, or other similar activity.
 - 4) Plan, or amendment thereto, for economic, development, or industrial development.
 - 5) Neighborhood or sub-area development plan.
 - 6) Proposal for formation of, or changes of boundary or function of special service districts, as these terms are defined in ORS 198.705 and ORS 198.710, except as provided in ORS 199.410 and 199.512.
 - 7) Recommendations for designation of an area as a health hazard.
 - 8) Other plans or proposals similar to the above.
- b. The City shall seek a recommendation from the County with regard to the following items which will affect the Urban Growth Area for which the City has ultimate decision-making capacity:
- 1) Proposals for annexation to the City.
 - 2) Capital improvement programs.
 - 3) Functional plans, or amendments thereto, for utilities, drainage, recreation, transportation, or other similar activity.
 - 4) Plans, or amendments thereto, for economic development or industrial development.
 - 5) Proposals for the extraterritorial extension of any city service, utility or facility, or the service area for any of the above.
 - 6) Amendments to the comprehensive plan text or map which are not submitted to the County as required by Section 2 of this agreement.
 - 7) Other plans or proposals similar to the above.
- c. The initiating jurisdiction shall allow the responding jurisdiction 45 days to review and submit recommendations with regard to the items listed in Sections 4.a. and 4.b. Additional time may be provided at the request of the responding jurisdiction and with the concurrence of the initiating jurisdiction.
- d. The initiating jurisdiction shall consider, and is obligated to respond to, as appropriate, the recommendations of the responding jurisdiction in making its decision. No response by the responding jurisdiction to the request shall be presumed to mean no comment on the proposal.
5. Area of Mutual Interest.

The City and County agree to establish an Area of Mutual Interest outside of the Sutherlin Urban Growth Boundary. The specific description of this area and responsibilities of the City and/or County relative to land use activities within this area will be jointly developed by the City and County. These tasks have been included in paragraph 8, Work Program, of this agreement.

6. Special Provisions.

a. Annexations:

- 1) The City of Sutherlin may annex land after having received a request for annexation when affirmative findings are made in relation to the following:
 - a) The land is contiguous with the city limits and within the Urban Growth Boundary.
 - b) The development of the property is compatible with the rational and logical extension of utilities and roads to the surrounding area.
 - c) The City is capable of providing and maintaining its full range of urban services to the property without negatively impacting existing systems and the City's ability to adequately serve all areas within the existing city limits.
- 2) Requests for annexation to the City for areas outside the Urban Growth Boundary shall be considered as a request for an amendment to the Urban Growth Boundary and shall be subject to the approval of the City and County as an amendment to the Comprehensive Plan.
- 3) Establishment of an Urban Growth Boundary does not imply that all land within the boundary shall be annexed to the city.

b. Urban Services.

- 1) Extension of City water and/or sewer services shall be permitted when they are consistent with the policies and proposals of the comprehensive plan and with any adopted functional plans for water and/or for sewer which are consistent with the comprehensive plan.
- 2) City services such as water, sewer, police, fire, street maintenance shall be provided only to those subdivisions or other major development projects which either annex to the city, or which enter into an unlimited agreement signed by the affected property owners that they will consent to petition for annexation at a time specified by the city.
- 3) All city services shall be provided and maintained to city standards and under the supervision of the city, unless some other arrangement acceptable to the city has been made for the maintenance and supervision of services.
- 4) Provision of City sewer and/or water service capable of supporting development at urban densities shall occur beyond the urban Growth Boundary only after a determination by affected agencies that a "danger to public health" as defined by ORS 413.705(5) exists. The service thus authorized shall serve only the area in which the danger exists.

7. Public Works Construction Standards.

- a. The County and City shall cooperatively develop construction and physical development standards related to roads and drainage systems in order to assure that an adequate transition may be made from a semi-rural to an urban environment and from County to City jurisdiction.
- b. The County Public Works Departments shall put emphasis in prioritizing needed improvements for arterial and collector streets within the Urban Growth Area.

8. Work Program. The City and County shall supplement this agreement with a work program to assure that the policies of the Comprehensive Plans and the provisions of this agreement are carried out. The work program shall include the following items:

- a. Establishment of a capital improvement program.
- b. Establishment of a uniform system of applications and fee schedules for the City and County.
- c. Establishment of a means to monitor changing development trends.
- d. A program for surrendering jurisdiction of County roads within the city limits to the City pursuant to ORS 373.270.
- e. Establishment of a process for coordination and review of plan and ordinance amendments, land use actions, and other land use activities as outlined by this agreement.
- f. Establishment of the area of mutual interest between the City and County and development of responsibilities of the City and County for land use activities within this area.

9. Special District Coordination.

- a. When a special district situated fully or partly within the Urban Growth Area has entered into an intergovernmental coordination agreement with the County and the City it shall be given the opportunity to review and comment on the various land use actions and activities as specified in sections 2 through 4 of this agreement.
- b. If such an agreement is entered into, the special districts shall give the City and County the opportunity to review and comment on the following activities which will apply to the Urban Growth Area.
 - 1) Major public works projects to be provided by the district.
 - 2) Plans for establishment, improvement, or extension of facilities provided by the district.
 - 3) Capital improvement programs which are being developed by the district.

10. Enforcement

- a. The County shall be responsible for enforcement of all Land Use Ordinances within the Urban Growth Area. The County shall have the exclusive right to decide whether to proceed with any enforcement actions. All enforcement action shall be taken in accordance with the enforcement provisions of the County Land Use and Development Ordinance.

11. Review, Amendment and Termination

- a. This agreement may be reviewed and amended at any time by mutual consent of both parties, after public hearing by the City Council and the Board of County Commissioners.
- b. This agreement shall be reviewed, and may be amended, at the time established for review of the City Comprehensive Plan.
- c. Any modifications in this agreement shall be consistent with the City and County Comprehensive Plans.
- d. This agreement may be terminated by either party under the following procedure:
- 1) A public hearing shall be called by the party considering termination. The party shall give the other party notice of hearing at least 40 days prior to the scheduled hearing date. The 40 day period shall be used by both parties to seek resolution of differences.
 - 2) Public notice of the hearing shall be in accordance with applicable statewide and local goals and statutes.
 - 3) An established date for termination of the agreement shall be at least 90 days after the public hearing in order to provide ample time for resolution of differences.

IN WITNESS WHEREOF, this Urban Growth Area Joint Management Agreement is signed and executed this 12 day of July 1982.

CITY OF SUTHERLIN, OREGON

By

Robert M. Lemmon
Mayor

Attest:

Lloyd K. Torric
City Recorder

BOARD OF COUNTY COMMISSIONERS
OF DOUGLAS COUNTY, OREGON

Doug Robertson
Doug Robertson, Chairman

J. B. Long
J. B. Long, Commissioner

Bill Vian
Bill Vian, Commissioner

EXHIBIT 2:

SUTHERLIN PUBLIC FACILITIES PLAN

PREPARED 1990-1991

PUBLIC FACILITY PLAN
FOR
THE CITY OF SUTHERLIN

PREPARED BY:
THE CITY OF SUTHERLIN
AND
THE UMPQUA REGIONAL COUNCIL OF GOVERNMENTS
1990-1991

CONTENTS

INTRODUCTION	1
I. PUBLIC FACILITIES PLAN REQUIREMENTS AND FACILITIES FINANCING	2
PURPOSE AND REQUIREMENTS OF A PUBLIC FACILITIES PLAN	2
WHICH PROJECTS TO FUND?	2
FUNDING METHODS	2
II. PUBLIC FACILITIES: DESCRIPTION AND ASSESSMENT	5
A. WATER	5
WATER TREATMENT FACILITIES	5
WATER TREATMENT STANDARDS	6
STORAGE FACILITIES	7
DISTRIBUTION SYSTEM	7
PRESENT AND FUTURE WATER PRODUCTION	7
B. SANITARY SEWER	9
TREATMENT STANDARDS	9
TREATMENT FACILITIES AND COLLECTION SYSTEM EXPANSION	10
STORM DRAINAGE	11
C. TRANSPORTATION	12
INTRODUCTION	12
STREETS	12
FUNCTIONAL CLASSIFICATIONS	13
STREET RATINGS	13
STREET CONDITION	16
MAJOR SIGNALS	16
PEDESTRIAN TRAVEL	16
BICYCLE TRAVEL	16
PUBLIC TRANSPORTATION	17
RAILROAD	17
AIR	17
SPECIAL TRANSPORTATION NEEDS	17
CONCLUSIONS	17
D. EMERGENCY SERVICES	18
FIRE PROTECTION	18
POLICE	18
E. OTHER SERVICES	19
EDUCATION	19
ENROLLMENT STATISTICS	20
REFUSE	20
HEALTH CARE	20
LIBRARY	20
F. UTILITIES	21
ELECTRICITY	21
TELEPHONE	21
NATURAL GAS	21
CABLE TELEVISION	21
III. IMPLEMENTATION POLICIES	22
IV. FUTURE PUBLIC FACILITIES EXPANSION TABLES	28

INTRODUCTION

The condition of public facilities in a community reflects the level of concern residents have for their city's quality of life and for its future development. Public facilities -- the water, sewer, transportation and other systems that make up the infrastructure of a community -- are the skeleton of a city on which hangs everything that makes an area livable.

If public facilities are the skeleton of the physical community, then the Public Facilities Plan is the integral framework that allows a city to chart its own orderly growth. The public facility plan, while not a master plan or a detailed capital improvement program, nonetheless specifically identifies public facility needs, timing, and financing mechanisms. The policies and concepts contained in the plan serve as a general blueprint upon which to base specific actions and programs.

This Public Facilities Plan is an outgrowth of and supplement to the City of Sutherlin's Comprehensive Plan and should be referred to in the context of that document.

I. PUBLIC FACILITIES PLAN REQUIREMENTS AND FACILITIES FINANCING

PURPOSE AND REQUIREMENTS OF A PUBLIC FACILITIES PLAN

Oregon Administrative Rule (OAR) 660 Division 11 requires that public facilities plans be provided as supplements to comprehensive plans. The purpose of a public facility plan is to help assure that urban development is guided and supported by services and facilities appropriate to the needs of the community and that this infrastructure is provided in a timely, orderly, and efficient arrangement, as required by Oregon's State Planning Goal 11.

The plan, in order to comply with OAR 660, must also list public facility projects, map or describe their locations, and provide policies or an urban growth agreement designating the provider of each service and the preparer of the plan. OAR 660 also specifies that the public facility plan must provide an inventory and general assessment of the public facilities, rough cost estimates and general schedule of each project.

In addition, Oregon law under ORS 197.712(2)(e) requires public facility plans for storm sewer, sanitary sewer, water, and transportation elements shown in the comprehensive plan of cities within urban growth boundaries and with populations greater than 2500.

WHICH PROJECTS TO FUND?

Not every public improvement can be funded nor can be justified within the context of the larger needs of the community. Also, public facilities must be differentiated from routine maintenance projects. To qualify as a public facility project, the project should first be identified as a solution to a problem that affects community health and safety, injuries or damage to public or private property that results from failure or lack of the system.

Once a list of projects is drawn up, the feasible ones can be culled from the rest by comparing them to a checklist of attributes, according to these criteria:

1. The importance of the need, especially the health and safety impact;
2. The degree to which the project responds to the need;
3. Impact on other facilities;
4. Conformance to the Comprehensive Plan or other plans;
5. Operation and maintenance costs;
6. Energy requirements;
7. Environmental impacts (including economic, natural, and aesthetic features);
8. Cost;
9. Financial suitability;
10. Effects on property value;
11. Job creation or retention;
12. Offsetting revenue generated or other leverage brought about;
13. Cost advantages from scheduling.

FUNDING METHODS

Who bears the responsibility for fixing a problem? Is it only those who use an amenity? Or should new users bear the brunt of financing? For that matter, how do you define "user?" Should the long-time resident who has paid taxes for many years be forced to pay the same as a newcomer who has made no past contribution?

These are sticky questions and the answers to them usually come down to the issue of equitability. To be equitable, user costs should reflect use, benefit, wear, ability to pay, and past efforts. Users--in as many forms as possible -- should benefit, or benefit in the future, from their efforts to pay.

Furthermore, costs to property owners should be in relation to the extent that costs benefit only specified properties versus the general city, that costs not duplicate those costs already paid for by the property owner, and that relate to the facility's period of use.

For example, in the matter of financing a city wastewater plant, the cost should be spread throughout the entire community. Conversely, the cost of an individual new sewer line should be borne by the property owner alone. An example of both property owners and the entire city sharing costs would be the repaving of a specific street.

However, each situation is slightly different. Depending on the project, a number of funding methods are available. Some financing will be provided in whole or in part by the agency or private party doing the work. But for the local public portion, available sources usually include general fund (property tax) revenues, special assessments, Local Improvement Districts (LID's), surcharges, user fees, capital improvement or systems development charges, bonds, and grants or loans. Most of these strategies can be broken down into one of seven basic types:

1. Pay-as-you-go: Funds are collected as they are needed or may be saved. This method saves interest costs and thus reduces the total project cost. It also eliminates the costs associated with bond issues and other debt obligations. A major disadvantage to pay-as-you-go financing is that it is difficult to obtain large amounts of capital when they are needed for major projects. Also, costs may not be able to be broken down into yearly segments and may require a full commitment to the completed project rather than a year-by-year approach. If the asset has a long life, the payments should coincide with the life of the project instead of paying for it all up front. This unfairly charges the full cost to those who may move while those who arrive after the asset is paid off but still in use get a free ride. Another disadvantage is that inflation may raise costs faster than the savings may accumulate and cause a shortfall.
2. Pay-as-you-use user fees: Payment is over time with the term equal to the life of the item. The current budget pays off interest and depreciation as benefits from outlays come in. Principal is paid off. This method is fair to people who move after the beginning of the project.
3. General obligation bond: This pledges the full faith and credit of the jurisdiction and therefore makes the bonds attractive to buyers.
4. Special Assessment bonds: These are used for neighborhood improvements with each property assessed a portion of total project cost.
5. Revenue bonds: These use a pledge of revenue from the project benefitted to repay the loan.

6. Local Improvement Districts (LID's): These are small districts formed for the purpose of carrying out local improvements (paving of streets, construction of storm sewers, development of a park). Property owners within the LID are assessed for the cost of the improvements in accordance with ORS 223.387-223.485.
7. Grants and other forms of Federal Aid: These are available to cities that meet certain criteria. For example, as a population grows, cities become eligible for special federal city allotments awarded on a competitive basis.

In public facility finance, the timing of both the project and the financing is important. The project should be scheduled to optimize cost savings and to mesh with the existing infrastructure. Financing should be chosen to optimize loan and bond options.

New developments, it is generally agreed, should "pay their own way." In other words, a new development should be responsible for constructing, paying for, or depositing funds for an improved street with curbs, gutters, and sidewalks and for sewer, water, storm drainage facilities, fire hydrants and street lights, in addition to all utilities.

II. PUBLIC FACILITIES: DESCRIPTION AND ASSESSMENT

A. WATER

The community's water system is owned and operated by the City of Sutherlin. The system has three components: source, transmission and treatment, and distribution. If any component is not performing adequately, the quality of water service to the community is seriously impaired.

WATER SOURCE

Sutherlin has three surface water diversion points. The first is on Calapooya Creek near the community of Nonpareil where the city has three water rights. The first water right has a priority date of December 3, 1924 for 0.75 CFS (485,000 gallons per day). The second water right has a priority date of September 5, 1941 for 2.25 CFS (1,454,000 gallons per day). A third water right has a priority date of January 29, 1979 for 1.0 CFS (646,000 gallons per day). The first two water rights may be exercised all year while the third is good from about mid-October through June only. The full exercise of all three water rights at Nonpareil provide 4.0 CFS. However, there is a 30% probability that the natural stream flows at the site will drop below 3.0 CFS every year during the month of August.

Sutherlin's second diversion point is on Cooper Creek below the Cooper Creek Dam. This water right is for 5.0 CFS (3,230,000 gallons per day) and has a priority date of August 29, 1967. The water right is good only when natural stream flows into the reservoir can support it from about December through April. During the period of May through November, Sutherlin must withdraw water from a 500 acre feet (162.9 million gallons) storage allotment that the city owns in Cooper Creek reservoir.

The city's third point of diversion is on the North Umpqua River near river mile 15. Sutherlin has the right to divert 1,346 gallons per minute from the North Umpqua River under a 1979 priority. The city proposes to withdraw up to 3.0 CFS which could be pumped 2.5 miles to the upper end of Cooper Creek. This source would be used only in potential drought years and would otherwise be used as a reserve until the need justifies the high cost of pumping the water to Sutherlin. The city is retaining this water right for future utilization because no facilities have yet been constructed for this diversion.

WATER TREATMENT FACILITIES

Water treatment facilities are maintained at both the Calapooya Creek and Cooper Creek sources. The Nonpareil plant on Cooper Creek was constructed in 1983 and is a typical surface water treatment plant in that it treats water by filtration and disinfection.

Raw water is pumped into the plant through a debris screen. As the water enters, it is injected with alum and a polymer before reaching a clarifier, where it is mixed, flocculated, and sedimentated in a single-compartment tank. Coagulants are introduced and mixed with the water under a central cone-shaped skirt where high floc concentration is maintained. Next, the water is directed under a hood through a sludge blanket at the bottom of the tank, which promotes growth of larger conglomerated clusters where the heavier particles have settled. Then, the overflow rises upward in the peripheral settling zone to radial weir troughs suspended at the surface.

The water next passes through filters which remove the nonsettleable floc that remains after chemical coagulation and sedimentation. The filters consist of two aluminum boxes containing a mixture of coal, sand, and garnet. Water passes downward through the filters, pushed by pressure above and pulled by suction below. The filters are cleaned by reversing the flow and backwashing the water up through the beds. Wash troughs suspended above the filter surface collect the backwashed

water and carry it out of the filter box and into an outside settling pond where the sludge sedimentates out and water returned to the creek. The sludge is later pumped to a drying bed.

Prior to the final step in the treatment process, measured amounts of chlorine and food-grade polyphosphates are added to the water before it enters the distribution system. Chlorine is used to destroy pathogens and to control nuisance organisms. Polyphosphates aid in the removal and prevention of oxidation and corrosion of the systems steel pipes. Sutherlin's water distribution system is progressive because it actively cleans corrosion out of its lines through the use of food-grade polyphosphates.

This plant at Nonpareil is currently in excellent condition and has a net capacity of 2.5 million gallons per day with a 2 hour water detention time. The plant could be easily expanded but expansion is limited by the city's water rights on the Calapooya.

The second water treatment plant, at Cooper Creek, is essentially the same design as the Nonpareil plant with one difference: it has no clarifier. Raw water is injected with alum and chlorine before being taken into the plant but instead of flowing through clarifiers, it moves directly into two mixed media filters which remove the floc.

The Cooper Creek plant is well maintained and provides a good degree of treatment. The only drawback to this plant is that it has a short water detention time of 8 minutes. The plant was designed for a capacity of 2.0 million gallons per day, it could easily be expanded to 4.0 million gallons per day with the addition of two more filters. However, if this course were taken, it would be advisable to also add a clarifier and a larger wet well in order to better treat the water and to maintain a longer detention time.

Cooper Creek itself has high concentrations of iron and manganese and currently uses potassium permanganate to oxidize these minerals prior to filtration. However, the city is exploring new ways to control iron and manganese in the water treatment process and plans to put in an adjustable water intake structure. Although capital costs are high, investment in the plant would improve it and save on long-range costs.

WATER TREATMENT STANDARDS

The Safe Drinking Water Act of 1974 gave the Environmental Protection Agency (EPA) the power to set maximum limits on the level of contaminants permitted in drinking water. The act also directed EPA to develop rules for the operation and maintenance of drinking water systems. It is the responsibility of the Oregon State Health Division to enforce and govern these regulations.

Drinking water regulations dictate that water for human consumption be monitored and tested for bacteriological, physical, and chemical characteristics. Among the bacteriological tests are those for coliform groups which indicate the presence of pathogens. Five times each month, the city takes samples at various points in the distribution system and performs bacteriological tests on them. Sutherlin is one of only seven cities in the state that is certified to do its own testing.

Physical tests determine the degree of turbidity, color, and odor in the water. Drinking water should not contain any impurities that offend the senses of sight, taste, or smell. Monitoring and treatment of physical characteristics is done hourly.

The city continuously monitors the water for presence of organic and inorganic chemicals that exceed the EPA limits for human health. Detection of excess substance amounts would be grounds to reject the water supply.

The city has indicated that they have not had any problems in any of these areas and operates well within the standards of the Safe Drinking Water Act.

STORAGE FACILITIES

Sutherlin currently has two main water storage reservoirs in use to offset demand fluctuations, to maintain constant pressure in the system, and to provide storage for emergencies, in case of fire, for example. The Calapooya tank has a capacity of 1.25 million gallons and the Umpqua tank has one of 1.0 million gallons. Sutherlin also has three smaller storage tanks located in residential areas. They are the Tanglewood tank (70,000 gallons), the Upper Umpqua tank (70,000 gallons), and the Ridgewater tank (40,000 gallons). The city presently has about 2.43 million gallons of system storage available.

These storage volumes are tempered by the reliability of Sutherlin's water supply.

Sutherlin's water storage criteria is 2.23 million gallons. This figure is derived by multiplying the average consumption rate of 165 gallons per person per day by the 1988 population of 4500 multiplying by a 3-day average consumption. If the population increases to 11,000, as it is expected to do by the year 2010, the city's storage criteria would be 5.45 million gallons.

The Insurance Service Office (ISO) Fire Flow recommendations for Sutherlin are now 3500 gallons per minute for 3 hours on the main distribution level. This flow rate would require about 0.63 million gallons of storage. Since the city's main reservoir is 1.25 million gallons, this recommendation is easily implemented.

In the city's residential areas, the fire flow recommendation is 1000 gallons per minute for 2 hours. This rate of flow would require a reserve of 0.12 million gallons. Sutherlin's two 70,000 gallon tanks and one 40,000 gallon tank are on separate pressure levels. Any difference in actual storage and recommended storage must be made up by pumping from the lower level systems.

DISTRIBUTION SYSTEM

Sutherlin's water distribution network was built in 1956. The water lines range in size from 4 inches to 14 inches. Some of the original welded steel pipe has been replaced and others will need to be replaced in the future. The city has used asbestos cement pipes in the past to prevent corrosion but now is replacing the asbestos cement with plastic. Every year, the system has an estimated unaccounted water loss rate from parks irrigation, hydrant flushes, and treatment plant usage of 5 to 10 percent. The acceptable standard is 10 to 15 percent.

Recent additions to the distribution system include improvements at Oak Street Terrace, Barnes Addition, Sutherlin Heights, Ridgewater Estates, and South Comstock Road. In 1982, two waterlines were installed in and around Sutherlin's industrial park, then the site of the municipal airport. This extension provided necessary water service to the industrial park and completed a loop of the transmission main from Calapooya to Hastings to Comstock and Duke Roads.

PRESENT AND FUTURE WATER PRODUCTION

Daily water production records since 1977 for the city were analyzed and average water production figures used in previous reports were consulted. Water production relationships are reported on a gallons per capita basis to allow the city to base its predicted future water requirements on the most recent population forecasts.

Sutherlin's water consumption is by industrial, residential, and commercial users. About 6% of the city's water consumption is by unmetered users.

In 1979, Sutherlin's water system served an estimated 7,000 persons through 1,593 residential connections. Of these connections, 152 (serving 480 persons) were outside the city limits and mostly located along the transmission line from Nonpareil.

Existing water sources may not be adequate to serve Sutherlin's estimated year 2010 population of 11,000. Therefore, additional surface water impoundments seem to be the only viable source for future water needs. The current impoundment upstream from the Nonpareil facility contains approximately 2.3 acre feet. This impoundment extends upstream for about a quarter of a mile and is held by the Nonpareil Dam which is 110 feet wide and approximately 15 feet high. This dam is not used for storage but to back up water behind the intake point.

The Douglas County Comprehensive Plan has identified a potential impoundment on Gassy Creek which would add 9,200 acre feet to the water supplies of the Calapooya sub-basin. Sutherlin's future municipal water needs could be met by the construction of an impoundment upstream from the Nonpareil treatment facility. In addition, an impoundment on Hinkle Creek is possible, as is the possibility of an agreement with the Sutherlin Water Control District to add another 500 acre feet to the supply and increase the existing water supply by 35 percent.

A 1988 study by Gary Dyer Engineering reviewed Sutherlin's ability to provide water to the city's industrial sites. This study concluded that the water storage requirements for the entire system should be increased to equalize the 3-day storage, fire reserve, and emergency needs. Based on these criteria, the total storage requirements of the city are calculated as follows:

<u>Maximum Day Demand</u>	
Current Demand	2,097,000 gallons per day (gpd)
Future Industrial Demand (Increase) $49,590 \times 2.5 =$	124,000 gpd
Total Maximum Day Demand	2,221,000 gpd or 2.2 million gpd

<u>Storage Requirements</u>	
Equalizing 0.25×2.2 mgd =	0.55 Million Gallons (MG)
Fire Reserve	0.72
Emergency	2.20
Total Storage Requirements	3.47 MG
Existing Storage	2.40

Additional Storage Required	1.07 MG
-----------------------------	---------

When viewed from the standpoint of the overall storage needs of the community, an additional 1.0 million gallons of storage is required. The existing 1.0 million gallon reservoir east of the industrial area is suitably located to serve industrial development. Therefore, the 1.0 million gallon storage should be cited so as to optimize flow rates and pressure throughout the city.

The need for an additional reservoir is related indirectly to the industrial water demand, but the new reservoir improvement is considered a low priority in relation to the industrial area. The city's combined water treatment plant capacity of 3.45 million gallons per day far exceeds the current maximum daily demand of 2.1 million gallons per day. Currently, maximum daily demand represents only about 60% of treatment capacity. Because of this situation, ample reserve capacity exists for industrial development.

B. SANITARY SEWER

The city of Sutherlin owns and operates one wastewater treatment plant which was built in 1977 and is located approximately 3 miles west of the city on Highway 138. This plant removes impurities and treats wastewater so that the treated outflow meets state and federal requirements and is suitable for disposal or reuse.

Wastewater enters the plant and flows to a wet well, then pumped to the head works area and into the grit chamber. In the grit chamber, sand, gravel, eggshells, bone chips and other particles are removed by a comminutor, a device that cuts up accumulated material remaining on the grit screen without removing it from the wastewater. The collected grit is then trucked to the county landfill.

Next, the influent flows to a clarifier, which, like the water treatment clarifier, is a settling tank that allows the heavier solids to sink and the lighter ones to rise. The settled solids form a sludge that is routed off the bottom of the clarifier and into an aerobic digester where microorganisms feed off the sludge. As they consume the nutrients in the sludge, the microorganisms begin to feed off their own protoplasm as the nutrients are depleted. When this happens, their cell tissue is aerobically oxidized to carbon dioxide, water, and ammonia.

After the clarifying process, the water is drained off and the remaining sludge is applied to nearby fields as fertilizer. The liquid, now with a lower specific gravity, flows into the stabilization/contact tank for further separation and gravitational settling. The last process in this primary treatment phase is to inject chlorine into the water and retain it in the chlorine chamber for disinfection.

The next step in the process is to filter the water to remove any remaining suspended particles before finally releasing the treated water into Calapooya Creek. In the summer, this treated water is used to water the grass on the nearby golf course.

The existing waste water treatment plan was designed for a dry weather flow of 1.3 million gallons per day, which is also the rate allowed by the discharge permit. The designed hydraulic capacity is 2.7 million gallons per day.

If the ratio of persons on the sewer system (approximately 3,800 in a population of 4,500) remains the same in the future, and that the standard average daily flow for 4,500 persons is 650,000 gallons per day, the new 1.3 million gallon per day treatment plan is capable of serving a population of 10,000. This facility is modular in design and may be expanded by adding additional clarifiers as required.

Within the city, some areas rely on septic systems for wastewater treatment. Although the city has considerable excess capacity, these areas will remain without sewer service until a collection system is constructed for them. Several sewer trunk lines exist that are at or near their transmission capacity because of appreciable inflow and groundwater infiltration at times of heavy precipitation.

TREATMENT STANDARDS

The Oregon State Department of Environmental Quality (DEQ) regulates the construction and operation of wastewater treatment facilities. Accordingly, DEQ has established minimum quality standards for treated effluent discharge into Calapooya Creek. These standards are based on consideration of potential use, streamflow volumes, proximity to urban development, other waste discharges in the water system, as well as projected future discharge levels.

Effluent quality is measured in terms of amount of BOD5 (this stands for 5-Day Biochemical Oxygen Demand and is a measure of the oxygen-consuming, carbonaceous organic material in wastewater) and amount of TSS (Total Suspended Solids contained

in wastewater). Another DEQ requirement are tests for presence of coliform bacteria groups, primarily fecal coliform. Fecal coliform bacteria are pathogenic organisms and they promote infectious diseases.

The Sutherlin treatment plant currently operates well within DEQ discharge standards for BOD5, TSS, and fecal coliform. DEQ's discharge standards are 30 milligrams per liter for both BOD5 and TSS during wet weather and a 10 milligrams per liter for both in dry weather. Fecal coliform standards are 200 colonies per milliliter.

Additional water quality standards may be imposed on the discharge of ammonia, nitrates, and phosphorous. Phosphorous in particular is monitored because an excess of this mineral causes overfertilization in surface waters and thus promotes the nuisance growth of algae and aquatic weeds. These additional standards result from a 1984 law suit charging that the DEQ was only taking the point source discharge (discharge point of the water treatment plant) into account when monitoring instead of checking the existing surface water quality. This resulted in the formulation of the Total Maximum Daily Load (TMDL) system, a method that tests existing surface water quality. When this is fully implemented, treatment costs can be expected to rise.

TREATMENT FACILITIES AND COLLECTION SYSTEM EXPANSION

Sutherlin's collection system was constructed in large part in 1956. It is primarily a gravity-run system. Most of the network consists of 8 inch lines but pipe diameters range from 6 to 24 inches.

The system has a chronic infiltration and inflow problem. A significant amount of surface and groundwater is entering the system. In recent years, repairs and materials replacements have attempted to reduce the volume of inflow entering the plant.

Although the system is in good to fair condition, it is deteriorating with age. Steps should now be taken to implement a well-planned preventative maintenance program that would reduce costs associated with deterioration.

A preventative maintenance program should begin by inventorying the system's components and identifying deficiencies. Next, the program cost should be estimated and a source of funding identified. Finally, a schedule and budget for a long-range maintenance and rebuilding program should be devised. Once the funding is appropriated, it must be used for its intended purpose, not to make up for a shortfall in other areas of the city's budget.

The limiting factor for a sewer system service area is relative topography. A hilly area will cause costs to rise because of the need for additional pumps or lift stations. Most of the city of Sutherlin lies in the Sutherlin Creek Valley, a fairly level area that is favorable to gravity-run collection systems. A study by the consulting firm of HGE Engineering examined the inflow and infiltration problem and the city is exploring solutions to it.

The Sutherlin area contains soils that are not well-suited for septic waste disposal. Shallow clay soils and surface perched water during the winter months contribute to surfacing sewage problems for those users outside the urban growth boundary. Within the urban growth boundary, sewer hookups have eliminated the septic problems. The city is aware of a few isolated septic systems within the city limits and is working to bring these onto the sewer collection system.

STORM DRAINAGE

The city has a limited storm drainage system that is dependent on 4 major ditches. Storm drains are located at both the junior and senior high schools, along Central Avenue, and in the Cascade II, III, and Raintree subdivisions. New subdivisions are required to install storm water drainage systems at the time of construction. The city should develop a long-term plan to convert from open ditches to storm drains.

C. TRANSPORTATION

INTRODUCTION

Sutherlin's traffic circulation and transportation system greatly determine how the community has developed and will develop in the future. New development density is directly tied to the availability of various modes of transportation. Early urban forms tended to be denser because movement was by foot, horse, or mass transit. The advent of the automobile made it easy for cities to spread out. But rising energy costs, especially in the 1970's, forced Americans to reexamine the role of the car in urban development. Future energy availability and pollution levels may render the car not so attractive as a means of primary transportation. Therefore, it is important for communities recognize that current conditions are not static and that it may be costly to close off options instead of considering all potentially usable transportation infrastructures.

Sutherlin's transportation requirements are met by an extensive city-wide street network, Greyhound bus service northbound and southbound, and Southern Pacific's railway freight service.

Interstate 5 runs north and south through the western portion of the city and two of the freeway's interchanges, at Central Avenue and at Highway 99 south of town, make the community highly accessible to this route. Sutherlin is at the intersection of Interstate 5 and Highway 138, one of the state's major access routes to points on the Oregon coast.

STREETS

Sutherlin's street network can be divided into three classifications: arterial, collector, and local. The City of Sutherlin additionally classes streets as either primary or secondary. Arterial streets are the principal streets. They move large volumes of traffic and are designed with large rights-of-way (68 to 100 feet wide) with pavement widths of at least 48 feet (this width may be adjusted where traffic volumes are not high). Arterial streets have limited or controlled access to them and have no on-street parking.

Collector streets funnel local traffic onto arterial streets. Their rights-of-way range from 60 to 80 feet wide with pavement 38 to 64 feet wide. Property access from collector streets should be discouraged.

Local streets, the third classification, provide access to abutting property. Their secondary function is to move local traffic to a collector. Through traffic, especially buses and heavy trucks, should be discouraged on local streets. The standard rights-of-way for new locals can be from 50 to 60 feet, with pavement widths of 26 to 48 feet. Some of the most functional older streets are somewhat narrower. All streets serve an additional function as easements for utilities.

Primary streets are those most heavily-used local streets, while secondary streets are less heavily-used.

FUNCTIONAL CLASSIFICATIONS

The functional classifications of Sutherlin's streets were mapped in September, 1977 and are shown on the Street Network Map.

The functional classifications for Central Avenue, Calapooia Street south of Central Avenue and State Street north of Central Avenue were taken from the State Highway Departments inventory. Because each of these streets is identified as a rural arterial that goes into and through an urban area, these streets have been classified by the criteria established in the Federal Aid Highway Act of 1973. Under this act, these state-identified streets can be partially funded by State Highway Department monies. The remainder of Sutherlin's streets were classified by the function in local traffic patterns.

Central Avenue is classified by the State Highway Department as functioning both as an arterial (the section from the west city limits to State Street) and as a collector (State Street to east city limits). Intensive auto-related development is occurring near the Central Avenue exit from I-5. Central Avenue is the only fully-developed east-west street in Sutherlin.

State Street (north of Central Avenue) is the city's only other identified arterial street. This portion of State Street (a section of Highway 99) when combined with Calapooia Street (also a section of Highway 99) is the only north-south paved arterial in the city. Under the State Highway Department's criteria, only that portion of Highway 99 which is north of Central Avenue is officially classified as arterial although it functions locally as an arterial. The remaining portions of State and Calapooia Streets along with Comstock Road, South State Street, Northwest Sixth Street, Northwest Fourth Street, Southeast Waite/Southside Road and Northeast Mar Dona Way from Central Avenue to Northeast Fourth are functioning as collectors. The rest of the community's developed streets function as local streets.

The need for an additional east-west thoroughfare in the community has long been identified. Increased traffic flows associated with commercial and residential development along Central Avenue make this need all the more apparent. A right-of-way formerly belonging to Weyerhaeuser, Inc., has been approved as the route for this east-west bypass.

The railroad and Interstate 5 present barriers for future east-west traffic circulation. Since the railroad crosses both Sutherlin's major thoroughfares at grade, traffic is often halted on these streets. Because of the traffic volume on Central Avenue, the situation at this crossing is much more critical than at the grade crossing south of town.

Through traffic on U.S. Highway 99 is restricted at Central Avenue before being allowed to continue north or south. A right-of-way off of North Calapooya has been approved to straighten the north-south highway leading to Oakland.

Overall roadway demand is expected to increase because of additional traffic generated by new commercial and industrial firms. New access roads into, out of, and within the project area will inevitably be built with the arrival of new developments.

STREET RATINGS

An evaluation of the city's streets (excluding alleys) was made in February, 1978 and reviewed in August, 1989. Streets were judged according to their function (arterial, collector, or local), and were given one of five ratings. A GOOD rating indicates that the street is serving its primary function well, has asphalt or concrete paving with no significant deterioration, and provides adequate drainage by curb and gutter or proper ditches.

A FAIR rating indicates that the street has an improved, paved surface but has surface defects, is not wide enough to handle its traffic load, or has inadequate drainage.

Streets rated POOR have improved surfaces but have major defects or significant deterioration of the surfaces.

Any unimproved street open for traffic falls into the Gravel (GR) category. An Undeveloped (UD) street is one that has been platted but has not been improved or used as a traveled way.

In 1989, the City had 23.79 miles of improved or semi-improved streets. They ranged from new streets like Oak Street with curbs, gutters, and sidewalks, to very narrow streets like Kruse Street with oil mat surfaces and storm drains. See Table I for an inventory of existing streets. This table refers only to city-maintained streets. For classifications of state and county-maintained streets, see p. 13.

TABLE I: CITY-MAINTAINED STREETS

STREET NAME	LENGTH (FEET)	CONDITION (In Feet)					
		CLASS	GOOD	FAIR	POOR	GRAVEL	UNDEVELOPED
Agate	660	Local	660				
Airway SW	420	Local			420		
Arch NE	1400	Local			400	1000	
Arvilla	610	Local			610		
Ash	730	Local		730			
Ault	260	Local				260	
Azalea	730	Local		730			
Bebeau	500	Local				500	
Beecroft	1250	Local				1250	
Branton	800	Local		800			
Calapooia	950	Local		580		100	270
Casa De Loma	1450	Local		1450			
Cedar Rd. NE	150	Local					150
Central	7980	Art/Col		5580		2400	
Comstock	2180	Local			2180		
Cub	140	Local					140
Dean SE	510	Local		510			
Dean SW	540	Local		330		100	110

STREET	LENGTH (FEET)	CLASS	CONDITION (IN FEET)				UNDEVELOPED
			GOOD	FAIR	POOR	GRAVEL	
Don Mar	110	Local					110
Duke	1750	Local					1750
Earwood	110	Local					110
Eddy	870	Local			870		
Edgewood	2460	Local					2460
Everett	3000	Local				2600	400
Fifth	1780	Local		1210	400		170
First NE	4500	Local		3170	980		350
First SW	2320	Local		1110	1000		110
Fourth NE	7150	Local	2390	4020	400		340
Fourth SW	1920	Coll					1920
Front SW	490	Local					490
Garnet	630	Local	630				
Garnet Ct.	310	Local	310				
Gleason	880	Local			880		
Glen	810	Local			810		
Grant	870	Local		870			
Grove	2170	Local		1250			920
Hasting	3490	Local				2300	1190
Hawthorne	1410	Local		550	860		
Jade	1300	Local	1300				
Jasper	740	Local	740				
Johnson	880	Local		880			
Koleno	230	Local			230		
Kruse	930	Local	930				
Lake View	480	Local		480			
Landing	880	Local				480	400
Lane	340	Local				340	
Laurel	2210	Local				350	1860
Lester	480	Local		480			
Magnolia	1000	Local		650			

STREET	LENGTH (FEET)	CLASS	CONDITION (IN FEET)				
			GOOD	FAIR	POOR	GRAVEL	UNDEVELOPED
Maple	1010	Local			1010		
Mar Donna	1750	Coll		1260	490		
Miller	1060	Local			740		320
Myrtle	750	Local		400		350	
Oak Terrace	850	Local			650		200
Oak NW	100	Local		1000			
Opal	1010	Local	1010				
Page	3080	Local				550	2530
Pear	580	Local	580				
Pine	890	Local		890			
Plum	310	Local		310			
Primrose	250	Local			250		
Raintree	1100	Local		1100			
Ridgeview	950	Local			950		
Ridgewater	1520	Local			1520		
Robinson	880	Local	880				
Ruby	340	Local	340				
Second NE	3610	Local		1680	1930		
Second NW	2180	Local		300	1770	110	
Second Ct.	240	Local		240			
Sherman	650	Local		650			
Sherwood	1700	Local		650	1050		
Sixth	8300	Coll	850		1050	4590	1810
South Side	2060	Coll			2060		
Spence	1110	Local		1110			
St. Johns	1290	Local		550	740		
State	5200	Coll	2600	2600			
Strong	150	Local				150	
Sunnyside	110	Local	110				
Sunset	1090	Local		1090			
Sunset Ln.	580	Local		580			

STREET	LENGTH (FEET)	CLASS	CONDITION (IN FEET)				UNDEVEL- OPED
			GOOD	FAIR	POOR	GRAVEL	
Tanglewood	850	Local		850			
Terrace	1620	Local		1620			
Terrie	120	Local		120			
Third NE	3640	Local		2160	780		400
Third NW	400	Local			300	100	
Third Ct.	240	Local		240			
Umpqua	1960	Local		1620	260		80
Umatilla	2380	Local		1030	1350		
Valentine	750	Local		750			
Vantage	200	Local		200			
View	1150	Local			1150		
Waite	1000	Coll		1000			
Westwood	800	Local		400		400	
Willamette	1790	Local		450	1340		
Wisteria	540	Local				540	

SUMMARY

Condition	Length (miles)	% of Total
Good	1.72	7.23
Fair	8.98	37.76
Poor	6.78	28.50
Gravel/Dirt	2.46	10.34
Undeveloped/Platted	3.84	16.14

STREET CONDITION

A summary chart of the street inventory indicates that while a large percentage (28.50%) are in poor condition, the majority of high volume arterial and collector streets are in fair to good condition.

MAJOR SIGNALS

Sutherlin's downtown area has one traffic signal. Another signal is slated to be installed by 1991 at the intersection of Interstate 5 and Comstock. Traffic regulating devices are normally installed on the basis of minimum warrants as outlined by the U.S. Department of Transportation in 1987.

The Oregon State High Department monitored average daily traffic counts at selected sites within Sutherlin. Two Central Avenue intersections were subsequently programmed for traffic signals under the State Highway Six Year Plan. The Central-

State intersection may receive priority funding but the Central-Calapooia intersection was also included within the six year program.

PEDESTRIAN TRAVEL

Sutherlin's sidewalk network is limited and does little to encourage pedestrian traffic. The sidewalks in the community are predominantly located within the central business district, on the north side of Central Avenue between Northwest Comstock Road and Northwest Oak Street and leading to the local schools.

The sidewalk system does not currently tie major activity nodes together. The existing sidewalks do, however, have the potential to provide a good foundation for a community-wide sidewalk/pedestrian network. Sutherlin presently requires the construction of sidewalks in all new subdivisions.

BICYCLE TRAVEL

No identifiable bikeways exist within Sutherlin. What this means is that if bicycles are used as transportation, they must use either the very limited sidewalk network or compete with automobiles and trucks for street space. Because many streets are narrow and in poor condition, this competition for street space creates hazardous situations.

PUBLIC TRANSPORTATION

Public transportation in Sutherlin is limited to twice-daily north and southbound passenger bus service provided by Greyhound Bus Lines. Most short trip transportation demands are met by almost total reliance on the automobile.

RAILROAD

A Southern Pacific Railroad line runs north and south through the community west of the central business district. No rail passenger service to the community is currently available. The closest rail passenger connection is in Eugene.

Rail freight service is provided by Southern Pacific. Trackage in Sutherlin consists of a main line, one in-use industrial spur at the Murphy Company plant, and an active siding also near the Murphy plant.

Additional industrial spurs are readily available along appropriate locations within the planning area. Southern Pacific Company will provide the necessary rail planning services to prospective industrial tenants. Spur development costs are generally borne by the industrial tenant. However, the construction costs for the switch and 120 feet of track (\$30,000 to \$35,000 at present prices) will be reimbursed to the tenant by Southern Pacific in the form of \$20 per car-day for 5 years or until refunded. Additional track construction presently costs about \$50 to \$60 per foot.

AIR

Sutherlin's air passenger needs are served by either the Roseburg Airport, which offers limited passenger service, or the Eugene Airport which offers either direct or connecting flights to most major airports in the continental U.S.

SPECIAL TRANSPORTATION NEEDS

A study by the Oregon Department of Transportation identified the poor, the young, the aged, and the disabled as groups with special transportation needs. Although each of these groups is represented in the Sutherlin population, the elderly constitute the largest target group in need of special transportation services.

A transportation program sponsored by Douglas County Senior Services is operated in Sutherlin with at least one van trip to Roseburg each week, a special health care transport service for senior citizens, and a Senior Meals on Wheels program provided by one van four days each week.

Additional senior transportation is provided within the Roseburg-Sutherlin area by Douglas County Senior Services volunteers. This service must be coordinated in advance.

CONCLUSIONS

From all appearances, Sutherlin will continue to rely on the automobile for primary transportation in the coming years. Therefore, the community must continue to provide adequate streets that meet the needs of a car-based populace.

If a street function plan, a sidewalk network plan, and a bicycle plan were developed, future street improvements and upgrading could be undertaken in accordance with these plans. In other words, sidewalks and bikepaths could be built at the same time as streets and thus provide low cost alternatives to the automobile.

D. EMERGENCY SERVICES

FIRE PROTECTION

Sutherlin provides fire protection for those residents and businesses located within its corporate limits and rural fire protection for a district west of the city. The city's single fire station is located in the City Hall complex on Central Avenue. The department's facilities include a dormitory, kitchen, classroom, and storage for the city's fire fighting equipment.

The department has two full-time employees and 27 volunteers. It maintains 3 pumper trucks with respective pumper ratings of 1,250 gallons/minute, 1,000 gallons/minute, and 500 gallons/minute. In addition, one 2,000 gallon tanker truck, one salvage truck, and one brush pickup round out the complement of equipment. In 1975, the Insurance Services Office of Oregon gave the city's fire protection service a rating of 5 on a scale of 1 to 10 with 1 being the best possible score.

POLICE

The police department provides the city with police protection from its headquarters in the City Hall complex. The staff numbers 10 and includes a chief, 7 officers, and 2 police recordkeepers. The department has two marked patrol cars with another car available on a part-time basis. Two jail cells with a 4-bed capacity total are also located in the City Hall complex. An automatic dialing system called "R-U-OK" monitors elderly persons by regularly dialing subscribers and, if there is no answer, sending an officer to check on them.

A report by the Administrative Service Section of the Board of Police Standards and Training identifies that the police department's present facilities (office space and cells) are inadequate to meet existing needs. This report also sets a standard of one additional officer for each 500-person increase in population.

E. OTHER SERVICES

EDUCATION

Sutherlin School District 130 administers the community's public educational services and serves an approximately 136 square mile area with one high school, one junior high, and two elementary schools that are located within the city.

Sutherlin High School is located on a 23 acre site at 4th Avenue and Umatilla Street. The 1990 enrollment for grades 9 through 12 was 381, with a 500 pupil capacity.

Sutherlin Junior High School contains grades 7 and 8 and occupies a 6 acre site immediately east of Sutherlin Senior High School. The 242 pupils enrolled here during the 1990-91 school year share physical education facilities with the Senior High. The school is equipped to serve 300 students.

Pupils in grades 4 through 6 attend West Intermediate school, which is located on a 20 acre site on Comstock Road in the northwestern portion of town and has a 1990-91 enrollment of 298. This facility is able to hold approximately 450 students.

East Primary School at 3rd Avenue and Umatilla Street has a 1990-91 enrollment of 384 pupils and is designed to accommodate 450. Grades 1 through 3 attend school on this 4 acre site.

School district enrollment figures indicate a steady increase in student population from 1968 to 1976 but from 1976 to 1984, enrollment decreased. Since 1985, however, enrollment has steadily risen and then dipped slightly in 1990.

ENROLLMENT STATISTICS
SUTHERLIN SCHOOL DISTRICT 130

<u>YEAR</u>	<u>TOTAL ENROLLMENT</u>
1990	1305
1989	1380
1988	1284
1987	1275
1986	1244
1985	1248
1984	1200
1983	1232
1982	1285
1981	1385
1980	1364
1979	1439
1978	1474
1977	1534
1976	1597
1975	1537
1974	1542
1973	1514
1972	1506
1971	1464
1970	1413
1969	1390
1968	1342

Sutherlin School District 130 is currently working on a Capital Facilities Plan in order to determine the district's future needs and how they should be satisfied.

Higher education opportunities for Sutherlin residents are available at Umpqua Community College, located 7 miles south of the city. The college offers a wide variety of educational opportunities that range from two-year degrees to apprenticeship training.

REFUSE

Refuse collection is provided by Sutherlin Sanitary Service, a private firm with a franchise with the city for the service. For those who do not subscribe to this service, a Douglas County Solid Waste transfer station is located in Oakland. There is currently no charge for waste disposal at this transfer site.

HEALTH CARE

Most of Sutherlin's health care needs are being satisfied outside the city, most likely in Roseburg. However, three physicians, one chiropractor, three dentists, and two veterinarians currently have practices in Sutherlin. In addition, a medical center across from Central Park has emergency capabilities and offers ambulance service to Sutherlin and the surrounding area.

LIBRARY

The Sutherlin City Library is a branch of the Douglas County Library and has all the resources of the main library in Roseburg at its disposal. The current library is located one block east of City Hall on Central Avenue. It is a 3,800 square foot building which should continue to provide adequate space to house the branch library for most of the planning period. In 1988, the library had a collection of 12,189 books and 24,000 paperbacks. The 1988 annual circulation was 58,197. The library is currently open 40 hours a week.

F. UTILITIES

Electricity, natural gas, cable television, and telephone services are all provided to the community through private firms or public utility companies. All of these companies are currently providing adequate service to the community and have indicated that they are capable of meeting its future demands.

ELECTRICITY

Electrical service to Sutherlin is franchised to Pacific Power and Light Company at a rate of 3.2% of gross. Douglas Electric also will soon purchase a service franchise at the same rate. Underground or overhead service is available and there is currently no hookup charge to new developments. Representatives of both electric companies have indicated that they are capable of meeting any foreseeable future electrical needs of the city.

TELEPHONE

The city has a 3% gross franchise agreement for telephone service from Pacific Northwest Bell. The telephone company's office for service to Sutherlin is in Roseburg. Company representatives have stated that they have ample capabilities to expand service in this area.

NATURAL GAS

Sutherlin's natural gas needs are provided by CPN through a 3% gross franchise with the city. CPN representatives have indicated that they are capable of supplying future natural gas demands of their current customers and, in fact, are taking new services requests.

CABLE TELEVISION

Cable television is franchised by the city to Falcon, Inc. which offers underground or overhead service.

III. IMPLEMENTATION POLICIES

In order to effectively implement the Public Facilities Plan, general, overriding policies should be adopted. The Public Facilities Plan is the detailed program that is the outgrowth of the Comprehensive Plan's general overview. The following policies can be seen as a framework by which to put both plans into practice.

A. GOAL: TO PROVIDE EFFICIENT PUBLIC FACILITIES AND SERVICES IN AN ORDERLY, PLANNED MANNER SO AS TO MEET THE NEEDS OF SUTHERLIN'S RESIDENTS AND BUSINESSES.

POLICIES:

1. The city shall ensure that appropriate support systems are installed prior to or concurrent with the development of a particular area. Costs of constructing water and sewer ties to new developments shall be borne by the developer.
2. All large construction projects shall be planned to meet ISO recommended fire flow requirements.
3. The city shall implement the projects necessary to satisfy projected water supply needs.
4. The city shall promote community awareness of water conservation.
5. The city shall continue to upgrade the existing water distribution system in an effort to minimize water losses.
6. The city shall identify ways to reduce and eventually eliminate the community's existing subsurface drainage problems.
7. The city shall establish appropriate and equitable funding systems in order to generate revenue for construction of public facilities.
8. The city will cooperatively work with the local school district to plan for enrollment levels.
9. The city shall encourage the expansion of vocational/technical programs at both Sutherlin High School and Umpqua Community College.
10. The city shall continue the agreement with the Douglas County Library system which makes available county library resources to the city library.
11. The city shall comply with all state and federal environmental quality regulations.
12. The city shall provide sewer and water service to areas within the Urban Growth Boundary.
13. The city shall require utilities to use the public right-of-way for future service ways and require utilities to coordinate activities in order to prevent unnecessary duplication.
14. Ensure that as new development occurs, public facilities and services to support the development are available or will be available within a reasonable time.
15. All public facility improvements in the Sutherlin Urban Growth Boundary shall be consistent with this plan.

16. Establish a priority system for evaluating competing demands for public facility improvements to help the budget committee rank projects, and to demonstrate to the public that projects are budgeted in an open, rational manner. This priority system should be based on both a short term and long term plan that is evaluated on an annual basis.
17. The criteria to indicate whether a project should be on the public facility improvement project list are:
 - Frequency or duration of the problem;
 - Threat to public health or safety;
 - Injuries or damage to public or private property that may result from failure or lack of the system;
 - Any other unintended negative consequences;
 - Service disruption from repairs;
 - Cost of the solution.
18. The criteria to indicate whether a project should be funded, as opposed to only be listed as a possible public facility improvement project, are:
 - The importance of the need, especially the health and safety impact.
 - The degree to which the project responds to the need.
 - Impact on other facilities.
 - Conformance to the Comprehensive Plan or other plans.
 - Operation and maintenance costs.
 - Energy Requirements.
 - Environmental impacts (including economic, natural, and aesthetic features).
 - Cost of construction
 - Financial suitability.
 - Property value increases.
 - Job creation or retention.
 - Offsetting revenue generated or other leverage brought about.
 - Cost advantages from scheduling.
19. This plan and all public improvements are based on these assumptions:
 - A. An improvement is most cost effective when installed at the proper time.
 - B. The financing of Public Facilities would be equitable: costs should, all other things being equal, reflect use, wear, ability to pay, and past efforts.
 - C. People should benefit, or benefit in the future, from their efforts to pay.
 - D. Costs to property owners should be proportional to who benefits from the project (the property owner mainly or the general public), how much of the cost has already been borne by the property owner, and how long the facility will be used.
20. New development, including but not limited to subdivisions, residential, or commercial, or industrial construction, should be responsible for constructing, paying for, or depositing funds for an improved street with curbs, gutters, and sidewalks, as well as sewer, water, storm drainage facilities, fire hydrants, and street lights, in addition to all utilities. This may be modified somewhat where there are other public benefits or improvements.
21. Payment of "in lieu of" fees is appropriate where the facilities are impractical to install when development occurs. Such fees shall be reserved for such improvements in the future.

22. Where existing or partial development is being utilized, as in construction on an existing lot which fronts or gains access from a sub-standard street, for example, full improvement as specified in Policy 20 above for new development is not always practical or appropriate. Instead, partial improvement "in lieu of" fees or agreement to participate in future Local Improvement Districts (LID's) is warranted.

23. Consistent with other policies of this Plan and the comprehensive Plan, improvements are to be provide by the agency and financed as follows:

SEWER COLLECTION SYSTEM

Provider/Owner: City

New Lines: Developer

Oversizing: City

Repair of Existing: City

Expansion of Existing: Varies by purpose

Facility to Serve One Area Only (such as a lift station): LID

SEWAGE TREATMENT SYSTEM

Provider/Owner: City

Expansion or New: City

WATER DISTRIBUTION SYSTEM

Provider/Owner: City

New: Developer

Oversizing: Developer

Replacement of Existing: City

Expansion of Existing: City

Facility to Serve One Area only (such as a booster pump): LID

WATER TREATMENT SYSTEM

Provider/Owner: City

Expansion or New: City

STORM DRAIN AND COLLECTION SYSTEM

Provider/Owner: City, County, and State; Sutherlin Water Control District

New: Developer

Oversizing: City or Owner of Particular Section

Repair of Existing: Owning Agency

Replacement of Existing: Owning Agency

Expansion of Existing: Owning Agency

Facility to Serve One Area Only: LID or Owning Agency

In Conjunction with Street Improvements: Owning Agency, LID

STREETS (PUBLICLY DEDICATED BUT NOT NECESSARILY PUBLICLY MAINTAINED)

Provider/Owner: City, County, or State highway Division

New: Developer or Agency

Oversizing: Owning Agency

Repair of Existing Paved: Owning Agency or Agency with Maintenance Responsibilities

Repair of Existing Unpaved: Owning Agency

Repaving: Owning Agency, LID

Widening Only (for abutting property owners benefit): LID

Widening Only (for through traffic); Owning Agency

Widening and Repaving Whole Street (for abutting property owners benefit): LID

Widening and Repaving Whole Street (for through traffic: Owning agency

Curb and Gutter (part of project cost): If LID, may waive or city assist

Sidewalks (part of project cost): If LID, may waive or city assist

BIKEPATHS/ROUTES

Provider/Owner: City, County, or State highway Division
New: Right-of-way Owner

PARKS

Provider/Owner: City
New: City (Sutherlin Parks and Recreation Association may initiate)
Improvement or expansion of existing: City or Parks & Recreation Association
Facility to Serve One Area Only (such as a tot lot): City or Neighborhood

SCHOOLS

Provider/Owner: Sutherlin School District or Private Provider
New: District or Private Provider
Repairs: District or Private Provider
Replacement of Existing: District or Private Provider
Expansion of Existing: District or Private Provider

OTHER PUBLIC BUILDINGS

Provider/Owner: Various
New: Agency
Repair, Expansion, or Replacement of Existing: Agency

24. The city should strive to have a complete set of public facility standards which complies with the standards of the American Water Works Association (AWWA) and other nationally-recognized agencies. The standards should be jointly adopted by all agencies to help coordinate installation and repair of facilities, as well as improve public or developer access and understanding. In addition, the city should periodically review all standards for public facilities.
25. Any expansion of the UGB or public facility systems must either be advantageous for residents (or future residents of the city) or to the city itself, as a means to that end.
26. A technical review committee composed of all affected agencies should be formed to coordinate and carry out the plan. Such a committee should review proposals from the private as well as public sector, as well as to meet regularly to work on common problems and review each member agency's plans for improvements.
27. The Planning Commission should make sure every interested and affected party, both staff and Board, has available at least one copy of the Plan and is familiar with the plan, its policies, and the impact of it on both long range and immediate operations. Non-agency parties may be charged a fee to cover printing costs of the Plan
28. The City of Sutherlin shall be responsible for the preparation, adoption, and amendment of the Public Facilities Plan, pursuant to OAR-11-015(1).

B. GOAL: TO PROVIDE AND ENCOURAGE A SAFE, CONVENIENT, AESTHETIC, AND ECONOMICAL TRANSPORTATION SYSTEM.

POLICIES:

1. Encourage the expansion of the street improvement program and also coordinate the program with the future street plan, and thus ensure that those streets that have been designated to carry high volumes of traffic (arterials and collectors) are in satisfactory and safe condition.
2. Support the development of an additional east-west limited access arterial thoroughfare.
3. Actively assist the County Road Department in upgrading South Calapooia Street to a four-lane road and removing the jogs in the highway at Central Avenue and south of town in the vicinity of the Pacific Railroad tracks.
4. Require the installation of metal pole street lights in new developments.
5. Encourage the Southern Pacific Railroad to put up railroad crossing arms at railroad crossings and to use indicator lights on high traffic streets.
6. Develop a street systems plan which identifies the function of each street in the community.
7. Future streets and major improvements to existing streets shall satisfy the following applicable developmental criteria:

	<u>Local</u>	<u>Collector</u>	<u>Arterial</u>
Minimum right-of-way	56 ft.	60 ft.	102 ft.
Minimum Pavement Width	36 ft.	40 ft.	70 -82 ft.

8. Discourage direct residential access onto existing and future arterials, in particular Central Avenue west of Sherwood Street.
9. Develop a system of sidewalks in the existing core city with emphasis on linking the community's major activity nodes.
10. The city shall coordinate with the county to plan and develop an area bikeway.
11. The city shall encourage the development of alternative modes of transportation to the automobile.
12. The city shall require sidewalks in all new subdivisions.
13. The city shall work with the Oregon Department of Transportation and Douglas County to improve the city's transportation system to a level consistent with the goals and policies of the Comprehensive Plan and the Public Facilities Plan.
14. The city shall require new development to install appropriate and pleasing landscaping along arterial streets.

C. GOAL: TO CONSERVE ENERGY RESOURCES AND ENCOURAGE UTILIZATION OF RENEWABLE ENERGY RESOURCES.

POLICIES:

1. Sound energy conservation principles, including the economical use of insulation, shall be considered in the placement of new structures, improvements to existing structures or other energy consumptive land uses.
2. New developments and subdivisions shall incorporate energy conservation principles into their planning and design.
3. The use of zero lot line zoning shall be promoted where appropriate to provide opportunities for increasing density and heat retention of dwellings.
4. Sutherlin will encourage the use of solar heating systems and landscaping in new construction in order to reduce heating and cooling energy needs.
5. Sutherlin shall continue to require that new construction meet State standards for weatherization and energy conservation.
6. "Mixed Use" areas that combine residential uses with neighborhood commercial activities will be encouraged.
7. Promote development of energy-efficient planned unit developments within designated residential areas.
8. Redevelopment of large lots and infilling and development of undersized lots will be encouraged where appropriate.
9. Residential development will be encouraged on non-collector streets.
10. Industries that provide secondary wood products processing will be encouraged.
11. Cogeneration techniques shall be encouraged to produce electricity and to process steam and low grade steam for hot water and space heating.
12. Industries will be encouraged to use renewable energy for applicable uses.
13. Diverse consumption of economical renewable energy forms will be encouraged.
14. The recycling of waste materials shall be encouraged.
12. The city shall coordinate solid waste disposal with Douglas County in order to accommodate current and future needs.

IV. FUTURE PUBLIC FACILITIES EXPANSION SCHEDULE TABLES

SANITARY SEWER

OCTOBER, 1989

MAP KEY	PROJECT	DESCRIPTION	ESTIMATED COST	YEAR	REMARKS
SS1	I&I Study	Assessment and Evaluation of System	\$ 5,000	1990	Use to establish future replacement schedule.
SS2	Industrial Park	3500 Linear Feet of 10"	\$ 70,000	1991	Access new park.
SS3	Industrial Park	2400 Linear Feet of 12"	\$ 55,000	1991	Access new park.
SS4	Industrial Park	2400 Linear Feet of 15"	\$ 65,000	1991	Access new park.
SS5	Industrial Park	6700 Linear Feet of Pressure Line	\$ 120,000	1991	Access new park.
SS6	Industrial Park	Pump Station	\$ 145,000	1991	Access new park.
SS7	Sewer Plant	Filter	\$ 300,000	1995	Abandon existing filter and replace with new outside concrete filter.
SS8	Sewer Plant	Add New Clarifiers	\$ 500,000	2000	Expand for City Growth.
SS9	Sewer Plant	Purchase 80 Acres	\$ 250,000	2000	Purchase adjoining acreage for disposal site.

STREETS

SUTHERLIN URBAN GROWTH AREA
FUTURE FACILITIES EXPANSION

OCTOBER, 1989

Map Key	Project Listing	Description	Estimated Cost	Year	Remarks
ST1	Weyerhauser Bypass	8800', 70' Curb to Curb, Arterial	\$ 1,200,000	1996	From Southside East to Calapooia
ST2	Duke Road	1700', 40' Curb to Curb, Collector	\$ 200,000	1991	Industrial Park Access
ST3	Industrial Park	3400', 40' Curb to Curb, Collector	\$ 375,000	1991	Industrial Park Access
ST4	Calapooia Street	1000', 70' Curb to Curb, Arterial	\$ 130,000	1992	From Central North to Highway 99 North

STORM SEWER

SUTHERLIN URBAN GROWTH AREA
FUTURE FACILITIES EXPANSION

OCTOBER, 1989

Map Key	Project Listing	Description	Estimated Cost	Year	Remarks
STM1	Sutherlin Creek	Master Plan	\$ 15,000	1991	Develop and Implement Master Plan for Maintenance of Creek from the City to the River
STM2	Industrial Park	350 L.F. of 18" Pipe	\$ 10,000	1991	Park Development
STM3	Industrial Park	1000 L.F. of 24" Pipe	\$ 30,000	1991	Park Development
STM4	Industrial Park	1300 L.F. of 30" Pipe	\$ 45,000	1991	Park Development
STM5	Industrial Park	400 L.F. of 42" Pipe	\$ 20,000	1991	Park Development
STM6	Industrial Park	3600 L.F. 20' x 6'	\$ 40,000	1991	Open Channel Park Development
STM5	Industrial Park	3200 L.F. 5' x 3'	\$ 10,000	1991	Open Channel Park Development

WATER

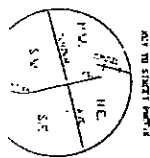
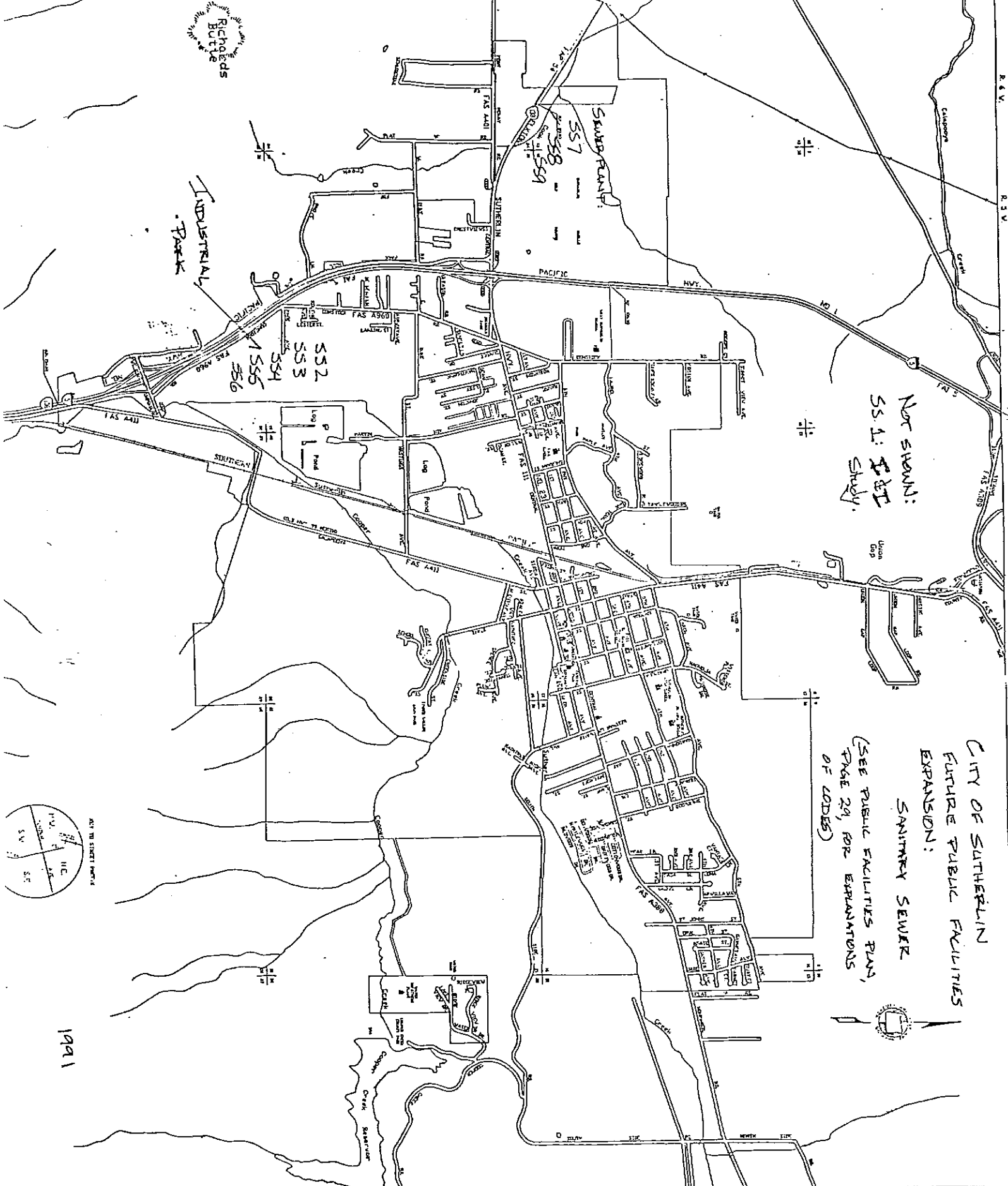
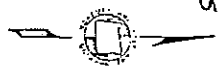
SUTHERLIN URBAN GROWTH AREA
FUTURE FACILITIES EXPANSION

OCTOBER, 1989

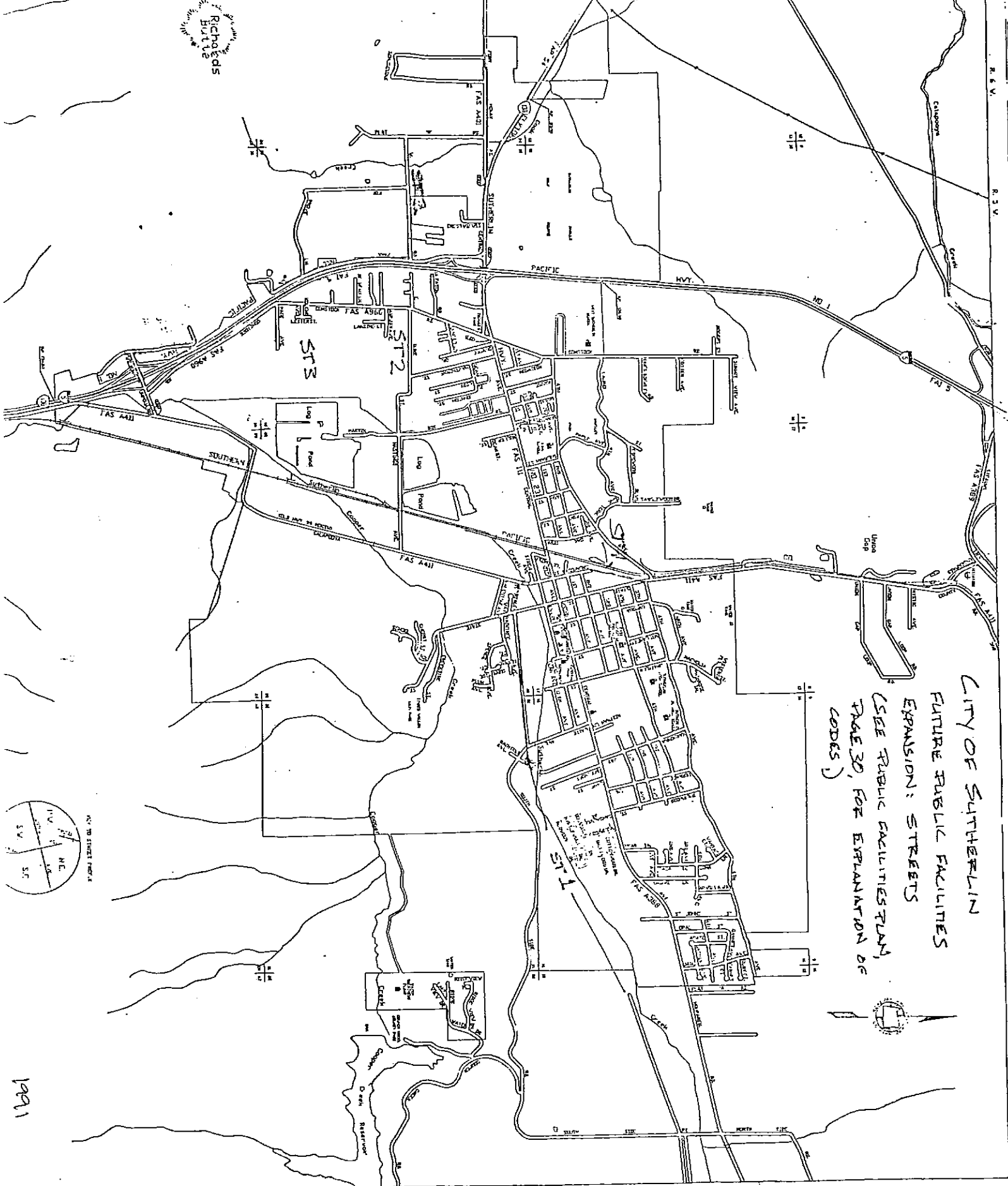
Map Key	Project Listing	Description	Estimated Cost	Year	Remarks
W1	Waite Street	2400 L.F. of 6" PVC	\$ 50,000	1991/1993	South from Central to City Limits
W2	South Side Rd.	6800 L.F. of 6" PVC	\$ 140,000	2000+	East from City Limits to Central
W3	Duke Road	2600 L.F. of 8" PVC	\$ 52,000	1996	Loop from Park Hill down Duke; M to Sutherlin Umpqua Road
W4	6th Street	4600 L.F. of 8" PVC	\$ 100,000	2000+	From Willamette to Jade Ave.
W5	Church Street	7000 L.F. of 8" PVC	\$ 150,000	2000+	From 138 to Church to Ft. McKay, back to 138
W6	Transmission Line	42000 L.F. of 14" PVC	\$ 1,200,000	2000+	Replacement of 50-year old line off Calapooia
W7	Industrial Park	4600 L.F. of 12" PVC	\$ 100,000	1991	From Duke Road to south end of park
W8	Schoon Mtn. Road	Pump Station and Reservoir	\$ 500,000	1995	70,000 gallon reservoir and pump station
W9	Golf Course	Pump Station and Reservoir	\$ 500,000	2000+	As needed for development
W10	Cooper Creek	Improvements	\$ 250,000	1995	Acquire additional water rights and make improvements to treatment plant to double capacity.

NOT SHOWN:
SS. 1: F&E
Study.

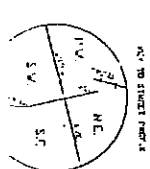
CITY OF SUTHERLIN
FUTURE PUBLIC FACILITIES
EXPANSION:
SANITARY SEWER
(SEE PUBLIC FACILITIES PLAN,
PAGE 29, FOR EXPLANATIONS
OF CODES)



Richards
Butte



CITY OF SUTHERLIN
FUTURE PUBLIC FACILITIES
EXPANSION: STREETS
(SEE PUBLIC FACILITIES PLAN,
PAGE 30, FOR EXPLANATION OF
CODES)



CITY OF SUTHERLIN
FUTURE PUBLIC FACILITIES
EXPANSION: STORM SEWER
(SEE PUBLIC FACILITIES PLAN
PAGE 31 FOR EXPLANATION OF
CODES)

