

CITY OF LOWELL

COMPREHENSIVE PLAN 2005

Lowell Revised Code Title 9, Section 9.900 Lowell Land Development Code, Article 9.900

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SECTION 9.910 PLANNING

The Lowell Comprehensive Plan 2005 contains the Public Policy for the City of Lowell regarding conservation, development and growth management within the community.

The City received a Planning Assistance Grant from the Department Land Conservation and Development in August 2004 and immediately began preparation of The Lowell Comprehensive Plan 2005.

The Lowell Comprehensive Plan 2005 is the first up-date of the Plan since acknowledgment by the State of Oregon Land Conservation and Development Commission in 1982 and subsequent Amendments in 1989.

The greatest value of the Comprehensive Plan is through its use as a policy guide for decision making. However, it can only have limited value unless it is supported by the community and the city administration. Possibly the most important factor in such a relationship is simply patient leadership supported by citizens who feel that community improvement is a worthwhile aim.

SECTION 9.911 CITY OF LOWELL

(a) Location

The City of Lowell is located on the east side of the Southern Willamette Valley in Lane County (Township 19 South, Range 1 West, Sections 10, 11, 14 and 15). Lowell is situated on to the north side of the Middle Fork of the Willamette River adjacent to Dexter Lake on the hilly transitional terrain between the Willamette Valley and the Western Cascade Mountains. Dexter Lake is formed by Dexter Dam, one of two dams constructed on the Middle Fork of the Willamette River in the 1950's.

Elevations around the community range from 650 feet mean sea level at the base of Dexter Dam to 2,141 feet at the summit of Disappointment Butte, immediately east of Lowell. The full pond elevation of Dexter Lake is 695 feet while the developed area of Lowell occupies portions of a small plateau 45 feet above the lake.

Lowell is located approximately 22 miles southeast of Eugene and approximately 17 miles southeast of Springfield. It is accessed from two of the area's major transportation corridors. State Highway 58 is one of the State's primary east-west corridors from Eugene to areas east of the Cascades located on the south side of the Middle Fork of the Willamette River. It provides access to Lowell from a bridge and causeway across Dexter Lake. Jasper-Lowell Road and Pengra Road, both County roads, provide access to Springfield on the east side of Middle Fork of the Willamette River.

(b) Description

Lowell is a small community located in an area rich in natural and recreational resources providing the City with a high level of livability.

Originally settled in 1852, Lowell was initially named Cannon, after an early settler of that name. The town site of Lowell was once known by the landmark of Butte Disappointment, which locals now call Lowell Butte. The town was originally located on 2,450 acres of land owned by Amos

D. Hyland, who held many thousands of acres of timberland in the area. In 1882, Hyland named the town Lowell after his hometown in Maine. The name change to Lowell was in response to many letters being sent to Canyon City, Oregon instead of Cannon. The City of Lowell was not incorporated until 1954.

Over the years, the city has sought to maintain its viability as an attractive residential community with a local employment base.

Lowell was a timber town until the late 1980s. The early industries in the area were hop raising, stock raising, and logging, and the present town site of Lowell was once a huge hop yard.

The first sizable increase in population occurred in conjunction with the building of the Lookout Point Reservoir by the U.S. Army Corps of Engineers (Corps) in 1948. The Dam ushered in a new era for the people who had settled on the Middle Fork of the Willamette River near Lowell. Much of the town of Lowell was relocated when the dam was built. Many of the houses had to be moved out of the river bottom east of town and new houses were built north of town for the new employees hired to build the dam.

In recent years, Lowell's employment has revolved primarily around the U.S. Forest Service and the Corps, as well as the Lowell School District. Recent consolidation of the Forest Service's District offices substantially reduced the workforce in the Lowell office.

Employment from timber related industries have significantly declined. Because of the city's close proximity to the Eugene-Springfield urban area, it is less than a 30 minute commute to jobs in Eugene and Springfield. Consequently, to a large extent, Lowell is becoming a residential community.

SECTION 9.912 COMPREHENSIVE PLANNING

The purpose of the Comprehensive Plan is to provide guidelines for conservation and development of community resources and to promote the public health, safety and general welfare of community residents. It is intended to ensure that the City's livability will be enhanced rather than weakened in the face of growth and change.

ORS Chapter 197, administered by the Department of Land Conservation and Development (DLCD), requires that cities and counties adopt comprehensive plans and ordinances that comply with Statewide Planning Goals and Guidelines. **ORS 197.010** provides the basic policy by stating that comprehensive plans:

- a. Must be adopted by the appropriate governing body at local and state levels.
- b. Are expressions of public policy in the form of policy statements, generalized maps and standards and guidelines.
- c. Shall be the basis for more specific rules, regulations and ordinances which implement the policies expressed through the comprehensive plans.
- d. Shall be prepared to assure that all public actions are consistent and coordinated with the policies expressed through the comprehensive plans.

e. Shall be regularly reviewed and, if necessary, revised to keep them consistent with the changing needs and desires of the public they are designed to serve.

ORS 197.175 more specifically outlines local government responsibility when it states, "...each City and county in this state shall:

(a) Prepare and adopt comprehensive plans consistent with state-wide planning goals and guidelines approved by the commission (LCDC) and

(b) Enact zoning, subdivision and other ordinances or regulations to implement their Comprehensive Plans."

ORS 197.015 (4) provides the official definition of Comprehensive Plan as follows:

"Comprehensive Plan" means a generalized, coordinated land use map and policy statement of the governing body of a state agency, city, county or special district that interrelates all functional and natural systems and activities relating to the use of lands, including but not limited to sewer and water systems, transportation systems, educational systems, recreational facilities, and natural resources and air and water quality management programs. "Comprehensive" means all-inclusive, both in terms of the geographic area covered and the functional and natural activities and systems occurring in the area covered by the Plan. "General nature" means a summary to policies and proposals in broad categories and does not necessarily indicate specific locations of any area, activity, or use. A plan is "coordinated" when the needs of all levels of governments, semi-public and private agencies and the citizens of Oregon have been considered and accommodated as much as possible. "Land" includes water, both surface and subsurface, and the air.

The Lowell Comprehensive Plan 2005 is directed towards meeting the applicable Statewide Planning Goals and Guidelines of the Oregon Land Conservation and Development Commission (LCDC).

Section 9.100 of the Plan specifically addresses the first two goals. Goal 1, Citizen Involvement, reads: "To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process".

The Lowell Comprehensive Plan 2005 (Plan) was developed and adopted with extensive citizen participation. Provisions are also included in this element for continued citizen involvement in the planning process.

Goal 2, Land Use Planning, reads in part: "To establish a land-use planning process and policy framework as a basis for all decisions and actions related to the use of land and to assure an adequate factual base for such decisions and actions".

The inventories and previous studies identified in the references provided in each Plan Section, provide the factual basis for the plan. Utilizing this factual data, the Planning Commission and City Council with the assistance of citizen involvement, evaluated alternative courses of action and made final policy choices, taking into consideration social, economic, energy, and

environmental needs of the community. The information, policies and recommendations of the entire Plan comply with Goal 2.

The Comprehensive Plan for Lowell is the City's official policy guide for conservation and development of community resources. It is intended to ensure that the City's livability will be enhanced rather than weakened in the face of growth and change and is designed to promote the public health, safety, and general welfare of community residents.

The Comprehensive Plan is the document through which the citizens of Lowell will implement their choices on how growth and change will occur and how it will be managed. It should not be considered a detailed development proposal, but a framework within which public officials and private citizens can coordinate their individual developmental decisions.

SECTION 9.913 STATEWIDE PLANNING GOALS AND GUIDELINES

The City of Lowell recognizes its responsibility to include consideration of the Statewide Planning Goals and Guidelines as adopted by the Land Conservation and Development Commission (LCDC).

To fulfill this responsibility, the City has included consideration of the following goals:

- Goal 1** Citizen Involvement: To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases off the planning process.
- Goal 2** Land Use Planning: To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.
- Goal 3** Agricultural Lands: To preserve and maintain agricultural lands.
- Goal 4** Forest Lands: To conserve forest lands for forest uses.
- Goal 5** Open spaces Scenic and Historic Areas, and Natural Resources: To conserve open space and protect natural and scenic resources
- Goal 6** Air, Water and Land Resources Quality: To maintain and improve the quality of air, water and land resources of the state.
- Goal 7** Areas Subject to Natural Disasters and Hazards: To protect life and property from natural disasters and hazards.
- Goal 8** Recreational Needs: To satisfy the recreational needs of the citizens and visitors of the state.
- Goal 9** Economy of the State: To diversify and improve the economy of the state.
- Goal 10** Housing: To provide for the housing needs of the citizens of the state.

- Goal 11** Public Facilities and Services: To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.
- Goal 12** Transportation: To provide and encourage a safe, convenient, and economic transportation system.
- Goal 13** Energy Conservation: To conserve energy.
- Goal 14** Urbanization: To provide for an orderly and efficient transition from rural to urban land use to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

SECTION 9.914 THE LOWELL COMPREHENSIVE PLAN

(a) Structure & Use of the Plan

The Lowell Comprehensive 2005 Plan is structured into nine Elements contained in the following Sections:

- Section 9.910 Planning**
- Section 9.920 Environment**
- Section 9.930 Population & Economy**
- Section 9.940 Housing**
- Section 9.950 Land Use**
- Section 9.960 Public Facilities & Services**
- Section 9.970 Transportation**
- Section 9.980 Growth Management**
- Section 9.990 Comprehensive Plan Maps**

Each Plan Element then contains individual topic Sections. Sections are organized into three primary groups:

- Background Data Findings**
- Referenced Associated Documents**
- Goals Policies & Recommendations**

(b) **Background Data Findings** present a summary of information and findings relevant to the Plan Element based on previous studies. The findings identify the relevant data, issues, conditions and needs which must be responded to in order to fulfill state and local goals. Findings also include an identification of the opportunities and constraints that could influence plan implementation.

Illustrative maps and diagrams have been prepared to assist in understanding various aspects of the Plan. Many are included with the Plan although some are not, due to reproduction

constraints. Those not included are referenced in the Referenced Associated Documents Section and are on file at the Lowell City Hall.

(c) **Referenced Associated Documents** summarize all of the plans, reports, studies, standards and ordinances that apply to each Plan Element Topic.

(d) **Goals & Policies** conclude each Plan Element. Introductory paragraphs identify the particular Statewide Planning Goals that are addressed in each Plan Element. This is followed by the City's adopted goals, policies and recommendations. Adopted City Policies are the foundation of the Comprehensive Plan. They are the primary means of achieving the goals and objectives of the Plan and the Statewide Planning Goals and Guidelines of the Oregon Land Conservation and Development Commission.

Goals

The goals represent the ideals, results or achievement toward which the Plan is directed. They are statements of purpose and specify, on a general level, what the planning effort is intended to accomplish.

Policies

Policies are identified as "shall" statements (i.e. "The City shall"). The policies are the means by which the City will implement the Plan.

Policies are official statements of strategy or principle that specify the intent of the City concerning the future growth and development of the community. Adopted by the City Council, they represent the official position of the City of Lowell while also providing:

1. A long range guide for the evaluation of various proposals for physical change and improvement.
2. A framework for making sound decisions on zoning, subdivisions, capital improvement programs, and other codes and ordinances.
3. A guide for public programs and expenditures.
4. An indicator of more detailed and specific studies that are needed.
5. A source of information and a statement of planning policy that is useful to the local business community, the general public, and other governmental units in making decisions regarding their individual development plans.

Conservation policies identify those elements or conditions of the community environment the citizens wish to preserve or enhance.

Development Policies identify those elements or conditions that require change or improvement and needed elements or conditions now lacking within the community.

(d) Plan Amendments and Local Plan Changes

Plan Amendments should be made as needed to maintain the Plan as an up-to-date guideline for urban development in Lowell. **Section 9.253** of the Land Development Code provides the procedures for Code or Plan Amendments.

A complete Plan review should also be performed at least once every five years to determine if major revisions to the Plan or Code are necessary. A public notice should be issued if it is determined that amendments are needed.

Plan Amendments include text or land use map changes that have widespread and significant impact within the community.

The Comprehensive Plan or Land Development Code should be revised as community needs change or when development occurs at a different rate than contemplated by the Plan. Major revisions should not be made more frequently than every five years unless changing conditions warrant this significant action.

Local Plan Changes do not have significant effect beyond an immediate area, such as a request for a Land Use District or Zone Change affecting a single ownership. Local Plan Changes do not represent a policy change relative to the community as a whole. The need and justification for the proposed change should be clearly established. Local changes should be made as needed to maintain the Plan as an up-to-date guideline for community growth and development.

Major Amendments and Local Changes to the Plan or Code must be adopted by the City Council following a recommendation by the Planning Commission based upon citizen involvement, and coordination with other governmental units and agencies. Citizens in the area and affected governmental units will be given an opportunity to review and comment prior to any proposed Plan or Code change.

Amendments to the Plan or Code may be initiated by the City Council, the Planning Commission, a property owner, or any citizen.

Adopted changes shall be maintained in the Record File of the proceedings at City Hall and copies of the amendment shall be placed in the applicable sections of the Plan or Code. Review copies shall be available to the public and personal copies may be purchased at the Lowell City Hall.

(e) Measure 37 Implications for Plan Amendments.

Ballot Measure 37, approved by voters at the November, 2004 General Election, requires the City, under certain circumstances, to reimburse property owners for the loss of property value as a result of a land use decision by the City. It is the policy of the City, for any proposed amendment to the Plan or Code, that if any property owner raises a reasonable issue of possible loss of property value as a result of the proposed amendment, the City will not make a decision on the amendment until the loss of such value, if any, can be estimated by qualified persons.

(f) City/County Coordination

The Lowell Urban Growth Boundary (UGB) and the City Limits are contiguous. That is, they are the same boundary. An “Area of Interest” (AOI) or area of mutual concern was established in 2000 in a “Joint Agreement for Planning Coordination Between Lane County and the City Lowell”. The City has outright planning responsibility for the area within the City/UGB boundary. The County has planning responsibility for the AOI although it will submit proposed changes and development proposals to the City for review and comment prior to issuing a decision on specified Land Use Action

(g) Plan Implementation

Implementation measures are intended to assist in putting the Plan into effect. Generally, Plan implementation includes the enactment of regulatory measures pertaining to land development such as zoning and subdivision regulations that are contained in the Lowell Land Development Code, but also include other studies, reports, standards, plans and ordinances. Capital Improvement Programs or other management measures also assist in implementing Planning Goals and Policies.

The Plan and implementing ordinances will be adopted by the Lowell City Council after review and recommendation by the Planning Commission and public participation and public hearings. Implementation ordinances will be reviewed and revised as needed.

The Plan, supporting documents, and implementing ordinances will be maintained on file in the Lowell City Hall and are easily accessible to the public.

(h) Plans

There are several specific plans and planning studies that are referenced in the Lowell Comprehensive Plan, but are not a part of the adopted plan. They are identified and referenced in the applicable topic section of the Plan.

(i) Zoning

Zoning is probably the most familiar legal instrument used in plan implementation. While the Comprehensive Plan specifies the principals and policies for conservation and development of community resources, the zoning provisions of the Code actually provide the definite and precise standards and procedures to implement the Plan.

(j) Zoning and the Comprehensive Plan

The Comprehensive Plan, while a guide for zoning actions, is not a zoning regulation. Zoning regulations are detailed pieces of legislation that are intended to implement the proposals of the Comprehensive Plan by providing specific standards for use of land in various districts within the community.

It is important that zone change proposals be considered in relation to the policies and aims of the Comprehensive Plan. Amendments to the Zoning provisions of this Code that are consistent with the Comprehensive Plan can proceed as provided in the Code. However, zoning amendments that are contrary to the intent of the Comprehensive Plan should be reviewed first as a potential Plan change. If the zoning amendment is deemed in the public interest, then the

Comprehensive Plan should be so amended before action on the zoning amendment proceeds. This procedure should guarantee essential coordination between the two planning instruments.

The City of Lowell has prepared a Land Use Development Code in conformance with the City's Comprehensive Plan and has incorporated the Plan therein to facilitate coordinated decision-making.

To further facilitate coordinated planning efforts, the Zoning Map and the Comprehensive Map have been combined into a single Land Use District Map.

(k) Land Division Regulations

Land Division regulations provide the City with guidelines for approval of subdivision or partition plats. It specifies procedures for plat approval; contains design standards for streets, lots, and blocks; and lists improvements such as streets and utilities that are to be provided by the Land Divider.

Lowell has adopted Land Division regulations into the Code in conformance with the Comprehensive Plan.

(l) Building Permits

The City issues Building Permits, administers the State Building Code and provides inspection services through a contract with a qualified service provider. Building permits are maintained on file at the City providing a continuous building and development record.

Outright permitted uses are issued a building permit without prior approval by the City. Developments requiring review and approval by the City are issued a building permit only after final approval is obtained.

Capital Improvement Program

It is essential that long range financial planning, based on available and anticipated resources, be maintained by the city.

Capital Improvements Programming is one of the tools available to the community for long range financial planning. The long range Financial Plan encompasses estimates of the City's expenditures for establishing, operating and maintaining public services and for constructing capital improvements.

A long range financial plan must be based on the following:

1. An Operating and Maintenance Budget for public services.
2. A Capital Improvements Program based on a Comprehensive Plan.
3. A Comprehensive Revenue Program.

Upon completion of the financial plan, it is carried out with the following programs:

1. A priority list of proposed capital improvements.

2. A five-year capital improvement budget.
3. The annual city budget.

It is essential that additional operating expenses brought about by capital expenditures be included in the annual budget to insure correlation of operating and capital budgets.

In estimating revenue sources, those public agencies not directly controlled by the City, but responsible for the provisions of certain capital expenditures relative to City requirements, must be related to priority scheduling in time and coordinated as to their availability of funds.

Based on detailed programs expressing levels of service, and a definition of facilities to provide this service, cost estimates for capital expenditures may be prepared and individual program priorities assigned. Priority projects for the various program areas can then be selected to prepare an annual capital expenditure budget, based on the anticipated revenues of that year.

SECTION 9.915 LOWELL CITIZEN INVOLVEMENT PROGRAM

The City of Lowell recognizes its responsibilities under the Statewide Planning Goals and Guidelines as adopted by the Land Conservation and Development Commission to prepare, adopt, and implement a "Citizen Involvement Program" (CIP). This program is intended to assure that all citizens have an opportunity to be involved in all phases of the planning process.

- (a) The Lowell City Planning Commission is designated as the Committee for Citizen Involvement (CCI). The CCI will establish and maintain an effective communications link between decision-makers and those citizens desiring to be involved in the planning process.
- (b) The Lowell Citizen Advisory Committee (CAC) shall consist of members of the Planning Commission and additional citizens who meet with and serve as ex-officio members of the Planning Commission when the body is acting as the CAC. Members of the Planning Commission will be chosen by procedures established by the City Council. Additional ex-officio members shall be appointed by the City Council as needed to create a CAC broadly representative of geographic areas and of interests relating to land uses and land use decisions.
- (c) The City will provide for an ongoing citizen involvement program that will allow all citizens the opportunity to be involved in the planning process. This will include, but not be limited to, the following:
 - (1) Formulation of a Citizen Advisory Committee (CAC) to assist in citizen participation.
 - (2) Citizen participation in the formulation and development of plans, maps, surveys, inventories, special studies, or other key components of the planning process.
 - (3) Citizen participation in the formulation goals and policies to guide decision-making.
 - (4) Citizen participation in the review, evaluation, and recommendation regarding proposed changes to the comprehensive plan and implementing ordinances.

- (d) The City shall encourage organizations, special districts and other government agencies to participate in the planning process and to coordinate their planning efforts with those of the City of Lowell.
- (e) The City will communicate planning information to citizens and government agencies through the use of public meetings, the news media, the mailing of notices and/or a community newsletter.
- (f) Open public meetings will be conducted by the City at key points during the course of the planning program. Through these meetings, citizens will be given the opportunity to participate in planning activities such as data collection, plan preparation and plan implementation.
- (g) The time and place of public meetings addressing local planning issues shall be widely publicized. Notification may include posting at the City Hall, Fire Station and the Post Office and by notification in a community newsletter. Affected agencies and affected property owners will be notified by first class mail on issues that could change the classification of property or that limits or prohibits land uses previously allowed.
- (h) The public shall be given the opportunity to review and comment on planning proposals both verbally at public meetings and in writing.
- (i) Minutes of all Planning Commission and City Council meetings and all technical information, plans, studies, and ordinances shall be maintained and available for public use at the City Hall.

SECTION 9.916 LOWELL AGENCY INVOLVEMENT PROGRAM

The City of Lowell recognizes its responsibility under the Statewide Planning Goals and Guidelines as adopted by the Land Conservation and Development Commission, to prepare, adopt and implement a program for "Agency Involvement and Coordination". This program is intended to assure an effective working relationship with those local, state, and federal agencies that may have an interest in the City and its surrounding area.

In order to fulfill this responsibility, the City has adopted the following agency involvement program:

- (a) The City will notify the following agencies where development proposals may have an impact on their facilities or programs and where notification is otherwise required by law or agreement:

Regional and Local Agencies (RLA)

1. Lane County Planning Department
2. Lane Council of Governments (LCOG)
3. Lowell School District
4. Lane Community College

5. Lowell Rural Fire District
6. Lane County Health Department
7. Lane County Housing Authority
8. Lane County Sheriff

State-Agencies (SA)

1. State Housing & Community Development Department
2. Department of Environmental Quality
3. Department of Geology and Mineral Industries
4. State Health Division
5. Division of State Lands
6. Economic and Community Development Department
7. Department of Transportation
8. Parks and Recreation Department
10. Department of Water Resources
11. Department of Fish and Wildlife
12. Department of Land Conservation and Development.

Federal Agencies (FA)

1. Federal Emergency Management Agency (FEMA)
2. US Army Corps of Engineers
3. US Forest Service – Middle Fork Ranger Station
4. US Department of Agriculture Rural Development
5. US Department of Housing and Urban Development
6. US Environmental Protection Agency
7. US Natural Resource Conservation Service

Others (O)

1. Lane Electric Cooperative
2. Qwest Telephone Company
3. Charter Communications Television Cable
4. Star Garbage

- (b) The City will inform affected agencies of the status of current planning efforts, future planning work schedules, and regular meeting dates of the City Planning Commission and the City Council.
- (c) The City will provide to agencies, on request, copies of studies, plans and ordinances which are related to the City's planning program.
- (d) The City will request each agency to designate a contact person who will be responsible for coordination with the City.
- (e) The City will inform the various agencies of public hearings and other meetings, where they may have an interest.

- (f) The City will encourage each agency to provide the information which is needed by the City to carry out its planning program. This may involve such activities as:
- (1) Provision of plans or studies prepared by the agency that are needed by the City.
 - (2) Participation by the agency in public hearings or other meetings.
 - (3) Direct assistance by the agency in the development of a plan or study or in the consideration of a specific planning-related problem

SECTION 9.917 RESERVED FOR EXPANSION.

SECTION 9.918 REFERENCED ASSOCIATED DOCUMENTS

1. **Lowell Comprehensive Plan**, Land Council of Governments; 1978, 1980, 1981, 1982 LCDC Acknowledged and 1989 Amended.
2. **Lowell Urban Growth Boundary Land Analysis Draft**, Lane Council of Governments, 2001.
3. **Lowell Economic Development Strategic Plan**, Lane Council of Governments, 2003.
4. **Region 2050**, Lane Council of Governments, 2001-2005.

SECTION 9.919 PLANNING GOALS & POLICIES

(a) The following Lowell goals and policies address the first two **Statewide Planning Goals**.

Goal 1 Citizen Involvement reads: "To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process".

Goal 2 Land Use Planning reads in part: "To establish a land-use planning process and policy framework as a basis for all decisions and actions related to the use of land and to assure an adequate factual base for such decisions and actions".

(b) **Lowell Planning Goals**

- GOAL 1.** To encourage development in a planned and considered manner consistent with the community's vision, general health, safety and welfare.
- GOAL 2.** To achieve an environment that assures each individual the widest possible choices and opportunities for a productive and meaningful life-style within the community.
- GOAL 3.** To preserve those features that are special and unique to the community while also being responsive to changing needs and conditions.

GOAL 4. To achieve public interest, understanding, and support of the planning process and the goals toward which the process is directed.

GOAL 5. To provide effective communication between city residents and city officials and to provide an ongoing opportunity for all persons to participate in all phases of the planning process.

(c) Lowell Planning Policies

1. The Comprehensive Plan is the controlling planning instrument for the City of Lowell. All other land use, development and management plans shall be in conformance with the Plan.
2. The Lowell Comprehensive Plan shall be maintained as an on-going decision making guideline for planning actions within the Lowell Urban Growth Boundary.
3. All proposed revisions or amendments to the adopted policies shall be reviewed at public hearings before final adoption.
4. All local codes and ordinances shall be in conformance with the adopted policies of the Comprehensive Plan. Code or ordinance amendments, deemed in the public interest, that are contrary to the intent of the adopted policies shall be reviewed and amended as policy changes to the Comprehensive Plan.
5. The City shall be an active participant in regional planning efforts.
6. Coordination shall be maintained between the school district, serving utilities, Lane County, and other governmental agencies having facilities or programs in the area.
7. The City shall monitor significant area developments outside of the City that could affect the City.
8. An active and on-going citizen involvement program shall be maintained by the City to insure that all citizens have an opportunity to be informed and involved in the planning process.
9. The City of Lowell shall reinforce the applicable Statewide Planning Goals as they apply to the community through specific goals, objectives and policies in response to community needs.
10. The City shall develop an accurate buildable lands inventory which shall be maintained on a continual basis.
11. All future plan-related studies and reports shall be recorded as source references in the plan
12. The studies and plans of other agencies, applicable to the City of Lowell, shall also be referenced and noted in the applicable element of the Comprehensive Plan.

13. A Capital Improvement Program shall be developed and maintained as an on-going implementation component of the Comprehensive Plan.

SECTION 9.920 ENVIRONMENT

Section 9.921 Environmental Data Summary

The Environment Section of the Lowell Comprehensive Plan presents a summary of existing environmental conditions in the Lowell area so these environmental resources can be protected and enhanced while accommodating needed growth and development.

Maintaining Lowell's environmental quality is essential to the livability of the community. At the same time, there are environmental conditions that can impact development unless they are properly addressed.

(a) Regional Context

Lowell is situated in a narrow finger of the Southern Willamette Valley formed by the Middle Fork of the Willamette River. Lowell is located on Dexter Reservoir near the Willamette National Forest and is near to Lookout Point and Fall Creek Reservoirs. The Willamette Valley is formed by the Willamette River and its tributaries between the Coast and Cascade mountain ranges. The Willamette River flows northward to join the Columbia River before entering the Pacific Ocean.

The Willamette Valley was a destination of the earliest settlers that located on the farmable flatlands of the valley along the waterways where most of the cities formed. The Eugene-Springfield metropolitan area became the economic and cultural center of the Southern Willamette Valley where other community inhabitants share a common watershed, air shed, commute shed, and growth shed.

(b) Climate

The climate is dominated by moist, mild air from the Pacific Ocean. Winters are cloudy and wet, with mild temperatures. Winter temperatures are usually in the forties. Most precipitation, in the form of both rain and snow, occurs from November to March. Rainfall is approximately five to eight inches per month in this wet season. Snowfall is insufficient to support any snow related recreational activities.

The average yearly high and low temperatures are 63 and 42 degrees fahrenheit. The average annual percipation is between 35 and 45 inches. Lowell has nearly 7 more inches than nearby Eugene. The summer months are dry with moderate temperatures, and the days are generally sunny. Highest temperatures at the lake occur in August. The average temperature for July and August is 68. The month of July averages the lowest percent of cloudiness at 37 percent; August is the next lowest.

(c) Topography & Vegetation

Lowell is situated at the southeast end of the Willamette Valley formed by the middle fork of the Willamette River. The community is surrounded by hilly terrain characteristic of the transitional area between the Willamette Valley and the high Western Cascade Mountains.

Lowell is 741 feet above sea level. Elevations around the community range from 695 feet at the full pool elevation of Dexter Lake to 2,141 feet at the summit of Disappointment Butte, immediately northeast of Lowell. The developed area of Lowell occupies portions of a small plateau 45 feet above the lake.

Logging, dam and road construction, farming and grazing have altered the vegetation found in the area. Most obvious is the lack of forest in the predominately forest zone adjacent to the City. There is some indigenous plant communities on the few relatively undisturbed sites surrounding Lowell, including Oak and Douglas Fir, Incense Cedar and Western Red Cedar. Riparian and aquatic vegetation are found on the banks surrounding Dexter Lake. No other locality near Eugene-Springfield is known to offer comparable diversity of vegetation. While the surrounding area is rich in its diversity of vegetation, the city limits site possesses only scattered groves of evergreen and deciduous trees while the remaining undeveloped land is covered with native grasses.

(d) Hydrology

Several factors other than climate affect the occurrence, distribution, and availability of the total quantity of water available in the basin. Water storage is achieved naturally through glaciers, snowpacks, lakes and the underlying soils. Man has added to this list in the form of ponds and reservoirs.

Dexter Dam is an earth filled dam with a concrete spillway whose gates are controlled from Lookout Point. The resultant lake divides the area into two sections. The lake covers 960 acres at minimum lower pool and 1,025 acres at full pool. The lake is 3.3 miles in length and its circumference measures 7.3 miles. Dexter is a regulating dam that works in conjunction with Lookout Point Reservoir. Because of this, the surface level is quite stable and varies only by five feet year round. The only withdrawals from full pool are those required to regulate the varying power releases from Lookout Point powerhouse to fairly uniform flows downstream of Dexter Dam.

The shoreline areas of Dexter Lake have gradual slopes with few bays and coves. The topography of the surrounding area is mountainous, and runoff naturally flows down to the reservoir from the steep slopes on each side.

Soil properties and soil cover both influence runoff from rainfall. Soil properties also play an important part in the recharge of groundwater. Soil cover is important to the rainfall/runoff relationship because it determines the relative quantities of water that will run off or will be available for plant use and for groundwater recharge. Soil cover also determines the rate at which runoff will occur.

(e) Soils

In 1970, the U.S. Soil Conservation Service (SCS - Now Rural Development) prepared a report at the request of the City of Lowell entitled "Soil Survey Report for Land Use Planning and Community Development, Lowell Area, Oregon." The report presents information on soils found in Lowell and the surrounding area and evaluates these soils in terms of their suitability for

various types of urbanizing land uses. Noted limitations to development are the presence of excessive slopes, shallow depth to bedrock, clay subsoils with slow permeability, high shrink-swell potential, and seasonally high water table. The purpose of the report is to identify the existing soil conditions, the hazardous areas, and those areas where various land uses are best accommodated.

Soils covering the slopes surrounding Lowell are composed of shallow clays over moderately shallow, weathered rock. Soils within the developed area of Lowell consist generally of dense clays with natural stability hazards, such as small, active slumps, evident along the incised drainage channels, and silty clay soils which present drainage problems.

The soil characteristics generally known in the Lowell area are not conducive to, nor have the capacity for volume agricultural farm use. The farming of seed or produce crops has not been historically viable. Grazing of sheep or cattle has been the primary agricultural land use. Agricultural soils, identified by the SCS Soil Capability Classification Systems, appear on the Agricultural Suitability Map. The Vacant Agricultural Land Map shows only soil classifications I-IV that are vacant. This map indicated that the vacant agricultural soils in the core area of Lowell, because of adjacent uses and land use patterns committing them to urban development, cannot be used for any viable agricultural enterprise other than for perhaps urban gardening. Further, when the Vacant Agricultural Land Map is overlaid with the Over 15 Percent Slope Map and the Elevation Above 880 Map, the amount of land actually usable for agriculture within the City of Lowell is negligible. However, the majority of the land is zoned R-1 which does allow agricultural pursuits if desired by the land owner.

(f) Geology

Dexter Lake is located within the transitional area between the Willamette Valley and Western Cascade Geologic and Physiographic Provinces. These two geologic subdivisions are strikingly different in several aspects of their geologic history. In the Western Cascade Range the hill slopes are underlain by intrusive rocks, laval flows, and tuffs which were formed ten to 35 million years ago. Since then erosion has been the dominant geological process as stream-cutting and landsliding have sculptured the major valleys and surrounding rugged hills and buttes. Consequently, the valley floor is filled with river sediments.

Many of the high buttes surrounding the Dexter Lake area are resistant remnants of massive stocks that intruded the Little Butte Formation during the latter part of the Tertiary Period. One such feature is Eagle Rock, composed of a coarse-grained diorite which was quarried during construction of Lookout Point Dam. Mount Zion appears to be of similar makeup. Williams Butte and the high hill immediately to the east are also cored by intrusive rock, but in these two cases it is dense fine-grained basalt.

The geologic history of the Willamette River in the Dexter Lake area is recorded in the valley bottom alluvial fill and in old, high terrace benches on the valley walls at elevations up to more than 150 feet above the present river level. The highest river terraces and gravels, clearly exposed at an elevation of about 800 feet, are of unknown age, but probably date back into the Pleistocene. This is evidenced by the deep weathering of the old gravels. Many of the clasts, once river rocks, can now be easily cut with a knife.

The main portion of the river valley is floored by river gravels and overbank silt and sand deposits that have accumulated since the last major glaciation of the high mountains to the east. During the period of glacial retreat, from about 13,000 to 8,000 years ago, river draining of the recently deglaciated mountainous areas carried greater sediment loads than they do today. Some of this material now forms terraces ten to 30 feet above the river level. For the past few thousand years, the river has been undergoing extensive meandering and downcutting, as evidenced by

numerous meander scars and recently abandoned channels on the surface of the floodplain. These natural drainage ways are flood and storm channels, and the City should take appropriate action to insure their continued operation and maintenance.

At present, there are no known commercial mineral resources for exploitation noted in the Dexter Lake Master Plan prepared by the U.S. Army Corps of Engineers.

(g) Landslides

Portions of the area surrounding Lowell have, in recent years, shown a high potential for landslides. The slide on the east face of Eagle Rock that displaced Highway 58, the Southern Pacific Railroad line, and a number of buildings occurred after waste material from the quarry was deposited on the slide area. Other slides have been experienced near the north abutment of Lookout Point Dam in unstable deposits of natural slope debris and excavated waste material. Numerous small failures have been noted in connection with construction activity in deeply weathered tuffs of the Little Butte formation.

The history of landslide activity associated with construction projects demonstrates the fragile nature of the geology and soils throughout the area and the need for careful analysis of the conditions affecting land use planning and development.

(h) Drainage

The City of Lowell borders the north shore of Dexter Lake and is surrounded by hills on all other sides. The resulting topographical configuration creates a short drainage basin which funnels the runoff through the community to the reservoir. Since most of the development within the City occurs on a relatively flat bench overlooking the lake, there are problems associated with channeling excess surface water through this area.

There are a number of incised natural water courses in the hills and across the flatter portions of the area which, supplemented by a series of roadside ditches, carry the runoff to the lake. The major drainage problem in the community involves getting the excess surface water in the flat areas into the drainage channels.

SCS conducted a field survey of the drainage situation in Lowell in 1969 and prepared a report, "A Reconnaissance Report for the City of Lowell Drainage Problem," which makes several recommendations:

- The water collection problems associated with the low lying areas of the community can best be solved by land shaping.
- Proper maintenance of the existing roadside ditches would also facilitate and improve drainage in the area. The City should consider a complete drainage study of the area to be made by a private engineering consultant. This study should include the developed area of the City and any or all areas where future development can be expected.
- All existing natural drainage ways should be considered flood and storm channels, and the City should take appropriate action to insure their continued operation and maintenance.

(i) Slope

Shallow slopes of less than eight percent do not normally represent major constraints to development. Although soil type and other physical factors must be considered, problems of erosion, slump, creep or slide, and excess drainage are minimal. Development costs are lesser on shallow slopes than on steeper slopes.

Development on moderate slopes of 8 to 15 percent require more careful design consideration. Steep slopes of 15 percent and greater generally pose severe development constraints due to the high cost of providing roads, utilities, and environmental protection.

As indicated in the preceding discussion of topography and drainage, Lowell is partially framed by hills. Analysis of the topography indicates that there is approximately 250 acres of accessible land with slopes less than 15 percent within the City of Lowell.

(j) Reservoir Shoreland

Land within the city limits, along the shore of Dexter Lake, is within the government reserve under the management of the U.S. Army Corps of Engineers. The objectives of the management program are aesthetic enhancement, recreation, wildlife, and watershed protection. These objectives are to be achieved through the conservation of soil, timber, grassland, water, and wildlife resources throughout the reserve. A lake shore management plan addresses private floating facilities along the shoreline.

(k) Habitats

Wildlife habitat depends upon climate, soils, topography, water, vegetation and the presence of people. Collectively, these factors create environments that provide food, water and cover for wildlife species. All vegetative types in developed areas provide habitat for some type of wildlife species. Wildlife distribution correlates with different types and succession of plants. It is this association that forms the basis for the following analysis of wildlife within the City of Lowell.

A 1976 aerial photo, in conjunction with a field investigation identified five vegetative cover types. These cover types are riparian, urban, field, lake, and mixed conifer/deciduous woodland. The Vegetation Map shows the relationship of these cover types to the City of Lowell and Appendix E, 1982 Lowell Comprehensive Plan 1982 lists those wildlife types commonly associated with these vegetative covers. The following is a description of the five vegetative cover types and commonly associated wildlife:

- a. **Riparian:** This type of vegetation most frequently occurs along streams and rivers and usually forms a dense narrow bend near the shoreline. This vegetative habitat is very valuable in that it provides food, cover, and resting opportunities for a great variety of animal species.
- b. **Urban:** Little vegetation exists in this environment except in the form of lawns, ornamental trees, flowers, and gardens. Some natural vegetation may remain, although pavement, concrete, and buildings dominate.
- c. **Lakes:** For purposes of this analysis, this vegetative habitat consists of ponds, rivers, lakes, and sloughs. Most of these habitats offer resting and feeding opportunities for waterfowl.

- d. **Mixed Conifer/Deciduous Woodlands:** This forest consists primarily of Douglas Fir, although significant quantities of Oregon Big Leaf Maple and Oregon White Oak are present.
- e. **Fields:** This habitat type contains the annual and perennial grasslands of the State. Species of grass differ with geophysical area.

Presently, there are no known rare or endangered species of wildlife residing within Lowell. Because of the large amount of natural land in public ownership adjacent to Lowell, no areas of vegetative cover have been identified as being essential to the survival of any wildlife species commonly found in the Lowell area.

While wildlife habitats in the community are marginal, water-fowl, shore birds, and upland game may be found along the northeastern shore of Dexter Lake; quail may be found on the extreme southeastern shore.

The lake is used heavily for winter resting and feeding by as many as 2,000 migratory birds. Some waterfowl nesting occurs mainly on the eastern portion of the lake. Many species of non-game birds use the habitats along the lake shore. Fur-bearing mammals using the lake margins include muskrat, beaver, mink, and occasionally otter. Warm water game fish are also present in Dexter Lake.

The lake fringe is U.S. Army Corps of Engineer's property. It should be retained in its natural state to provide food and cover for wildlife.

SECTIONS 9.922-9.927 RESERVED FOR EXPANSION.

SECTION 9.928 REFERENCED ASSOCIATED DOCUMENTS

1. **Lowell Comprehensive Plan**, Land Council of Governments; 1978, 1980, 1981, 1982 LCDC Acknowledged and 1989 Amended.
2. **The Willamette River Basin Planning Atlas**, Pacific Northwest Ecosystem Research Consortium, Oregon State University Press, 2002.

SECTION 9.929 ENVIRONMENT GOALS & POLICIES

(a) **Statewide Planning Goals.** The primary Statewide Planning Goals related to this element of the Plan are Goals 5, 6, and 7 although other Goals also have natural environmental implications.

Goal 5 reads: "To protect natural resources and conserve scenic and historic areas and open space." In response to this goal the following Lowell Policies are included to help insure the wise management of natural resources for future generations and to avoid land use conflicts damaging to the natural environment.

Goal 6 reads: "To maintain and improve the quality of air, water and land resources of the state." In response to this goal the following Lowell Policies are included to insure that waste and process discharges do not threaten to violate state or federal environmental quality statutes, rules and standards, nor exceed the natural environmental carrying capacity of the area.

Goal 7 reads: "To protect life and property from natural disasters and hazards." In response to this goal this element includes policies that are appropriate safeguards to insure against loss of life and property from natural disasters and hazards. The primary hazards in the Lowell area are related to potential flooding, localized ponding, and steep slope erosion earth slide potentials.

This element also includes policies relevant to **Goals 3**, "To preserve and maintain agricultural land". and **Goal 4**, "To conserve forest lands by maintaining the forest land base".

(b) Lowell Environmental Goals

GOAL #1 To protect and improve the environmental quality of the Lowell area.

(c) Lowell Environment Policies

1. The City shall strive for continual and substantial progress toward improving the quality of the local environment by supporting and enforcing applicable environmental quality standards and regulations.
2. The City shall encourage developments that reinforce the aesthetic appeal of the community's natural setting.
3. Development proposals in areas considered to pose geologic hazards such as flooding, poor drainage, ponding, high water table and slippage shall submit engineering investigations for review and approval of the City to ensure that environmental problems can be mitigated.
4. Area watercourses, drainageways and significant wetlands protect water resources, fish and wildlife habitats, preserve recreational and scenic resources, and serve as natural greenway buffers within the community. Developments requiring channelization, removal of significant native vegetation, alteration of drainageway banks and filling of drainage channels shall be discouraged. Alterations considered necessary shall be submitted to the City for review and approval.
5. Groundwater resources shall be protected from potential pollution from septic tank wastes, urban run-offs, solid and liquid waste disposal, and agricultural contaminants.
6. Developments adjacent to Dexter Lake, drainageways, ponds and sloughs that may contain wetlands or riparian areas shall provide protective measures to insure water quality and wildlife habitat is preserved, restored or mitigated.
7. The City of Lowell shall support and cooperate with the U.S. Army Corps of Engineers to maintain the Dexter Lake shoreline as a natural open space feature for the community and to provide wildlife habitat.
8. Development proposals for residential, commercial or industrial developments shall recognize the value of existing on-site native vegetation and shall identify these features as part of the City's review and approval procedures.

9. The creation of vegetative screening and/or buffers between non-residential areas and residential uses shall be required.
10. In evaluating discretionary land use applications, the City shall consider the effects of the proposed use upon identified fish and wildlife habitats.
11. The creation of trails and parks associated with vegetative drainageways shall be a consideration in all park master planning efforts.
12. Hillside developments requiring significant removal of native vegetation, alteration of drainageways and excessive cut & fill shall be discouraged and specific standards for hillside development shall be adopted.
13. Unshielded lighting producing glare shall be discouraged particularly in hillside areas and specific standards to reduce the effects of lighting glare shall be adopted.
14. The City shall require compliance with local, state and federal air quality regulations and air quality compliance shall be an identified requirement for applications submitted to the City.
15. Proposed developments shall comply with the, DEQ Noise Control regulations, the Oregon Noise Control Act and all other applicable federal, state and local noise control regulations and noise compliance shall be an identified item requirement for applications submitted to the City.

SECTION 9.930 POPULATION & ECONOMY

SECTION 9.931 POPULATION & ECONOMY DATA SUMMARY

This Section contains background data on existing population and employment levels and projections of future population and employment trends. Population and economic data for Lowell cannot be viewed in isolation. Lowell is an integral part of the larger Lane County region. Population data and projections provide a basis for determining land use, housing, transportation and public facility needs. Projections of population and economic activities also indicate potential impacts on the environment resulting from population and economic growth.

In 2000, Lowell's population was 857 according to the US Census. The city successfully challenged this estimate and it was corrected by the Census Bureau to 880. The geographical information database at Lane Council of Governments indicates that there are approximately 957 people in Lowell (assuming the same vacancy rate and persons per household as the US Census Bureau) Of the cities in the region, only Westfir has a smaller population.

(a) Population

(1) Population Projection Assumptions

The following assumptions are the basis for the population projections for Lowell:

- There will be limited growth outside the City Limits/UGB.
- The city will continue to be supportive of growth.
- A small town preference will continue to contribute to growth.

(2) 2000-2020 Population Projections

Lowell has been growing at a relatively slow rate, compared to the county as a whole. The 2000 US Census specified the total population for Lowell at 857. Based on a housing and resident count conducted by the city, the 2000 population was estimated based on the number of housing units in the LCOG parcel file, and the persons per household and vacancy rate from the 2000 US Census. This resulted in a 2000 population of 957.

**TABLE 9.930 A
Lowell Historical Population**

Year	Population
1960	503
1970	567
1980	661
1990	785
2000	880

Sources: US Census (2000)

(3) Population Growth Rates

Based on the population estimates for 1960, 1970, 1980, 1990, and 2000 population, the city’s average annual growth rate has been relatively low over the last 40 years, ranging from about 1.2% during the 1960s up to 2.0% during the 1990s.

**TABLE 9.930 B
Lowell Average Annual Growth Rate Population
Based on Alternative Population**

Time Period	Years	Growth Rate	2020 Population Estimates
10-Year	1960-1970	1.20%	
	1970-1980	1.55%	
	1980-1990	1.73%	
	1990-2000	2.00%	1,422
20-Year	1980-2000	1.87%	1,386
30-Year	1970-2000	1.76%	1,357
40-Year	1960-2000	1.62%	1,320

The preferred population projections take into account the City’s relatively slow but steady growth rate over the last forty years. The preferred population projection for the city is based on “% of Lane County.” The UGB is co-terminus with the city limits.

**TABLE 9.930 C
Population Allocation for Urban Growth Boundary Areas in Lane County
with Annual Average Growth Rates**

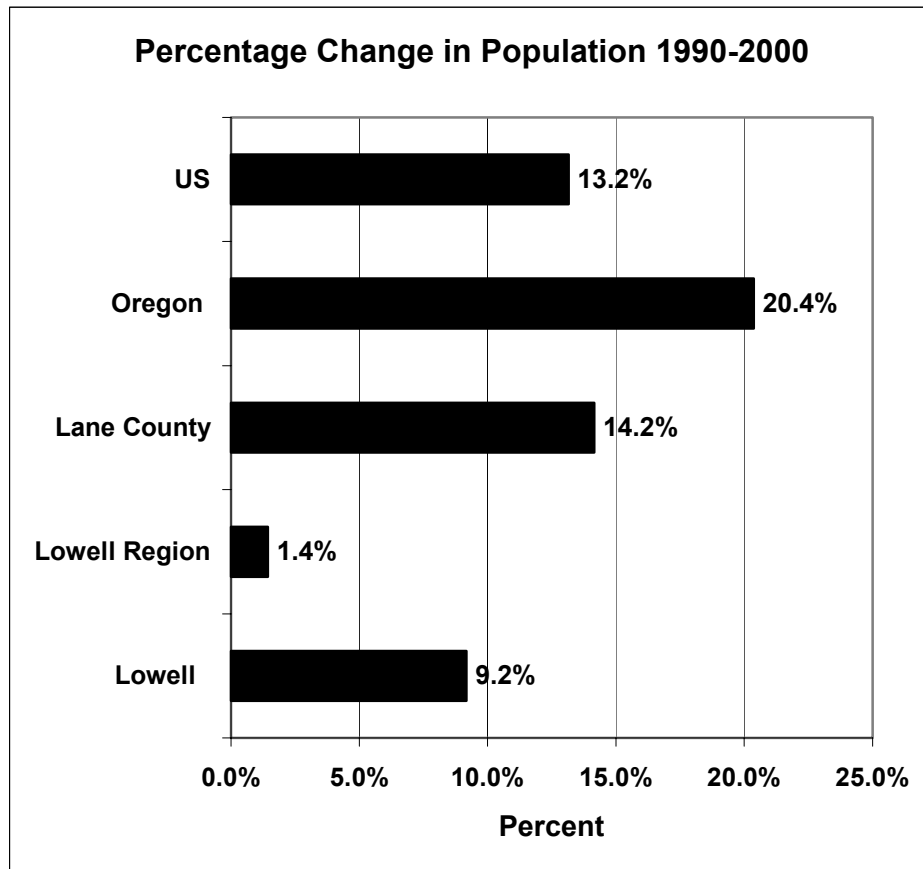
Lane County					
Year	Low	Forecast	High	Outside UGB	Lowell
1990		282,912		62,043	785
2000		322,977		63,664	880
2004		333,350		61,710	900
2025	390,251	410,790	431,330	56,500	1,500
2030	410,362	431,960	453,558	56,000	1,700
Average Annual Growth Rates					
1990					
2000		1.33%		0.26%	1.15%
2004		0.79%		-0.78%	0.56%
Projected Growth Rates					
2000-2025		0.97%	-0.48%	-0.48%	2.16%
2000-2030		0.97%	-0.43%	-0.43%	2.22%

1990 and 2000 population figures are based on Census data and the 2004 figures are population estimates produced by the Population Research Center at PSU.

(4) Demographics

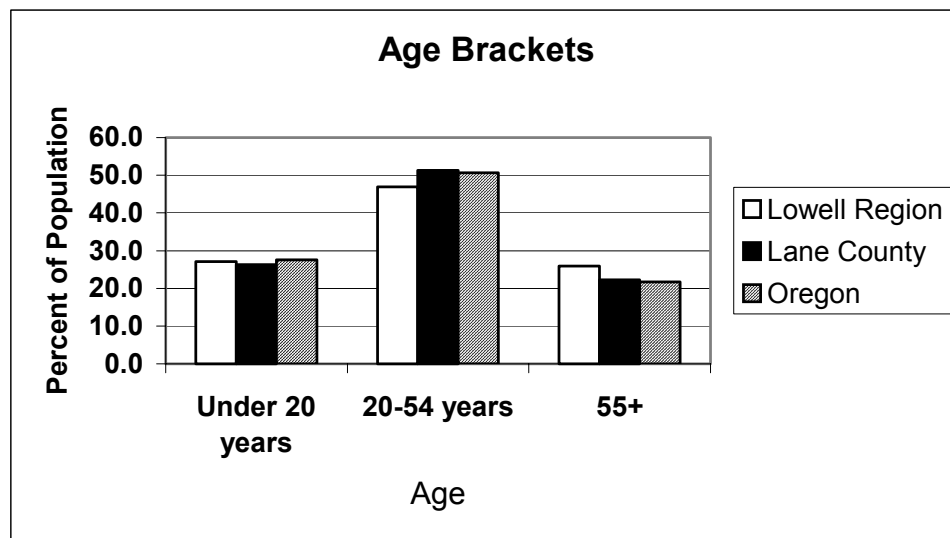
The City of Lowell had a Census population of 880 residents in 2000. Lowell was among the slowest growing cities in Lane County from 1990 to 2000, with a 9% increase in population that exceeded only the growth rates of Oakridge and Westfir over that time period.

TABLE 9.930 D



Note: During the entire period, Lowell had development moratoriums in place due to limited water and sewer capacity.

TABLE 9.930 E



**TABLE 9.930 F
Median Age**

Area	Median Age
Lane County	36.6
Lowell	34.5

Source: 2000 U.S. Census

The Lowell region work force population is comprised of higher percentages of residents 55 and over, and lower percentages of residents 20-54, than both Lane County and Oregon.

SECTION 9.932 ECONOMY

Lowell was a timber town until the late 1980s. The early industries in the area were hop raising, stock raising, and logging, and the present town site of Lowell was once a huge hop yard. The first sizable increase in population occurred in conjunction with the building of the Lookout Point Reservoir by the U.S. Army Corps of Engineers (Corps) in 1948. The Dam ushered in a new era for the people who had settled on the Middle Fork of the Willamette River near Lowell. Much of the town of Lowell was relocated when the dam was built. Many of the houses had to be moved out of the river bottom east of town and new houses were built north of town for the new employees hired to build the dam.

Today the vast majority of workers who live in Lowell commute to Eugene-Springfield to work. Lowell is 15 miles from Eugene-Springfield, compared to 23 for the average Lane County City; Lowell is 125 miles from Portland, compared to 129 miles for the average Lane County city.

The Lowell Economic Region includes Census Tracts 15, 16 and 17. Census Tract 15 includes the Westfir and Oakridge area. Census Tract 16 contains Lowell, Dexter, Unity and Fall Creek area and Census Tract 17 includes the Pleasant Hill and Jasper area.

The Lowell region work force population increased by only 1.4% from 1990-2000, with two census tracts losing population and one gaining population. By comparison, Oregon’s population grew by 20.4%, Lane County’s by 14.2%.

**TABLE 9.930 G
Lowell Workforce Region Population 1990 and 2000**

Census Tract	1990 Population	2000 Population	1990 – 2000 Numerical Change	1990 – 2000 Percent Change
15	4,578	4,400	-178	-3.9%
16 Lowell	4,570	4,992	422	9.2%
17	5,350	5,315	-35	-0.7%
TOTAL REGION	14,498	14,707	209	1.4%

Income levels in the City of Lowell are relatively low. Median Household Income in Lowell is over \$5,000 less than that of Oregon; Per Capita Income is nearly \$7,000 less.

TABLE 9.930 H
Income in 1999

Area	Median Household Income	Per Capita Income
US	\$ 41,994	\$ 21,587
Oregon	40,916	20,940
Lane County	36,942	19,681
Lowell	35,536	14,078

While incomes in Lowell tend to be lower, a lower percentage of City of Lowell and Lowell region residents live below poverty level than residents of Oregon as a whole.

TABLE 9.930 I
Percent of Persons Below Poverty Level

Area	Percent of Persons Below Poverty
US	12.4%
Oregon	11.6%
Lane County	14.4%
Lowell Region	10.1%
Lowell	11.5%

Source: 2000 U.S. Census

(a) Lowell Region

On a percentage basis, there are more Lowell region workers involved in the following Occupation Groups than in Oregon as a whole:

“Service,”

“Farming, fishing, and forestry,”

“Construction, extraction, and maintenance,” and

“Production, transportation, and material moving”.

The opposite is true for the occupations of:

“Management, professional, and related occupations,” and

“Sales and office”.

It is not clear what percentage of these jobs are located in the Lowell region. Many are likely to be located in the Eugene-Springfield metro area.

For the most part, the percentages of Lowell region workers involved in the given industries are comparable to the percentages of Oregon workers. The greatest discrepancy is in the “Agriculture, forestry, fishing and hunting, and mining” industry, where the percentage of Lowell’s workers is 3.5% higher than Oregon workers overall. The percentage of Oregon workers involved in the “Finance, insurance, real estate and rental and leasing” industry is 2.4%

higher than the percentage of Lowell workers. It is not clear what percentage of these jobs are located in the Lowell region. Many are likely located in the Eugene-Springfield metro area.

TABLE 9.930 J
Occupations of Lowell Region and Oregon Resident Workers

Occupations	Lowell Region		Oregon
	Number of Persons	Percent of Resident Workers	Percent of Resident Workers
Management, professional, and related occupations	2,056	29.7%	33.1%
Service	1,158	16.8%	15.3%
Sales and office	1,493	21.6%	26.1%
Farming, fishing, and forestry	275	4.0%	1.7%
Construction, extraction, and maintenance	718	10.4%	9.1%
Production, transportation, and material moving	1,212	17.5%	14.7%
TOTAL	6,912	100%	100%

(b) Industrial/Commercial Land

The City of Lowell has a designated area for light industrial activities in an Industrial Park. A portion of the land is occupied by manufacturing uses. The Lowell Industrial Park has full City services and there are two vacant tax lots totaling 3.45 acres available for businesses to locate there. The Industrial and Commercial Lands Assessment in Rural Lane County (June 2000) includes inventory information for these two lots.

Commercially zoned land is also available in Lowell, primarily to accommodate small, sole proprietor businesses common in the area. There are several vacant commercial sites available for new occupants or redevelopment.

Industries that meet the following criteria should be given the highest priority in regards to outreach and recruitment because they are considered to be the most likely candidates for a good fit with the Lowell area:

1. Small, clean, quiet companies. These offer a better fit and employment growth potential for Lowell, e.g. ten companies with 5 employees each rather than one company with 50 employees.
2. Employers that require skilled labor and provide family wage jobs.
3. Entrepreneurial in nature.
4. Cottage industries that meet the applicable code requirements.
5. Manufacture a product or provide a service that is exportable outside the Lowell/Dexter/Fall Creek area. These bring in money from outside the community to add to the local economy.
6. A business that will pull customers from outside the city.

7. Target commercial, industrial, and residential employers and developers—it takes all components to create the healthy economy that the area is seeking to build.

(c) Targeted Industries

The Lowell Economic Development Strategic Plan Committee reviewed an extensive list of Industrial Sectors. The Committee applied its criteria to the general sector lists with the intent of identifying the sectors most applicable for the Lowell area. Within each sector, however, there are often smaller employers that closely fit with the Lowell area's expectations.

(d) Retirement and Tourism

The retirement and tourism industries help support commercial businesses and provides lower wage jobs suitable for youth and others just entering the job market. Although tourism is important to the Lowell community, focusing exclusively on its development to generate jobs and income would not be appropriate, and would be inconsistent with the need for diversity. Due to the nature of their impacts, the Lowell area targets tourism and retirement not as core elements of a local economy, but to play supplementary roles to help diversify economic activity. The following information may speak directly to tourism or retirement, but much of it applies to the other sector as well.

(1) Tourism

Overall, there are many benefits to local communities from tourism, as well as potential costs. Tourism is widely recognized for creating and sustaining jobs, and bringing new money to an area. Visitor spending supports local business, specialty shops, restaurants and recreational facilities which might not otherwise survive. Tourism can also lead to the regeneration of redundant buildings, help with local conservation and environmental improvement, and be a key source of civic pride.

However, while tourists do spend money which directly supports local jobs, a number of these jobs tend to be: seasonal; part-time; have limited career prospects, except in certain sectors, such as accommodation; and have unsociable hours (especially in accommodation), with staff turnover relatively high compared to other economic activities. Destination tourism planning is about finding a balance between costs and benefits in the best interest of tourism and the community.

Most jobs associated with tourism are direct service jobs in tourist-related facilities and attractions. These are primarily in hotels, attractions, restaurants, shops selling discretionary goods and travel firms. Most direct tourism jobs, particularly in comparison to other industries, tend to be: *entry-level*, requiring little or moderate skills and training; relatively simple and cheaper to create; more labor- rather than capital- intensive (except when new facilities are required). Tourism also attracts sole proprietorships, and this is a plus for the community, because it contributes to job growth and community investment.

(2) Retirement

For the Lowell area, retirement as an employment sector can be as much the result of lifestyle choices as it will be the result of decisions by specific employers to locate in Lowell. As an employment sector, the retirement sector would constitute the high density retirement communities that are becoming increasingly important in the economy. Lowell and the surrounding area can seek to attract these employers, but Lowell can also offer its low cost of living, its rural amenities and its proximity to the Eugene Springfield metropolitan area to encourage retirees to think of Lowell no matter what their housing choice. Retirement, in its aspect of increased concentration of a stable economic base is as important for the associated service related sectors of the economy as it is for the retirement communities themselves. An increase in the number of retired persons who choose the Lowell area for their place of residence will increase the use of local restaurants, stores and other service sectors of the economy.

Like tourism, Lowell cannot choose retirement as the major focus of its economic development plan, because by itself, retirement as an economic sector is not likely to provide a significant step in helping Lowell reach its economic development goals. Retirement is, however, one aspect of a diverse, stable economic base that the Lowell area can benefit from making a part of its overall plan.

(e) Concentrated Industries

Concentrated industries are companies that have a relatively high dollar value per square foot; they get a lot done in a small footprint. Tumac, Inc., located in the Lowell Industrial Park, is an example of a concentrated industry. Tumac is a contract machine shop that manufactures custom component parts for clients. There are many other examples of concentrated industries, including component manufacturing (biotech, medical, electronic, motorhome parts), a cabinet shop, fine woodworking, and parts for off-road vehicles. These Concentrated Industries may be represented in several of the Industrial sectors commonly used to analyze employment sectors.

(f) Nurseries

Nurseries are a targeted industry for the rural area outside the communities. The area has an abundance of land suitable for nurseries—appropriately zoned, with agricultural soils, suitable climate, proximity to markets, and transportation access. There are existing nurseries, both in the Lowell area and within the county. Nurseries are an industry that exports products outside the area and provides job opportunities for youth.

(g) Cottage Industries

Cottage industries, called home occupations in zoning codes, can be located either inside or outside the city within the Lowell area. The City of Lowell code includes requirements for cottage industries inside the city limits and the Lane County code includes requirements for cottage industries outside Lowell's city limits. A wide variety of cottage industries already are located in the Lowell area, indicating the suitability of the area for such businesses. Like other categories discussed in this list, Cottage Industries may be developed within several of the larger industrial sector categories. While these sectors may have different characteristics and demands, at the Cottage Industry level they share many similarities, derived from their characteristics as small enterprises.

(h) Locational Advantages

- The Lowell/Dexter/Fall Creek area offers a rural, small town atmosphere and proximity to a larger metropolitan area with good access to health care, specialized goods and services, and other amenities.
- The natural beauty of the area is stunning, with three large lakes, a major river, and many smaller streams. The area is in the Cascade Mountains and is less than a two hour drive from the postcard scenic Oregon Coast.
- The Lowell/Dexter/Fall Creek area is close to many outdoor recreation opportunities.
- Lowell is a small city which has less bureaucracy than larger cities.
- Industries in Lowell enjoy the benefits of being a “big fish in a small pond”.
- Employees can enjoy nearby outdoor recreation opportunities on their lunch hours.
- The Lowell area is within twenty minutes of Eugene/Springfield, a short commute distance for work, and approximately two hours from the Portland metropolitan area.
- Area is a gateway to the Willamette National Forest, which stretches for 110 miles along the western slopes of the Cascade Range.

(i) Local/Regional Resources

- The City of Lowell projects a user-friendly “How can we help you?” attitude to prospective citizens, commercial, industrial, and residential employers and developers. The staff provides high quality customer service.
- Lowell has an academically strong local K through 12 school system with civic-minded students that are an asset to the community. The schools meet all the testing requirements set by federal programs.
- Located strategically close to several excellent public institutions of higher learning—University of Oregon and Oregon State University; and Lane Community College and Linn-Benton Community College.
- Good transportation system access: located just off Highway 58; a short distance from I-5 and the Eugene Airport; within two and a half hours of the Portland International Airport; access to Amtrak rail service in Eugene; good county roads; and a good local street system
- High quality residential view lots are available, and less costly than in the Eugene/Springfield area
- Residents within the Lowell/Dexter/Fall Creek/Oakridge are seeking employment opportunities close to home and provide a ready and willing workforce.
- Up-to-date water and wastewater systems and internet (DSL and fiber) connections put Lowell ahead of many other small communities in the area.
- Property in the Lowell/Dexter/Fall Creek area is less expensive than in the Eugene/Springfield area.
- An abundance of vacant commercially zoned land is available and ready for development.
- The industrial park has a well-established company as an anchor and two development-ready lots of vacant industrial zoned land.

SECTIONS 9.933-9.937 RESERVED FOR EXPANSION

SECTION 9.938 REFERENCED ASSOCIATED DOCUMENTS

1. **Census 2000**, U.S. Census Bureau, 2000.
2. **Lowell Urban Growth Boundary Land Analysis Draft**, Lane Council of Governments, 2001.
3. **Lowell Economic Development Strategic Plan**, Lane Council of Governments, 2003.

SECTION 9.939 POPULATION & ECONOMY GOALS & POLICIES

(a) **Statewide Planning Goals:** The primary Statewide Planning Goals related to this Section of the Plan are Goals 2 and 9, although other Goals are also impacted by the Population and Economy Element of the Plan.

Goal 2 reads, "To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions." Population trending and projections are a means of identifying potential land use needs for future growth and development.

Goal 9 reads, "To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens." Comprehensive Plans should contribute to a stable and healthful economy and should provide areas suitable for increased growth and development of the areas economic base."

(b) Lowell Population & Economy Goals

- GOAL 1.** To encourage population growth within the service capability of the City.
- GOAL 2.** To encourage a diversified economic base for the City of Lowell that broadens and improves long-term employment opportunities.
- GOAL 3.** To provide support for existing business and governmental activities while encouraging new businesses that support community needs.

(c) Policies

1. The City of Lowell shall strive for continual and substantial progress toward improving the quality of life for area residents including livability and economic prosperity.
2. The City shall actively encourage young families with children to locate in Lowell to support and maintain the Lowell School District.
3. The City shall track population growth on an annual basis to determine if growth projections remain valid. If growth exceeds projections, a reexamination of urban growth needs shall be initiated.

4. The City shall maintain a cooperative approach with local employers.
5. The City shall continue to actively encourage industrial and business developments that can help improve the economy of the Lowell area which are compatible with maintaining the area's environmental assets and the livability of the community.
6. The City shall encourage service type businesses that support the needs of Lowell residents, the people working in Lowell and the needs of the Lowell area.
7. The City recognizes the need to create a centralized downtown business district in Lowell and shall encourage new retail, office and service commercial developments to locate there.
8. The City shall provide and maintain an adequate supply of land for commercial and industrial uses to support the Lowell economy.

SECTION 9.940 HOUSING

Section 9.941 Housing Data Summary

The Housing Section of the Lowell Comprehensive Plan presents an inventory of existing housing, housing trends, housing demand, housing need and buildable land needs.

The housing counts vary depending upon where the data was obtained and will be noted as to the source. The 2000 Census data provides the latest census statistical housing data.

(a) Existing Housing

The 2000 Census indicates a total of 346 housing units within the Lowell City Limits/UGB. A 2001 LCOG Urban Growth Land Analysis (UGLA) produced a count of 383 and the LCOG Economic Development Strategic Plan (EDSP) provided a 2003 count of 399 housing units.

**TABLE 9.940 A
2000 Census Population & Housing Status**

Population	Persons In Group Quarters	Persons Per Household	Total Dwelling Units	Occupied Dwelling Units	Vacant Units	Owner Occupied Units	Rental Units	%Owner Occupied	%Rental Occupied
880	0	2.72	346	315	27	233	82	74	26

Source: 2000 U.S. Census

(b) Housing Units by Type

The following Tables summarize the number of housing for each type and their percentage of the total housing in the community.

**TABLE 9.940 B
Lowell Housing by Type - 1980**

Structure Type	Existing Units 1980		Projected Units 2000		Projected Units 1980-2000	
	#	%	#	%	#	%
SF-Detached	198	74%	257	69%	59	56%
Manufactured Homes	45	17%	74	20%	29	28%
Multiple-Family	24	9%	41	11%	17	16%
TOTAL	267	100%	372	100%	105	100%

Source: Lowell 1982 Comp Plan

It is interesting to note that the 1980 housing projection for the year 2000 is within 26 units of the 2000 Census count.

**TABLE 9.940 C
Lowell Housing by Type - 2000**

Structure Type	Existing Units 2000		Actual Units 1980		Added Units 1980-2000	
	#	%	#	%	#	%
SF-Detached	214	62%	198	74%	16	20%
Manufactured Homes	102	29%	45	4%	57	72%
Multiple-Family	30	9%	24	9%	6	8%
TOTAL	346	100%	267	100%	79	100%

Source: 2000 U.S. Census

**TABLE 9.940 D
Lowell Housing by Type - 2001**

Structure Type	Existing Units 2001		Future Units 2020		Added Units 2001-2020	
	#	%	#	%	#	%
SF-Detached	337	88%	403	82%	66	61%
Duplex	0	0%	20	4%	20	18%
Multiple-Family	32	8%	49	10%	17	16%
Manuf. Homes in Park	14	4%	20	4%	6	5%
TOTAL	383	100%	492	100%	109	100%

Source: LCOG UGLA

**TABLE 9.940 E
Lowell Housing by Type - 2003**

Housing Type	Lowell		Lane County
	Number of Units	Percentage	Percentage
Single Family	215	53.9%	59.4%
Multiple-Family & Duplex	44	11.0%	26.9%
Manufactured Dwelling on Lot	134	33.6%	8.5%
Manufactured Dwelling in Park	6	1.5%	5.3%
TOTAL	399	100%	100%

Source: LCOG EDSP

Compared to Lane County, Lowell has lower percentages of single family and Multiple-family and duplex dwellings, and significantly higher percentages of dwellings. Over one-third of the housing units inside the City are manufactured dwellings, more than three times the County rate.

(c) Housing Occupancy

The housing vacancy rate in the Lowell is higher than the Lane County average, but lower than the State average.

**TABLE 9.940 F
2000 Housing Vacancy Rate**

Area	Vacancy Rate
Oregon	8.2%
Lane County	6.1%
Lowell	7.9%

Source: 2000 U.S. Census

**TABLE 9.940 G
2000 Occupancy Status**

Area	Total Housing	Occupied Housing	Vacant Housing	Vacancy Rate
Lane County	138,946	130,453	8,493	6.1%
Lowell	346	315	27	7.9%

Source: 2000 U.S. Census

Lowell has a higher percentage of home owners and lower percentage of renters than the U.S., State of Oregon or Lane County.

**TABLE 9.940 H
Percent Owner & Renter**

Area	Owner	Renter
US	66.2%	33.8%
Oregon	64.3%	35.7%
Lane County	62.3%	37.7%
Lowell	74.0%	26.0%
Lowell Number	233	82

Source: 2000 U.S. Census

The median value of owner-occupied homes within Lowell is \$40,000 lower than that of Lane County, and over \$50,000 lower than that of Oregon. This is likely due in part to the high percentage of manufactured dwellings (35%) in Lowell, which tend to have lower value than “site-built” single family dwellings.

**TABLE 9.940 I
2000 Median Owner-Occupied Value**

Area	Median House Value
US	\$ 119,600
Oregon	\$ 152,100
Lane	\$ 141,000
Lowell	\$ 101,300

Source: 2000 U.S. Census

Median contract rent in Lowell is slightly higher than in Lane County and Oregon.

TABLE 9.940 J
2000 Median Contract Rent

Area	Median Contract Rent
US	\$ 519
Oregon	\$ 549
Lane	\$ 542
Lowell	\$ 558

Source: 2000 U.S. Census

(d) Housing Costs

Housing became less affordable in the 1990's. Housing costs continue to grow at rates nearly double incomes. The increasing cost of housing is beyond the means of many households without some form of assistance. A recognized standard of maximum shelter costs is 30 percent of household income. In Oregon, 37.2% of renters and 22.5% of owners pay more than 30% of their household income for housing.

Without financial assistance, many elderly and low income families are forced to accept inadequate housing. For these households, the cost of either maintaining a home or finding rental shelter at a cost of less than 30 percent of their net income becomes very difficult. The cost of purchasing a new home on a moderate income is unattainable for many families.

Even though interest rates are the lowest in many years, more and more people are still priced out of the housing market due to increased inflationary costs. Land costs and municipal services have risen sharply in recent years and building costs have increased at the rate of one percent a month.

A single family home is increasingly beyond the means of many households. Nationally, the result has been a rise in the number of apartments, duplexes, and manufactured homes.

Housing costs and rent levels in Lowell are modest compared to many areas of the state, but a substantial increase can be expected. The City will continue to seek means of reducing housing costs within the City. However, it must be recognized that municipal public facilities and services will contribute to higher housing costs through System Development Charges (SDC). Reduced lot sizes, efficient planning and inexpensive construction alternatives can be utilized to maintain housing within affordable limits.

(e) Affordable Housing

The State of Oregon has declared a Statewide Goal that all communities have the responsibility of providing an adequate number of household units at price ranges and rent levels commensurate with the financial capabilities of Oregon households.

Affordable housing is defined by a cost burden of no more than 30% of household income. Affordable housing means it would take at least \$ 20,000 yearly income to purchase a home with a Mortgage of \$ 70,000 or pay \$ 500 a month in rent. Or it would take \$ 32,000 yearly income to purchase a home with a Mortgage of \$ 120,000 or pay \$800 a month in rent.

Small communities like Lowell are limited in their ability affect the housing market. It is clear that the most a community can do is not to place undo burdens on the availability of land and the cost of municipal services. Maintaining administrative costs for land use decisions within reasonable limits and provision of timely decisions can also encourage developers to choose a Lowell location.

Housing authorities are more likely to address housing needs for special classes of individuals like low-income, those with disabilities or other special needs. Small cities have a more difficult time specifically addressing these special housing needs; especially when one considers that determining the socioeconomic needs and distribution for an expanding population is a highly speculative task at best.

Among the means at a City's disposal are Code provisions for smaller lots, the provision of multi-family zones in the community. It is also important that a community preserve and maintain its existing housing stock for the purposes of conserving natural resources used in home construction and for providing lower priced housing to residents of the community.

The City recognizes their existing housing stock as an extremely valuable resource. Therefore, the City has adopted policies pertaining to the rehabilitation of existing housing and the maintenance of a wide range of housing prices in Lowell.

(f) Assisted Housing

The 2000 Census identified 20 families and 98 individuals that were below the poverty level. There were also 45 homeowners and 36 renters that paid more than 30% of their income for housing.

There is a number of public and private housing assistance organizations that can help provide affordable housing in Lowell. This assistance includes new home purchase, rent supplements, low interest loans and grants for rehabilitation as well as other programs.

The City recognizes its responsibility to accommodate assisted housing in Lowell. There is a strong preference for programs that assist households in obtaining housing already available in the community as opposed to targeted housing developments that concentrate assisted housing in one area or in single developments.

The Federal Fair Housing Act of 1988 protects the right to freely choose a place to live without discrimination.

Qualified citizens of Lowell should be aware of available assistance programs, and should participate in them if they choose. The City can be a source of information concerning housing availability in general should assist those seeking information on housing assistance.

SECTION 9.942 HOUSING TRENDS

Average annual growth rate growth in Lowell has been relatively low over the last 40 years, ranging from about 1.2% during the 1960s up to 2.0% during the 1990s. The 1980 to 2000 Trend is summarized in the following table.

**TABLE 9.400 K
Housing Trend 1980-2000**

Period	Population Increase	Housing Increase	Added Housing Units					
			Single-family		Multi-family		Manufactured	
			No.	%	No.	%	No.	%
1980-2000	219	79	16	20.0%	6	9.0%	57	72.0%

Source: 2000 U.S. Census

The last 20 year housing trend provides little information that is helpful in projecting future needs. The improved municipal water and sewer system has substantially increased housing opportunities providing an immediate incentive for housing production in Lowell.

There are several regional trends that will affect the type of housing needed in the next 20 years in addition to local conditions:

- Over 70% of population increase will come from net migration.
- Household size is expected to continue declining.
- The region will add more residents that are 65 and older and group quarters will increase by about 2%.
- Younger people in the 20 to 34 age range are more mobile and generally have less income than people who are older and they are less likely to have children. All of these factors mean that young households are more likely to be renters and renters are more likely to be in multi-family housing.
- Baby boomers in their 50s are about to reach the "empty nest" stage and these households have different needs than families.
- The rate of formation of single-parent households is slowing as is the rate of formation of married couple families with children.
- Income statistics indicate a substantial preference for single-family housing and ownership when incomes allow that choice regardless of age.
- The rate of increasing housing costs is approaching double that of the rate of income

Residential locational choice trends also include:

- Access to work.
- Access to shopping, recreation and friends.
- Public services.
- Community and neighborhood characteristics.
- Land and improvement characteristics.

In all, Lowell's potential for growth and development will depend on these national and regional trends as well as local factors, but most of all it will be the City's attitude, responsiveness and preparedness that will guide Lowell's housing development.

(a) Single-family Homes

Although becoming increasingly expensive, single-family homes are the primary choice of homeowners. With the low interest rates of the past decade plus the decline in available money for Manufactured Home Parks, single-family homes can be expected to continue as the housing of choice although their percentage of the total housing market may decline as interest rates increase and other choices such as manufactured homes and multiple-family homes become more affordable alternatives.

(b) Manufactured Homes

The cost of single-family homes is beyond the means of an increasing number of families. Manufactured homes are therefore rapidly becoming the house of choice for low to moderate income families. They provide excellent value, and with housing costs growing at rates nearly double incomes, they will likely be the affordable housing choice throughout the planning period although Manufacture Home Parks are declining in use and preference.

(c) Multiple-Family Housing

There are 32 multi-family housing units in Lowell. The demand for more affordable housing such as duplexes, apartments and attached townhouses will continue to increase. Apartments will be mostly the smaller four-plex to six-plex type. The percentage of multi-family units, including duplexes is expected to increase overall.

(d) Planned Developments

Planned Development proposals may increase as a means of addressing the affordable housing issues in the community. Planned Developments can increase overall residential density while providing enhanced living environments that can help to reduce housing costs.

SECTION 9.943 PROJECTED HOUSING DEMAND & NEED

The language of Goal 10 and ORS 197.296 refer to housing need and requires communities to provide needed housing types for households at all income levels. Goal 10's broad definition of need covers all households.

House Bill HB2709 codified in the Statewide Land Use Planning Laws ORS 197.296 also requires an analysis of demand for new housing. Specifically it:

1. Refined the definition of buildable lands to include "redevelopable land".
2. Requires coordination of population projections with the County and State.
3. Sets criteria for prioritizing land for UGB expansions.
4. Sets specific requirements regarding buildable lands for needed housing.

Demand is what households are willing to purchase in the market place. Growth in population leads to a growth in households and implies an increase in demand for housing units that is usually met primarily by the construction industry based on the developer's best judgment about the types of housing that will be absorbed by the market.

Most plans make forecasts of new housing demand based upon population projections. Housing authorities are more likely to address housing needs for special classes of individuals like low-income, those with disabilities or other special needs.

Trying to determine the future socioeconomic and special housing needs for an expanding population is highly speculative at best.

The complexity of determining housing needs comes from consideration of past trends, projecting these trends into the future, and then trying to predict housing needs for Lowell's future population. The following five steps outline the process:

- Project the estimated population growth for a determined time period.
- Project the number of new housing units needed.
- Project the housing mix needed.
- Estimate the number of additional housing units needed by type
- Estimate the expected net density

(a) Population

Lowell's population is projected to increase at a rate of 2.22 percent from 2000 to 2030 for a total population of 1500 by the year 2025 and a population of 1700 by the year 2030. The Census population of 880 in lieu of the LCOG estimate of 957 was utilized as the base because of the projected average annual growth rate (aagr) produced numbers closer to the projected populations of 1,500 and 1,700 identified by the County and State.

(b) Average Household Size

Average household size has been declining both nationally and locally over the past 30 years and is expected to continue to decline. It is assumed that Lowell's average household size will also decline slightly to approximately 2.5 by 2030 due to smaller family size and an increase in older residents.

**TABLE 9.940 L
Lowell Persons Per Household (PPH)**

Year	PPH	% Change
1980	2.75	
1990	2.90	5.5%
2000	2.72	-6.2%

(c) Projected Number of Households

The projected number of households is based on the existing household size of 2.72. This is considered a high figure for future projections since statewide trends indicate something closer to 2.5 due to declining family size and an aging population. The number of households is less than the number of housing units due to the number of vacant housing units.

**TABLE 9.940 M
Lowell Household Projections**

Year	Household Population	Household Size	Number of Households
2000	880	2.72	315
2025	1500	2.50	605
2030	1700	2.50	684
2050	2653	2.50	1,061

The year 2025 is the 20 year population forecast required for a change in the UGB

(d) Vacancy Rate

A 5.8 percent vacancy rate is suggested although the 2000 Census has indicated an existing rate of 7.9 percent.

(e) Needed Housing Units

LCOG has projected a 5.8 percent vacancy rate for all units although rates generally differ between owner and rental units. Adding the projected vacant units to the projected households provides the total number of housing units needed.

**TABLE 9.940 N
Needed Housing Units**

Year	Projected Households	Vacancy Rate	Needed Housing	2000 Housing	Added Housing
2000	315	7.9		346	
2025	605	5.8	640	346	294
2030	684	5.8	724	346	378
2050	1,061	5.8	1,123	346	777

The year 2025 is the 20 year population forecast required for a change in the UGB

(f) Housing Distribution by Type

The distribution of housing types has varied over the years and will continue to be driven by market factors. The projected housing distribution for single-family, manufactured dwellings and multiple-family is summarized in **Table 9.940 O** based on the following assumptions.

(g) Single-family Homes

Site-built single-family housing remains the preferred choice. Although due to the rising cost of housing, manufactured homes have continually increased their share of the housing market. Manufactured homes on individual lots are also statistically included with site-built single-family housing in many housing tabulations.

(h) Manufactured Homes

Manufactured Home Parks have declined in preference and use. Financing has also become extremely limited for MH Parks. However Manufactured Homes will continue to be placed on

individual lots as an alternative to site-built housing. Their lower cost will continue to maintain their market share

(i) Multiple-family Housing

Multiple-family housing in Lowell has been less than that found in other areas. Although due to the increased cost of housing, it is expected to increase over the planning period.

(j) Planned Developments

The City expects and encourages more proposals for Planned Developments during the planning period. Planned Developments can provide mixed uses and higher densities that can lower housing cost.

**TABLE 9.400 O
Projected Housing Distribution by Type**

Time Period	Projected Housing Mix	Added Dwelling Units	Accumulative Total Units	Accumulative Housing Mix
1980				
Single-Family	74.1%		198	
Manuf Homes	16.9%		45	
Multiple-Family	09.0%		24	
Totals	100.0%		267	
2000				
Single-Family	20.3%	16	214	61.8%
Manuf Homes	72.2%	57	102	29.5%
Multiple-Family	07.5%	6	30	08.7%
Totals	100.0%	79	346	100.0%
2000-2025				
Single-Family	50.0%	147	361	56.4%
Manuf Homes	40.0%	118	220	34.4%
Multiple-Family	10.0%	29	59	9.2%
Totals	100.0%	294	640	100.0%
2025-2030				
Single-Family	50.0%	42	403	55.7%
Manuf Homes	35.0%	29	249	34.4%
Multiple-Family	15.0%	13	72	9.9%
Totals	100.0%	84	724	100.0%
2030-2050				
Single-Family	50.0%	199	602	53.6%
Manuf Homes	30.0%	120	369	32.9%
Multiple-Family	20.0%	80	152	13.5%
Totals	100.0%	399	1123	100%

Numbers vary slightly due to rounding
Manufactured Homes include those on individual lots and those in manufactured home parks.

(k) Residential Densities and Lot Size

The Lowell Single-family Residential District (R-1) has a minimum lot size of 7,000 sq. ft. or approximately 6 dwelling units per net acre.

The Lowell Multiple-family District (R-3) also has a minimum lot size of 7,000 sq. ft. that permits up to 15 units per net acre or higher under the Conditional Use procedures.

It is assumed that lot sizes will increase and housing density will decrease on the steeper slopes.

The Planned Development provisions of the Lowell Land Use Code also permits increased densities that provide enhanced living environments that can help to reduce housing cost.

Based on all of these factors, an assumed average density for the City is projected to be 6 units per acre.

(I) Projected Population, Needed Housing & Land Need

The following **Table 9.940 P** provides a summary by year of the potential growth rate, needed housing and land need for residential growth. The following assumptions are applied:

- The 2000 Census Population projection of 880 is utilized as the base.
- The Portland State Census estimates for 2001 through 2004 were also applied to formulate the Table 9.400 P.
- The 2000 Census Housing count of 346 is utilized as the base.
- Population Growth Rate – 2.22% per year to the year 2050 is assumed.
- People per household – 2.5 is assumed.
- Housing Vacancy rate – 5.8% is assumed based on the LCOG estimate.
- Average Density 6.0 Units per acre is based on the assumed housing mix.
- Added Land for Streets & Public Purposes – 25%
- Added Land needed to provide locational choices – 25%

Numbers may vary slightly due to multiple sources and varying estimates, although they are very close and relatively consistent.

SECTION 9.944 BUILDABLE LANDS FOR RESIDENTIAL USE

Buildable land needs are addressed in detail in the **Section 9.800, Growth Management**. The City is required to provide sufficient buildable lands to meet the projected land use needs of the City for the planning period, including buildable land for needed housing.

A change in the Lowell Urban Growth Boundary (UGB) requires a need to accommodate long range urban population, consistent with a 20 year population forecast coordinated with affected local governments.

Lowell will require approximately 73 gross acres of buildable residential land to accommodate the additional housing needs of the community based upon the coordinated population projections to the year 2025 for an UGB change.

Lowell will require approximately 194 gross acres of buildable residential land to accommodate the additional housing needs of the community based upon the coordinated population projections to the year 2050.

**TABLE 9.400 P
Projected Population, Housing & Land Need**

Year	Population aagr 2.22%	Housing 2.5 ph+5.8%V	Housing Increase	Land Area 6 u/acre+50%
2000	880	346		0
2001	880	346	0	0
2002	880	346	0	0
2003	890	349	3	1
2004	900	353	7	2
2005	923	390	44	11
2006	946	400	54	14
2007	969	410	64	16
2008	993	420	74	19
2009	1018	431	85	21
2010	1044	442	96	24
2011	1070	453	107	27
2012	1097	464	118	30
2013	1124	476	130	32
2014	1152	488	142	35
2015	1181	500	154	38
2016	1210	512	166	42
2017	1241	525	179	45
2018	1272	538	192	48
2019	1303	552	206	51
2020	1336	565	219	55
2021	1369	580	234	58
2022	1404	594	248	62
2023	1439	609	263	66
2024	1475	624	278	70
2025	1512	640	294	73
2026	1549	656	310	77
2027	1588	672	326	82
2028	1628	689	343	86
2029	1669	706	360	90
2030	1710	724	378	94
2031	1748	740	394	98
2032	1787	756	410	103
2033	1827	773	427	107
2034	1867	790	444	111
2035	1909	808	462	115
2036	1951	826	480	120
2037	1994	844	498	125
2038	2039	863	517	129
2039	2084	882	536	134
2040	2130	902	556	139
2041	2177	922	576	144
2042	2226	942	596	149
2043	2275	963	617	154
2044	2326	984	638	160
2045	2377	1006	660	165
2046	2430	1028	682	171
2047	2484	1051	705	176
2048	2539	1075	729	182
2049	2596	1098	752	188
2050	2653	1123	777	194

Lowell presently has less than 59 Buildable Residential Acres available or a deficit of 135 acres. Most of the City's existing Buildable Land is comprised of small partially vacant parcels that will develop slowly if at all

The City has very few parcels capable of supporting a subdivision.

SECTION 9.945-9.947 RESERVED FOR EXPANSION.

SECTION 9.948 REFERENCED ASSOCIATED DOCUMENTS

1. **Lowell Comprehensive Plan**, Land Council of Governments; 1978, 1980, 1981, 1982 LCDC Acknowledged and 1989 Amended.
2. **Lowell Urban Growth Boundary Land Analysis Draft**, Lane Council of Governments, 2001.
3. **Draft Housing Element For Lowell, Oregon**, Lane Council of Governments, 1976.
4. **Census 2000**, U.S. Census Bureau, 2000.

SECTION 9.949 HOUSING GOALS & POLICIES

(a) **Statewide Planning Goals:** Local housing policies must comply with the requirements of **Statewide Planning Goal 10** which reads: "To provide for the housing needs of the citizens of the state".

Goal 10 requires incorporated cities to complete an inventory of buildable residential lands and to encourage the availability of adequate numbers of needed housing types in price and rent ranges commensurate with the financial capabilities of its households.

(b) **Lowell Housing Goals**

GOAL #1 To increase opportunities for all citizens of Lowell to enjoy safe, decent, sanitary housing at affordable prices.

(c) **Policies**

Housing Need

1. The City shall strive to provide all citizens of the community with the opportunity to live in sound housing, adequate to their needs, at reasonable cost relative to their income.
2. The City shall support the right for all citizens of the community to obtain adequate housing regardless of their age, race, religion, sex, ethnic background or disability.
3. The City shall not discriminate against needed housing types and programs that address the needs of its citizens.
4. The City shall insure that residential development is supported by the timely and efficient extension of public facilities and services.

5. The City shall continue to support increased residential development while also encouraging business and commercial activities that support residential community needs.
6. The City shall develop standards for mixed housing and commercial use in its downtown commercial core as a part of a Downtown Development Plan.

Existing Housing

7. The City shall ensure adequate standards of fitness for human habitation through enforcement of its codes and ordinances.
8. The City shall support the rehabilitation of existing housing to help maintain the community housing stock and improve the appearance, structural condition and energy efficiency of existing housing.

Housing Types

9. The City shall support a wide range of housing types and innovative residential design and planning concepts.
10. Manufactured homes shall continue to be permitted on individual lots subject to siting standards that maintain their compatibility with on-site residential construction.

Housing Costs

11. The City shall support efforts to reduce housing costs by providing enough residentially zoned land to support a mix of housing types and density that address the needs of its citizens.
12. The City shall not adopt regulations that have the unwarranted affect of increasing the cost of housing.

Buildable Lands

13. The City shall maintain sufficient residential buildable lands within the community to provide locational choices for each housing type that will assist in keeping land costs for housing at reasonable levels.
14. The City shall support orderly in-fill development of underdeveloped land in existing residential areas.

Housing Assistance

15. The City shall support housing and family assistance programs that benefit the local community and shall cooperate with County, State and Federal agencies in meeting the City's affordable housing needs.
16. The City shall cooperate with developers or non-profit organizations to consider the use of excess publicly owned land for construction of affordable housing.

SECTION 9.950 LAND USE

The purpose of the land use element of the Plan is to delineate a land use pattern for the Lowell urban area that will guide the future use of land. The land use plan is based upon the other elements of the Comprehensive Plan, community desires as expressed by citizen reviews, policy statements, projected land use needs to the year 2020, and existing land use patterns.

SECTION 9.951 LOWELL LAND USE

The five primary existing land uses in Lowell include:

- **Residential.**
Residential land uses include all single-family, multi-family and manufactured homes.
- **Commercial.**
Commercial land uses include all general businesses and service facilities including retail and wholesale stores and shops.
- **Industrial.**
Industrial land uses include all general manufacturing, storage and industrial service facilities.
- **Public and Semi-public.**
Public and semi-public land is a broad category including schools, churches, cemeteries, parks, utilities, and all municipal, institutional and governmental facilities. A separate land use district is not provided for Semi-Public uses. They are permitted in any zone as either a permitted or conditional use.
- **Open Space**
Open Space includes agricultural areas, woodlands, wetlands and riparian corridors together with parks and natural features within the community. A separate land use district is not provided for Open Space uses. Open space is a permitted use in any zone.

SECTION 9.952 EXISTING LAND USE

(a) Primary Land Use Districts

The following are the primary Comprehensive Plan and Zoning Districts in Lowell:

Single-family Residential District	R-1 - 7,000 sq. ft. min lot size
Multiple-family Residential District	R-3 - 15 units per acre
General Commercial District	C-1
Downtown Commercial	C-2
Light Industrial District	I-1
Public Lands	PL

(b) 1980 Land Use

The 1978-1989 Lowell Comprehensive Plan contains information that has been compiled into the 1980 Land Use Summary contained in **Table 9.950 A**. This information is presented for comparison purposes with the 2005 Land Use Summary contained in **Table 9.950 B**.

**TABLE 9.950 A
1980 LAND USE SUMMARY**

		1980 CITY LAND USE DISTRICTS					
	Land Area	R-1	R-3	C-1	C-2	I-1	PL
TOTAL TAX LOTS	445.68	346.47	5.26	2.13	0.00	9.60	82.22
	100.00%	77.74%	1.18%	0.48%	0.00%	2.15%	18.45%
DEVELOPED LAND	116.88	70.07	1.26	0.93	0.00	0.00	44.62
% DISTRICT DEV	26.23%	59.95%	1.08%	0.80%	0.00%	0.00%	38.18%
		20.22%	23.95%	43.66%	0.00%	0.00%	54.27%
VACANT LAND	328.80	276.40	4.00	1.20	0.00	9.60	37.60
% DISTRICT VAC	73.77%	84.06%	1.22%	0.36%	0.00%	2.92%	11.44%
		79.78%	76.05%	56.34%	0.00%	100.00%	45.73%
STREETS	73.00						
	9.90%						
LAKE	219.00						
	29.69%						
TOTAL AREA	737.68						
	100.00%						
HOUSING		Homes	Percent				
Single-Family	198	74.16%					
Manufactured Homes	45	16.85%					
Multiple-Family	24	8.99%					
	267	100.00%					

Source 1978-1989 Lowell Comprehensive Plan

(c) 2005 Land Use

The existing pattern of development in Lowell is one of low density with large amounts of vacant and partially vacant land scattered throughout the community on oversized lots. Physical features such as steep slopes, drainageways, flood hazard, wetlands, riparian areas and geologic and soil limitations are constraints to development that limit the use of the property and may prohibit development. Approximately 75% of the vacant property in the City is subject to one or more of these natural development limitations. Some of these areas are classified as undevelopable although some could be developed if sound conservation and construction practices are followed.

An inventory of existing land uses was provided by LCOG in April 2005 from the Lowell GIS Database. The inventory findings are tabulated into a Land Use Summary for each of the Primary Land Use Districts together with a. The Land Use Summary is presented in **Table 9.950 B**

**TABLE 9.950 B
2005 LAND USE SUMMARY**

		2005 CITY LAND USE DISTRICTS					
	Land Area	R-1	R-3	C-1	C-2	I-1	PL
TOTAL TAX LOTS	444.77	376.55	14.56	6.12	3.72	7.42	36.40
	100.00%	84.66%	3.27%	1.38%	0.84%	1.67%	8.18%
DEVELOPED LAND	174.30	125.86	2.43	5.74	2.51	2.07	35.69
% DISTRICT DEV	39.19%	72.21%	1.39%	3.29%	1.44%	1.19%	20.48%
		33.42%	16.69%	93.79%	67.47%	27.90%	98.05%
VACANT LAND	270.47	250.69	12.13	0.38	1.21	5.35	0.71
% DISTRICT VAC	60.81%	92.69%	4.48%	0.14%	0.45%	1.98%	0.26%
		66.58%	83.31%	6.21%	32.53%	72.10%	1.95%
STREETS	73.00						
	9.91%						
LAKE	219.00						
	29.72%						
TOTAL AREA	736.77						
	100.00%						
HOUSING 2003		Homes	Percent				
Single-Family		215	53.88%				
Manufactured Homes		134	33.58%				
MH in Parks		6	1.50%				
Multiple-Family		44	11.03%				
		399	100.00%				

Source LCOG Lowell GIS

There are approximately 445 tax lot acres within the existing City Limits / Urban Growth Boundary. Of this total 174 acres are considered developed and 270 acres are vacant. The ratio of developed land to vacant land is approximately 40% Developed (174 acres) to 60% Vacant (270 acres). Much of the vacant land has some form of natural constraints that limit development.

The following information describes the existing conditions in each of the City's land use categories.

(d) Existing Residential Land Use

Residential Districts comprise 88 percent of the City's Tax Lots. Historically, low density single-family residential development has been the primary housing type.

There are 270 acres of vacant single-family residential land although only 66 acres are unconstrained for residential development. Buildable lands are available on vacant lands without building constraints. **Section 9.980 Growth Management** summarizes the various distributions of Developed, Vacant, Constrained and Buildable lands for each Primary Land Use District.

Within the City, 377 acres are presently designated for single-family dwellings in the R-1 Single-family Residential District and another 15 acres for multi-family dwellings in the R-3 Multiple-family Residential District. **Tables 9.950 A & B** provide a comparative land use and housing summary for 1980 and 2005/2003.

There are 126 acres of developed residential land within the city. In addition, there are approximately 8 dwelling units on 2 acres located in the Commercial C-1 District and 4 dwelling units on 1 acre located in the Commercial C-2 District.

Existing manufactured homes are located on individual lots and account for 20 percent of the total housing in Lowell. Currently, there is only one 6 unit manufactured home park developed and a second one approved but that is currently undeveloped and being considered for conversion to individual lots.

Existing multi-family residential uses currently account for 2 acres of developed land in Lowell. The only multi-family residential structure currently developed is one 16 unit apartment complex. This can have an impact on affordable housing alternatives for younger families and singles in the City.

(e) Existing Commercial Land Use

Lowell's commercial core is strongly impacted by the close proximity to retail and service centers in Eugene and Springfield. It is expected that outside influences will limit commercial development in Lowell until a larger population is achieved. Existing commercial uses comprise approximately 3 acres of the 10 acres zoned for commercial use and are primarily convenience and service businesses.

Lowell's commercial facilities are located on Main Street, Moss Street, and North Shore Drive, the City's primary Major Collector and commercial corridor. The commercial area is comprised of two identifiable areas:

District C-1 The General Commercial District is located on the Jasper-Lowell Road Corridor (Portions of Pioneer Street, North Shore Drive and Moss Street). It contains 6 acres. There are approximately 1.5 commercially developed acres and 0.38 vacant or partially vacant acres. However, 1.5 acres of the developed commercial area is single-family residential and 3 acres are devoted to other uses. Commercial activities in this area include a grocery store, gas station, and the Post Office. Also included are storage buildings and other limited commercial facilities in addition to the Lowell Grange.

District C-2. The traditional downtown core is centered on Main Street, between Pioneer and Moss Street. It contains almost 4 acres. There are 2.52 developed acres and 1.2 vacant or partially vacant acres. However, 0.96 acres of the developed commercial area is single-family residential and 1.56 acres is devoted to commercial uses. The downtown core is centrally located to the entire community with good access and orientation to the Major Collector Streets of Lowell. Commercial activities in this area include a grocery store, gas station, restaurant and an auto body shop.

Collecting a limited number of commercial uses into a compact center can improve the vitality of the area, attracting additional business as the community grows. Encouraging development in the Downtown Core Area with incentives can renew the commercial center of the community

(f) Existing Industrial Land Use

Base industries provide the economic foundation for most communities by providing local jobs and by bringing outside money into the community.

The City's industrial objective is to maintain an adequate supply of industrial sites at locations that are compatible with other land uses and to provide assurances that industrial development is consistent with maintaining environmental and livability assets of the community.

To address industrial objectives, the City has designated that the permitted uses be limited to light manufacturing and warehousing activities within buildings in the I-1 Industrial District. Exterior storage, heavy industrial manufacturing with emissions, and uses with potentially hazardous materials may be allowed by Conditional Use only.

District I-1 contains an industrial park with an existing industry in the northwest corner of the City with access from the Jasper-Lowell Corridor. The Industrial park has 6.89 acres, net public rights-of-way, of designated industrial land within the I-1 District. Of this, two parcels totaling 3.78 acres are developed and two parcels totaling 3.11 acres are available for development

(g) Existing Public & Semi-Public Land Use

Public and Semi-public facilities are essential to the community. These facilities are either owned by various governmental agencies or are operated by private institutions. Public uses include parks, schools, fire districts, Forest Service, State Parks and other governmental facilities. Semi-public uses include privately owned institutions that provide services to residents including, churches, cemeteries, camp grounds, fraternal organizations, utilities, and other agencies. Public uses are established as a separate land use district. Semi-public uses are permitted in all of Lowell's Land Use Districts as a Permitted Use or as a Conditional Use depending upon the zone or use.

District PL, the Public Lands District or Zone contains approximately 36.4 acres of Zoned Public Lands comprising 8.2% of the City's land area.

(h) Existing Open Space

The most significant scenic resources in the Lowell area are Dexter Reservoir, the hillside woodlands, the drainageway riparian areas, and the open farmlands. The Natural Environmental Element, **Section 9.920** contains a detailed description of the natural environment within the City.

There are no commercial forests within the City of Lowell. There are, however, extensive hillside woodlands and riparian vegetation along the small drainageways within the City.

The agricultural lands are also a valuable scenic resource. Ensuring the orderly planned conversion of agricultural lands within the City and prevention of haphazard development will help preserve these values until urban conversion actually occurs.

Parks in Lowell are important in addressing the recreational needs of the community and in providing an attractive environment for visitors. Parks not only enhance the community's appeal but can also contribute to a community's economic potential by helping to attract visitors and businesses. Parks are discussed in detail in **Section 9.970**, Public Facilities & Services.

SECTION 9.953 LAND USE TRENDS

As noted in **Section 9.930**, Population & Economy, population growth in Lowell has been modest at 1.2% to 2% per year since 1960 and has resulted in a population increase of only 219 people and 79 housing units from 1980 to 2000. Therefore statistical trending for Lowell provides little predictive value for the future.

Recent improvements made to the municipal water and sewer system now permits urban developments that were previously constrained by capacity limitations. Regional trends show a substantial increase in residential construction in small communities, particularly those within easy commuting distance from Eugene and Springfield which have the public infrastructure to support such growth.

Although statistical trending has limited value, there are developing trends that could have a significant impact on community development.

(a) Residential Land Use Trends

With the improvements to the municipal water sanitary sewer systems higher densities can be supported. The R-1 Residential District permits a minimum lot size of 7,000 sq. ft. and a Planned Development Overlay-District may allow even higher densities on larger undeveloped parcels with an approved development plan. Unfortunately, there are few of these larger undeveloped parcels that can be developed more economically in this manner. It is expected that a mixed residential density will continue with increasingly higher residential densities occurring during the planning period, but that many of the existing one-half to five acre residential parcels are unlikely to be further partitioned as a result of property owner choice, having been purchased within the City for lack of similar sized rural parcel availability.

Multi-family development has been lagging but is expected to increase due to the increasing cost of housing, particularly for young families and the elderly.

Manufactured Homes are also expected to continue to be a popular means to provide lower cost housing although, due to changes in interest rates and financing, site-built homes are expected to be the predominant housing source throughout this planning period..

(b) Commercial Land Use Trends

The City has 10 acres of commercially zoned land at this time. Only 1acre is utilized for commercial use and the remainder of the 10 commercial acres is utilized for other uses. The commercial facilities are located within the two adjoining commercial Districts.

District C-1. The corridor commercial area contains only 0.38 acres of vacant land. Much of this area's 6.12 acres is devoted to other uses. The corridor commercial area should provide space for heavier commercial uses requiring on-site truck and auto access like lumber yards, equipment sales and light fabrication shops.

District C-2. The City's downtown core area has continued to decline due primarily to the realignment of through traffic off Main Street many years ago. The location and redevelopment of the downtown core area will become increasingly important as a pedestrian friendly center for those persons who do not drive automobiles by providing a walking environment for students, the elderly and those living in adjacent multi-family facilities. Convenient parking areas will be needed for residents and visitors that do not interfere with an integrated shopping environment

The City's commercial development has been diluted due to a limited population, fewer jobs that don't require travel to the Eugene/Springfield urban area, and the proximity of that urban area. The limited development that has occurred has been haphazard and allowed without any specific commercial area planning. Emphasis and increased planning for the Downtown Core Area will greatly improve the appearance and commercial vitality of the City over the long run.

(c) Industrial Land Use Trends

The City's Industrial properties are well located and suited for industrial development. Their location minimizes impacts on residential areas and they are adjacent to Jasper-Lowell Road (Moss Street) with direct access to other major transportation routes, including Highway 58.

District I-1. The industrial Park contains 6.89 acres with only 3.78 acres presently developed. The remaining 3.11 acres are available for development with fully serviced utilities and improved streets.

The City has designated permitted industrial uses to be light manufacturing and warehousing activities within enclosed buildings in the I-1 Industrial District. Exterior storage, heavy industrial manufacturing and uses with permitted emissions may also be allowed by Conditional Use.

(d) Public & Semi-Public Land Use Trends

Because of the wide differences in public and semi-public uses it is virtually impossible to define a land use district applicable to all. Therefore the Public Lands District applies to governmental or institutionally owned lands. All other public and semi-public uses may be located in any zoning district under specified conditions as a Permitted or Conditional Use.

One of the City's largest public lands owners, the U.S. Forest Service, has indicated that they will divest themselves of much, if not all of their land within the next 10 years. This land will have to be considered for reutilization. The office complex on Pioneer Street is very close to the downtown commercial district and could be easily converted to commercial use as a business park. The undeveloped property adjoining Moss Street could be developed for multi-family use. The developed property adjoining Moss and 6th Streets should be considered for light industrial reuse with no more impacts than the present use has on neighboring residential properties. If such a use can not be found, redevelopment for residential uses or semi-public uses would be the City's preference.

(e) Open Space Trends

With a population of only 900 people and a land area of over 445 acres, the need for preservation of open space has not yet become a critical issue in Lowell. However, increasing impacts to the community's watercourses and vegetation suggest that protecting these resources should not be delayed.

The policies and recommendations related to this section and those contained in **Section 9.920**, Environment, are directed toward achieving this goal and thereby ensuring the preservation of open space, the protection of scenic and natural resources, and the promotion of a healthy and visually attractive environment in Lowell.

SECTION 9.954 PROJECTED LAND USE NEEDS

The City has a year 2000, population of 880 and a County coordinated estimated population of 1,500 for the year 2025 and a estimate population of 1,700 for the year 2030. The population projections may be too low now that municipal sanitary sewer system and water system improvements have been implemented. Population projections are discussed in detail in **Section 9.930**.

Future land use needs are based upon the following general criteria guided by the desires of the community expressed through citizen participation during the public review and hearing process:

1. The existing land use pattern and growth trends of the area.
2. The land ownership patterns, particularly public and semi-public, industrial and vacant land ownerships.
3. The natural environmental constraints, including topography, geology, soils, water resources, vegetation, wildlife, and air resources.

4. The accessibility to existing and proposed transportation systems.
5. The availability of existing and proposed community facilities, utilities, and services.
6. The location and suitability for each land use with respect to available natural amenities.
7. Previous planning and zoning commitments to each land use.
8. Lowell's role relative to the Eugene/Springfield Metropolitan Area.
9. The need to maintain an adequate supply of land for each land use.

The above criteria were utilized to determine the needs for the six land use districts applicable to the Lowell Area. Incremental and systematic expansion from the core area outward along existing service corridors is the preferred growth pattern and offers the greatest efficiency and economy for development.

(a) Residential Land Use Needs

Low density residential developments can be expected to predominate in Lowell. Lower density is necessitated by the constraints of the steeper hillsides, by drainageway protections, by the maintenance of the natural resource characteristics of the area and by earlier residential development patterns that created large residential parcels.

It is also recognized that not all designated land will be available for development through personal choice. Additional land beyond the calculated net residential land need has been included in the buildable land needs to provide land for roads and utilities and to provide locational choices to help maintain lower land costs

Large subdivision parcels are lacking in the City. The City needs to preserve the remaining larger acreage parcels for subdivision development that can more economically provide services while maintaining the natural features of an area in support of community livability. Planned Residential Developments are encouraged for larger housing developments within the City to provide adequate review and consideration of proposed developments.

There are also many smaller vacant and partially vacant parcels located throughout the City that are capable of further development. These areas will generally develop more slowly by small contractors as owners decide to sell portions of their larger lots. This is a slower in-fill process that will address only a portion of the City's residential need.

Manufactured Homes will continue to be an important low-cost alternative to site-built construction. Recent trends indicate that they will occur on individual lot rather than in Manufactured Home Parks.

State and County trends indicate that multi-family housing should increase although the percentage share of the residential market will remain low. Most of the multiple-family growth should to be encouraged to locate close to city services and retail areas to lessen transportation

needs and to support the Downtown Core Area. The location of multi-family uses has traditionally been adjacent to commercial areas as a supporting use that forms a transitional buffer between the commercial and single-family residential areas. In a community of Lowell's size and physical characteristics, it is reasonable to encourage this practice.

(b) Commercial Land Use Needs

Comparative land use statistics for 33 Oregon cities show an average of 4.2% allocated for commercial use for cities with 2,500 to 10,000 population. Lowell's 2.2% is lower than this average and much of the commercially designated land is used for other purposes.

Commercial activities that provide goods and services to area residents are essential to a viable community. The location and distribution of commercial facilities is also crucial to the organizational structure of a community and can substantially influence the quality of life in a city.

District C-1. Additional corridor commercial uses that rely on the Jasper-Lowell Corridor such as heavier commercial uses requiring on-site truck and auto access that are not appropriate for the Downtown Core Area should be encouraged in this area.

District C-2. The redeveloped Downtown Core Area should be the central commercial focus of the community with the majority of the retail, office and service businesses locating there. A strong downtown area can serve as a focal point for the community, encourage business activity, increase service efficiency, and stimulate residential development in the adjacent areas. Adequate off-street and public parking should be provided and a pedestrian-oriented atmosphere should be encouraged.

Commercial centers can provide the structure for quality community development. Fragmented dispersed development does not contribute to a sense of community. Designating more commercial land than is needed along an arterial road will encourage fragmented random strip development at the expense of the community and should be avoided.

If the needed amount of commercial land is located wisely in commercial centers new commercial businesses will be attracted to the community and will have a higher potential for success because they are supported by the activities generated by adjacent businesses, and are more efficient and convenient for area residents. The City's land use plan and transportation systems are thereby supported and the quality of life in the community is enhanced.

(c) Industrial Land Use Needs

There are cost advantages for industries to locate in small communities and Lowell's services and proximity to Highway 58, Eugene/Springfield and Interstate 5 could increase interest in the community by potential industries.

District I-1. The Industrial Park has ample space and buildings for additional development. If needed in the future this District could be expanded in this area.

(d) Public and Semi-Public Land Use Needs

The public and semi-public needs appear to be accommodated adequately and can expand as needed. Since semi-public uses may be located in any zoning district they have the maximum flexibility to locate where they are needed.

Existing governmental facilities located in the Public Lands District appear adequate to their needs. It is unlikely that there will be a need for expansion of the Public Lands District, in fact, just the opposite is anticipated, with the curtailment of operations on significant amounts of federal land owned by the Forest Services and Army Corps of Engineers. Re-zoning can occur if needed in the future to address future use of excess federal property.

(e) Open Space Needs

The City has a strong interest in preserving the considerable open space and scenic resources of the community and the surrounding area.

Open space may vary from active uses such as agricultural or recreational areas to more passive areas preserved for conservation or scenic values, including unique natural features such as wooded hillsides, or other places of scenic or special interest.

Open land may have obvious economic value, as is the case with agricultural and forest lands, but it also has other values that are not always readily apparent. Native vegetation on steep slopes, for example, protects soils from erosion and thereby preserves clean water resources. Open areas also provide a variety of habitat for wildlife. These and other natural resource values are discussed in more detail in **Section 9.920**, Environment.

In addition to economic and conservation values, in recent years there has been a growing awareness of the value of open lands as an esthetic resource which is also important to the general quality of life and livability of an area. Thus open land in general, has a number of significant values and certain types of open land have special significance as needed open space for the community.

Open space can be any size. It can range from broad expanses of agricultural and woodland areas to mini-parks and landscaped areas. Various landscaping measures can be undertaken in new developments which can enhance their appearance while increasing the amount of open space in the community as a whole. These measures range from preserving existing trees and other vegetation to provisions for "cluster developments".

Scenic and open space values should be protected and enhanced both within City and within the surrounding area. Linear greenways should be maintained throughout the community and extended into the surrounding area. Drainage channels should be preserved as linear greenway that can accommodate recreation trails.

SECTION 9.955 BUILDABLE LAND NEEDS

Buildable land needs are addressed in detail in the **Section 9.980**, Growth Management. However, it is evident from the needs analysis summarized in **Table 9.500 B** that additional residential, commercial and industrial land may be needed to support the City's growth and development.

SECTIONS 9.956-9.957 RESERVED FOR EXPANSION**SECTION 9.958 REFERENCED ASSOCIATED DOCUMENTS**

1. **Lowell Comprehensive Plan**, Land Council of Governments; 1978, 1980, 1981, 1982 LCDC Acknowledged and 1989 Amended.
2. **Lowell Urban Growth Boundary Land Analysis Draft**, Lane Council of Governments, 2001.
3. **Lowell Economic Development Strategic Plan**, Lane Council of Governments, 2003.
4. **GIS Tax Lot Data**, Lane Council of Governments, 2005.
5. **Region 2050**, Lane Council of Governments, 2001-2005.

SECTION 9.959 LAND USE GOALS & POLICIES

(a) **Statewide Planning Goals:** The primary **Statewide Planning Goals** (Goals) related to this Section of the Plan are **Goal 2**, Land Use Planning; **Goal 3**, Agricultural Lands; **Goal 4**, Forest Lands; **Goal 5**, Open Space, Scenic and Historic Areas and Natural Resources; and **Goal 8**, Recreational Needs.

Goal 2 reads in part: "to establish a land use planning process and policy framework as a basis for all decisions and actions related to the use of land and to assure an adequate factual base for such decisions and actions".

Goal 3 reads: "to preserve and maintain agricultural lands".

Goal 4 reads in part: "To conserve forest lands by maintaining the forest land base" Goal 4 is not technically applicable to the City of Lowell. Land Use Areas containing trees are included under Goal 5, natural resources and open spaces.

Goal 5 reads: "To protect natural resources and conserve scenic and historic areas and open spaces."

Goal 8 reads: "To satisfy the recreational needs of the citizens of the state and visitors" and where appropriate, "to provide for the siting of necessary recreational facilities including destination resorts."

(b) Lowell Land Use Goals

- GOAL 1.** To maintain a land use policy plan that sets forth the suitable kinds, amounts, and intensities of use to which land in various parts of the City should be put.
- GOAL 2.** To preserve open space in the urban environment that will enhance the livability of Lowell.
- GOAL 3.** To provide recreational facilities that address the needs of the community and visitors.
- GOAL 4.** To provide an inviting Downtown Core Area enhanced with mixed uses, sidewalks, bike lanes, landscaping, distinctive lighting and underground utilities.
- GOAL 5.** To promote residential growth in order to create a more self-sustaining community.

(c) Policies

General Land Use

1. Sufficient area shall be maintained for the balanced expansion of all major land uses.
2. Protective development standards shall be applied to areas of identified environmental significance.
3. The City shall encourage the removal and rehabilitation of unused or abandoned/dilapidated buildings.

Residential Land Use

4. A reserve of residential land shall be maintained to accommodate the housing needs of the City.
5. The City shall encourage the use of Planned Developments in order to consider the application of new development.
6. Residential districts shall be protected from heavy through traffic, conflicting land uses, or other encroachments that would impair a safe, quiet living environment.
7. The City shall encourage in-fill development on over-sized lots.
8. The City shall consider mixed use development within the downtown core area.
9. The cumulative effects of development on slopes of 15 percent or greater shall be considered during each review of the Comprehensive Plan to determine whether more restrictive development policies should be adopted.

Commercial Land Use

10. The City shall complete a Downtown Development Plan to encourage commercial and public uses to locate within the downtown core area.
11. The City shall encourage commercial facilities that will serve the needs of the community as well as those of the visiting tourists and recreational participants
12. The City shall ensure that future commercial development will not have a significant adverse affect on surrounding land uses.
13. Vehicular and pedestrian efficiency and safety shall be required criteria for all commercial developments.
14. The City shall encourage redevelopment of existing commercial properties that are underutilized or those that have fallen into disuse.

Industrial Land Use

15. Future Industrial developments shall not cause significant adverse affects that would seriously harm the residential appeal of the community or overburden its facilities.
16. Industrially zoned sites shall not be divided until a specific development plan is approved.
17. Industrial districts shall be protected from encroachment by incompatible land uses.
18. Review criteria for industrial proposals shall include adequacy of site size for the proposed use, utilization of the natural features of the site and the City's capacity to accommodate the transportation needs and the demand for public services.
19. Utilization of natural features and landscaping as screening and buffers to reduce the impacts of industrial developments on the community shall be encouraged.

Open Space

20. Publicly owned lands shall be encouraged to allow public access for recreational and scenic purposes.
21. The City shall prepare a Park and Open Space Master Plan that incorporates recreation areas, drainage greenways, trails and scenic resources.
22. Natural areas that are generally unsuited for development shall be preserved as protecting buffers to help reduce noise and visual conflicts and for protection of soils, watersheds, wildlife habitats and scenic areas.
23. Streams and drainageways within the community shall be preserved as linear greenways.
24. The City shall require inclusion of landscaping as an integral part of site and street developments.

25. Existing trees shall be preserved where feasible relative to development requirements of the property.

SECTION 9.960 PUBLIC FACILITIES & SERVICES

The purpose of the public facilities and services element of the Plan is to provide guidelines for the orderly and efficient provision of facilities and services needed to support urban development.

SECTION 9.961 CITY GOVERNMENT

Lowell has a Council/Manager form of government. The City Council consists of five elected Councilors. A Mayor is selected by the Council, from its membership, and serves a two year term. The Mayor chairs all meetings and has an equal vote on all matters before the Council. The Council appoints the City Administrator, who serves as the Chief Administrative Officer for the City, and the Municipal Judge. The City has an appointed five member Planning Commission that doubles as a Citizens Advisory Committee as described in Section 9.915, and a standing Budget Committee consisting of five appointed members and all City Council members. The Mayor appoints all committee/commission members with the consent of the full Council. The City Administrator appoints all department heads and approves the hiring of all other City staff. The City contracts for a City Attorney, City Engineer and City Planner who work at the direction of the City Administrator.

The City issues all Building Permits, and through a contract with The Building Department, LLC, administers the building inspections and enforcement program to insure compliance with state building code standards and requirements.

The Lowell City Hall complex is located on Third Street in the center Lowell's developed area adjacent to the Fire District Headquarters Station. The City Hall houses all building general functions and activities of city government. The existing City Hall building currently meets the needs of the City.

Government programs and services that are not provided directly by the City are available through Lane County and State of Oregon programs. Because of Lowell's close proximity to Eugene and Springfield other programs and services are readily available and accessible.

SECTION 9.962 CITY PROVIDED FACILITIES & SERVICES

It is the intent of the City of Lowell to provide urban level services throughout the City and to extend services as annexation occurs during the Planning Period. The City of Lowell has initiated the following programs in compliance with that intent:

1. Street Lighting.
2. Street Improvements.
3. Park Acquisition and Development.
4. Sanitary Sewer System Planning & Management.
5. Water System Planning & Management.
6. Storm Drainage System Planning and Management.

7. Law Enforcement and Public Safety.

(a) Needed Plans & Programs.

The following plans have been or need to be completed to provide for long range planning for public facilities and services. All these plans are to be attached to this Comprehensive Plan as reference documents.

1. Water System Master Plan
2. Sewer System Master Plan
3. Park & Open Space Master Plan
4. Storm Drainage Master Plan.
5. Downtown Development Plan.
6. Roads Master Plan to be replaced by a Transportation System Plan.
7. Wetland & Riparian Area Inventory & Plan.
8. Consolidated Capital Improvement Plan.
9. Disaster Preparedness Plan

(b) Water System

In the Mid 1950s, when Dexter Reservoir was built, the City of Lowell was partially relocated. At that time the Corps of Engineers built the City a new surface water treatment facility. It also provided the City with 1 cubic feet per second or approximately 450 gallons per minute in water rights to the Middle Fork of the Willamette River. Just a few years after the water treatment plant went into operation, the City transitioned to well water because of the relatively high cost to treat surface water. The City retained its water rights to the Willamette River. In the 1980s the City started experiencing capacity problems with its well which had only 80 gallons per minute in capacity. Also, the Federal Clean Water Act set more stringent standards for contaminants allowable in drinking water and it was found that Lowell's well water exceeded the new standards for arsenic. Because of these two problems, a study was conducted and a new Water Master Plan completed in 1998 which recommended that the City return to treating surface water. Throughout the 1990s, the City was forced to place a moratorium on new development because of water capacity problems. It was decided to rebuild the original surface water treatment plant that had been taken out of service 40 years earlier and in 2002, the rebuilt water treatment plant went into operation and the development moratorium was lifted.

Following is an overview of the Lowell Water System. For more detailed information refer to the Lowell Water System Master Plan.

The Lowell Water System consists of the following components:

- Water supply
- Water Treatment
- Transmission & Distribution
- Storage
- System Controls

(1) Water supply

Water is presently obtained from Dexter Lake through a 1 cfs (448.86 gpm) Water Right. The intake line is laid on the bottom of the reservoir just east and parallel to the Jasper-Lowell Road causeway across the reservoir connecting with Highway 58. The water is collected at a point just east of the covered bridge at the bottom of the reservoir in the original river bed.

(2) Water Treatment

The Treatment Plant currently is sized to produce 175 gallons per minute of treated water. It consists of a sedimentation and filtration system and temporary storage capability to provide contact time for chlorine disinfectant.

(3) Transmission & Distribution

The City has over 22,000 feet of water pipe lines. Continued expansion and improvements to the water distribution lines will ensure circulation and satisfactory fire flow capability. The distribution system was originally sized to provide adequate fire protection, however little of the system is looped which would enhance the water flows needed for fire fighting and the lack of looping creates the need to routinely blow off the water lines to maintain chlorine residuals at acceptable levels. Much of the original distribution system is approaching 50 years old and is in need of replacement.

(4) Storage

An existing 500,000 gallon storage reservoir should serve the existing and future needs in the Low Elevation Service Area (**LESA**) of Lowell. The reservoir high water level is at 953 feet and provides adequate service from elevation 880 feet to the lake level.

Water storage for the High Elevation Service Area (**HESA**) is presently unavailable except for a small area served by a small (2,500 gallon) upper level reservoir that was required of a development right at the 880 foot level. Additional storage will be needed for future growth and fire protection in the higher elevations. The Master Plan recommends a 300,000 gallon HESA reservoir located in the northeast corner of the City with a water surface level of 1166 feet would serve properties located between 880 and 1080 feet providing service to virtually the entire buildable area of the city. This additional reservoir would also serve as backup capability for the lower elevation reservoir in the event it must be taken out of service for maintenance.

(5) System Controls

Chemical conditioning, mixing and disinfecting processes are performed at the treatment plant. The electrical control system regulates pumping of water to the reservoir based on water levels in the reservoir. A SCADA system continually monitors the operations of the treatment plant and notifies operators of system malfunctions.

(6) Water Consumption

At the time the Master Plan was completed in 1998 water consumption was 27,440,000 gallons. The gallons per capita use per day was 78 gallons. This is considered below average. Average use is usually 125-150 gallons per day. In 2004, the metered and billed consumption was 21,896,990 which equated to approximately 75 gallons per day per person. During the same year, the water plant treated 28,924,946 gallons. The difference between the produced and billed quantities is attributed to unmetered uses such fire fighting, maintenance, including filter backwash and water line blow-off, and repair of the system and leaks.

(7) Future Water Demand

Population/Demand Projections.

The following population projections are based on the Master Plan growth projections of 3% per year and County coordinated projections of 2.2% and are adjusted to reflect actual 2005 data.

TABLE 9.960 A

2.2% Growth

Year	Population	EDUs	Ave Daily Demand(gpm)	Max Daily Demand (gpm)
2005	900	375	68	205
2010	1003	416	75	227
2020	1248	514	93	281
2030	1551	635	115	347

TABLE 9.960 B

3.0% Growth

Year	Population	EDUs	Ave Daily Demand(gpm)	Max Daily Demand (gpm)
2010	1043	432	78	236
2020	1402	576	104	315
2030	1883	768	139	420

Water Source

The maximum monthly demand (MMD) is estimated at 630,000 gallons per day (gpd) which is the limit of the City’s water rights.

Water Intake Line

The existing Water Intake Line is sized to provide for 830 gallons per minute, nearly double the City’s water rights

Water Treatment Plant

The treatment Plant should have a capacity of 317,000 gpd to meet the 20-year MMD. It’s current capacity is 252,000 gpd based on 24 hour operation. Allowing for 4 hours of down time for maintenance daily, a more realistic current capacity is 210,000 gpd.. Capacity is limited by clear well size for chlorine contact time.

Storage

Current storage capacity is 500,000 gallons. Current minimum storage capacity is estimates at 531,000 gallons and optimum storage at 718,800 gallons. Following are the estimated future storage capacity needs:

TABLE 9.960 C

Water Storage Requirements

Year	Minimum	Optimum	Fire Reserve
2010	578,000 gallons	949,000 gallons	380,000 gallons
2020	618,000 gallons	1,151,000 gallons	380,000 gallons
2050	750,000 gallons	1,860,000 gallons	380,000 gallons

Water Transmission Lines

Water Transmission Lines are sized on the basis of peak consumption, fire flow requirements and minimum pressure for a 50 year design period.

(8) Current and Future Limitations.

The current water system has capacity through 2030 for average daily flows, but does not meet the needs for peak flow, primarily in the summer months. Currently, there are short periods of time when water can not be made as fast as it is being used. The above information also shows that minimum storage needs are not being met. A combination of additional storage and clear well capacity is needed to meet minimum storage capacity and production capacity that can accommodate peak flow periods.

Refer to the 1998 Water System Master Plan for more details.

(c) Sanitary Sewer System

The first phase of major improvements recommended by the 2001 Sewer Master Plan were completed in 2003. The Plan recommends Phase 2 improvements to be completed in 2008, at the point the population reaches 1,463. The population figures used in the Plan are significantly higher than actual experience as a result of the 2000 census, which had Lowell at 880 population instead of the 1,150 starting point used in the Plan. In 2005, the City had a Portland State population estimate of 900 and was serving 395 EDUs. This 429 fewer in population and 73 fewer in EDUs than projected in the 2001 Master Plan. Assuming the 3.2% growth projected in the Master Plan beyond 2005 is realized, the City is eight years behind the projections contained in the Plan and Phase II improvements will not be required until approximately 2015.

The City of Lowell existing wastewater facilities include:

- Piped Collection System.
Primarily a gravity system.
- An Alder Street Pump Station.
- Wastewater Treatment Plant.
A trickling filter system providing secondary treatment & disinfection.
- A Submerged 16-inch Discharge to Dexter Reservoir near the dam.

(1) Collection System

Portions of the Collection System are aging and need improvements to correct infiltration/Inflow (I/I) problems. The primary collection trunk line on Moss Street was recently upgraded to a 15-inch collector main and the Pump Station pumps were replaced with two 350 gpm pumps.

(2) Treatment Plant

Improvements recommended as Phase 1 in the Master Plan have been completed and have increased capacity to a population of approximately 1450. These improvements included replacement of the Headworks, improvements to the screening and secondary treatment, the disinfection equipment, the solids drying beds and solids disposal capabilities. Phase 2 improvements will further increase capacity to a population of 2290. These improvements include construction of additional primary treatment and solids stabilization capacity. I/I continues to be a problem and additional I/I will decrease this capacity.

(3) Projected Needs

As a result of the out-of-date population projections contained in the Sewer Master Plan, until an update is completed, the City should use the population projections at 2.2% and 3.0% contained in Section 9.613 for the Water System for projecting Sewer System capacity needs.

(4) National Pollutant Discharge Elimination System (NPDES) Permit

The City's current NPDES permit provides for a population capacity of 1,115 and needs to be increased at the next renewal. The recent sewer treatment plant improvements were designed and constructed to meet regulatory requirements for increased discharges.

Refer to the 2001 Wastewater Facility Plan for more details.

(d) Stormwater Drainage

The City has no Stormwater Drainage Master Plan or designed stormwater drainage system. Because of the City's location primarily on hillside areas, primary storm drainage is provided by natural drainageways channeling stormwater from those hillside areas into Dexter Reservoir. In the more developed portions of the City, stormwater drainage is provided through a combination of open ditches and stormwater sewers which channel stormwater into the existing natural drainageways. New requirements limiting Total Maximum Daily Load for various contaminants being discharged into the Willamette River will require the City to complete a Stormwater Drainage Management Plan in the near future.

SECTION 9.963 PARKS & RECREATION

The scenic and recreational resources of Lane County are of exceptional quality. Its spectacular beauty includes the wilderness of the high Cascades, lakes, reservoirs, rivers and streams.

Lowell is situated in an area that features a wide variety of recreational opportunities. Within a six-mile radius of Lowell can be found a variety of regional parks, which include:

(a) Rural Riverfront Parks

- Jasper State Recreation Site. Sixty-two acres south of the river across from Jasper, with picnic facilities, a playground, group recreational facilities, and a proposed expansion of 71 acres on the eastern side.
- Fall Creek Park. Five acres midway between Jasper and Unity, with picnic facilities (Lane County Park).
- Clearwater Park. Ninety acres on north side of river across from Mt. Pisgah and presently undeveloped (Lane County Park).
- Elijah Bristow State Park. Eight hundred forty seven acres located along the Middle Fork of the Willamette River from Dexter State Recreation Site westward two miles, with natural areas, picnicking, hiking and equestrian trails.
- Pengra Access. A State Park located across the river from Elijah Bristol which has a boat ramp and boater parking area.
- Additional Boat Launches. The Army Corps of Engineers maintained two boat launch areas adjacent to Dexter State Recreation Site below Dexter Dam, one on each side of the river.

(b) Reservoir Parks

- Dexter State Recreation Site. Presently 93 acres on Dexter Reservoir has parking, picnicking, boat launching facilities and an 18 hole Disc Golf Course.
- Lowell State Recreation Site. Presently 46 acres on Dexter Reservoir between the City of Lowell and Dexter Dam, with boating, swimming, concessions and picnicking facilities
- Orchard Park . One hundred acres between Lowell and Lookout Point Dam on Dexter Reservoir. (U.S. Army Corps of Engineers Park).
- South Beach Park. Four acres located between Route 58 and Dexter Reservoir, used for picnicking (U.S. Army Corps of Engineers Park).
- Meridian Park. Located on the north side of Lookout Point Reservoir just east of the dam. Facilities include restroom, picnic area and high water boat launch. (U.S. Army Corp of Engineers Park.
- Signal Point Boat Launch. Located on north side of Lookout Point Reservoir approximately 6 miles east of the dam. Contains a year round boat launch, parking and restroom facilities. (U.S. Army Corp of Engineer Facility)
- Ivan Oakes Park. Located on Lookout Point Reservoir (U.S. Army Corps of Engineers Park)
- Winberry Park and Boat Ramp, North Shore Park, Sky Camp, Vascara Campground, Fisherman's PONT Group Camp, Free Meadow, Lakeside 1 and Lakeside two, all located on Fall Creek Reservoir and operated by State Parks, which provide a variety of recreational activities.

(c) Lowell City Parks

- Paul Fisher Park. Located at the intersection of Moss and 3rd Street next to City Hall, this approximately 2.0 acre park contains picnic and playground facilities
- Rolling Rock Park. Located on the south side of North Shore Drive between Moss Street and Pioneer Street, this approximately 1.5 acre park is developed as a heritage park with displays of historic logging and railroad equipment. It contains picnic and restroom facilities and it the site of the annual Blackberry Jam Festival.
- Future Planned Park Area. The City currently owns approximately 8 acres of wooded land on the east side of town which used to be the Union Pacific Railroad right-of-way. This land is currently undeveloped but but approximately 2 acres is anticipated to be developed as a natural park with hiking and picnic facilities at some future date.

Recreational opportunities within the community should be expanded through the continued improvement of city, neighborhood and local area parks, together with the school grounds. The integration of city parks with the regional parks will serve the local needs of students and residents while providing attractive recreational opportunities for tourist and visitors

It is important that the City develop a Parks & Recreation Master Plan in the near future. This plan is needed to identify improvements for existing parks, to plan for future parks and recreational facilities and to plan for the development of linear greenways and trails within the community. The Master Plan should also include a Capital Improvement Program to identify costs and priorities for park acquisition and improvements.

SECTION 9.964**FACILITIES AND SERVICES PROVIDED BY OTHERS**

(a) Solid Waste

Lane County has a Solid Waste Management Plan to provide systematic control of storage, collection, transport, separation, processing, recycling, recovery and disposal of solid waste on a countywide basis. Solid waste management, through the countywide solid waste plan, should provide a basis for meeting future solid waste needs of Lowell

Lowell is served by two private refuse haulers. The residents of Lowell also have access to the County’s Rattlesnake Creek Road Transfer Site located southwest of Lowell. Waste from this latter transfer site is hauled by' Lane County to Short Mountain Landfill, Hazardous wastes which are not recycled are sent to the Arlington Landfill, the authorized hazardous waste disposal site in Oregon. Information as to what constitutes a hazardous waste may be requested from DEQ’s regional representative in Eugene or from the Lane County Solid Waste Division.

(b) Lowell School District 71

The Lowell School District encompasses the City of Lowell and the Fall Creek, Unity and Lookout Point Areas. School facilities include one grade school and one combination high school/middle school. Enrollment in 2005 was 300 students.

School district enrollment has been steadily declining over the last 30 year. It has declined from a total of 472 in 1975 to 300 in 2005. This decline is a result of several circumstances. The City of Lowell, which accounts for less than 50% of enrollment has not had the infrastructure to support growth through much of the 1980s and 1990s. State land use laws have made rural residential development more costly than typical families with school age children can afford. Societal changes towards smaller families with fewer children have also led to a decline in school age children. In order to increase enrollment in the Lowell School District, the provision of housing that will attract families with children is a primary City goal.

In projecting enrollment, it must be assumed that there will be no significant increase in school age enrollment from the unincorporated areas outside the City with changes to State land use regulations. Assuming a 3% growth rate within Lowell and that 50% of the current enrollment are City of Lowell residents, resulting in a net school enrollment growth of 1.5%, the following enrollment growth can be anticipated. If the City is successful in attracting families with school age children, net enrollment might increase as much as 2.5%

**Table 9.960 D
Enrollment Projections**

<u>% Growth</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>
1.5%	323	350	377	407	438
2.5%	339	384	432	486	526

**Table 9.960 E
Lowell School District Capacity**

Grade School	425
High School	250
TOTAL	675

Source: Lowell School District

The current overall capacity of the Lowell School District appears adequate to accommodate projected school enrollment.

(c) Fire Protection

Fire Protection is provided through the Lowell Rural Fire Protection District. The District operates from two stations, the headquarters station is located within the City of Lowell with a sub-station located in the community of Fall Creek. The District covers an area of 23 square miles surrounding and including the City of Lowell.

Primary services provided by the District include structural fire suppression, wild land fire suppression, emergency medical first response, Fire & EMS public education and prevention and specialized rescue services. Currently the District is staffed with a Full-time Fire Chief and 22 Volunteer Fire Fighters.

The District's response equipment includes three 1,000-gallon engines, one 1,200-gallon tender, two wild land mini pumper's and one Rescue unit.

The fire district provides excellent service to Lowell. Current levels of protection are enhanced not only by advanced training activities, but by excellent working relationships with other neighboring districts. The District maintains mutual aid agreements with all fire agencies in Lane County and with Oregon State Forestry, Easter Lane District. Through these agreements, the Lowell Rural Fire Protection District automatically enlists the assistance of surrounding districts when emergencies are reported to be large. This quick response significantly reduces the response time of needed personnel and equipment that reduces property damage and loss of life.

(d) Post Office

Lowell has a Post Office facility constructed in 1988 which serves the City of Lowell and adjacent rural areas as Zip Code 97452. It also serves the Fall Creek/Jasper areas as Zip Code 97438. The Post Office contains 472 post office boxes (there are an additional 240 Post Office boxes located in Jasper and Fall Creek) and employs approximate 2 people. It contracts service to two contract routes for mail delivery to 535 addresses.

(e) Health and Social Services

The City of Lowell has limited health facilities. The City has no doctors or medical facilities. There is one dentist with offices in the City. The nearest routine medical facility is the Lakeshore Clinic in Dexter, approximately 4 miles away. Primary, specialized and emergency medical treatment is available in the Eugene and Springfield urban area, 15 to 30 miles west of Lowell. Fire department personnel are available for emergency aid.

Health and social service programs originating in a small community are rare, consequently they must be sought out from larger jurisdictions. Local organizations provide some assistance and social services to local residents but the majority of these services are obtained in nearby Eugene or Springfield and from Lane County or the State of Oregon.

(f) Law Enforcement Services

The City of Lowell does not have its own police department. Law Enforcement services within Lowell are provided primarily by the Lane County Sheriff's Office. Because the Sheriff's Office does not have sufficient personnel to provide the level of service needed, the City contracts with the City of Oakridge for additional patrol capability.

Because of the City's small tax base and low permanent tax rate, it is not likely that the City will be able to provide full time law enforcement capability in the next 30 years without increasing its tax rate significantly. An alternative to a City Police Department might be a regional law enforcement district that could be established to provide full time law enforcement to a wider regional area.

(g) Energy & Communication Systems

Primary energy and communications services are provided by the following companies:

- Lane Electric Cooperative
- Qwest Telephone Company
- Charter Communications (Cable)

(1) Voice Communication Services

Advanced telecommunications capacity is a primary concern for many communities in the region. There are two consortia that facilitate access to broadband fiber optic facilities: Fiber South Consortium and the Lane Klamath Regional Fiber Optic Consortium. Fiber optic lines have been installed in Coburg, Cottage Grove, Creswell, Springfield, Oakridge, Westfir, and Lowell, but are not yet activated for Lowell.

All of the Voice Communication services currently available in Lowell are provided by Qwest.

(2) Data Communication Services

The following Data Communication services are available in Lowell:

- Analog dial up
- Frame Relay service
- Digital Subscriber Lines (DSL)

All of the Data Communication services available in Lowell are provided by Qwest.

Frame Relay service is available in Lowell at the same price as in the Eugene-Springfield metro area. Digital Private Lines are available in Lowell at a different price as in the Eugene-Springfield metro area.

(3) Video Communication Services

The only commercial Video Communication service available in Lowell at this time is one-way cable service, provided by Charter Communications.

(4) Telecommunications Infrastructure

Telecommunication services throughout Lowell are provided by way of traditional twisted pair copper wire.

Some fiber optic cable has been installed in Lowell, but it is not currently utilized. There is a long haul fiber optic cable passing through Lowell. The incumbent Local Exchange Carrier has installed fiber optic connections between this long haul fiber system and the small central office. The City of Lowell, using financial support from the Regional Investment Board, has installed fiber optic cable from the long haul cable southward to the downtown area and northward to the Industrial Park. No switching equipment has been installed on this cable.

(5) Energy

The Lane Electric Cooperative provides electricity services to Lowell at competitive rates.

The City of Lowell has no natural gas service.

(6) Franchise Agreements

The City maintains Franchise Agreements with energy and communication companies and the two solid waste companies serving Lowell. Franchise Agreements, that provide fees to the City for permitting access over the City's public ways, are an important source of revenue.

SECTION 9.965 PLANNING IMPLICATIONS

Public facilities and services are an essential planning component and provide the primary elements to support community growth. Lowell's public facilities and services are capable of supporting additional community growth although there are improvements needed.

Schools and fire protection are currently serving Lowell very well, although expansion of both the level of service and support facilities may be needed as growth occurs. Both of these facilities have available land for their expansion needs. The City should maintain communication with these agencies and keep them informed of future community growth trends that could impact their level of service and facility needs.

The municipal sewer system and water system are capable of accommodating the community growth with the system improvements that were completed between 2000 and 2003. Additional capacity needs beyond those just completed are identified in the respective master plans and Systems Development Charges are being collected to help pay the cost for that extra capacity.

In summary, Lowell's public facilities and services are currently serving the needs of the community and, with identified improvements, Lowell is capable of providing an excellent level of service to an expanding community.

SECTIONS 9.966-9.967 RESERVED FOR EXPANSION

SECTION 9.968 REFERENCED ASSOCIATED DOCUMENTS

1. **Lowell Comprehensive Plan**, Land Council of Governments; 1978, 1980, 1981, 1982 LCDC Acknowledged and 1989 Amended.
2. **Lowell Economic Development Strategic Plan**, Lane Council of Governments, 2003.
3. **Lowell Water System Master Plan**, Systems West Engineering, November 1998.
4. **Lowell Wastewater Facilities Plan**, Tetra Tech/KCM Engineers, April 2001
5. **Lowell Public Works Construction Standards**, City of Lowell, February 2003
6. **Lowell Standards for Public Improvements**, City of Lowell, September 1994

SECTION 9.969 PUBLIC FACILITIES & SERVICES GOALS & POLICIES

(a) **Statewide Planning Goals: Statewide Planning Goal 11, Public Facilities and Services**, reads: "To plan and develop a timely, orderly, and efficient arrangement of public facilities and services, to serve as a framework for urban and rural development".

(b) Lowell Public Facilities & Services Goals

- GOAL 1.** To improve the quality of life in Lowell through improved public services and facilities.
- GOAL 2.** To provide public facility plans as a guide for the efficient development of future community facilities, utilities, and services consistent with long range community needs.
- GOAL 3.** To provide for the timely, orderly, and efficient provision of public facilities and services to serve as a framework for future community growth and development.
- GOAL 4.** To coordinate with other public agencies to maximize the efficiency and effectiveness of all public facilities and services.

(c) Policies

City Government

1. The City shall insure that public facilities, utilities, and services contribute to an orderly and efficient framework for incremental community growth and development.
2. The City shall consider the impacts on community facilities and services as part of the City's review and approval process.

3. The City shall require public facilities and services to be available in advance or concurrent with development.
4. The cost of providing public facilities and services for any development or proposed land division shall be the financial responsibility of the developer unless provided by other means approved by the City.
5. The City shall prepare and implement Master Plans for needed urban facilities and services.
6. The City shall prepare a short and long range Capital Improvement Program to guide financial implementation of needed facilities and services.
7. The City shall coordinate with Local Service Providers to ensure that community needs are addressed.
8. The City shall continue to support regional efforts to provide recreational, cultural and other services not available in the City of Lowell.

Parks and Recreation

9. The City shall design park and recreation programs to address the needs of all age groups within the community.
10. The City shall prepare and maintain a Park & Open Space Master Plan that provides the City with a unifying park, open space, bike and pedestrian system.
11. The City shall provide additional parks to accommodate the growing needs of the community.
12. The City shall integrate State and Federal park and open space planning into City planning.
13. The City shall require developers to deed park land as a condition of development approval or provide an in-lieu-of fee for park acquisition or improvement.

Water System

14. New development shall adhere to adopted City standards in all new extensions and replacement of water mains.
15. The City shall maintain and implement a Water System Master Plan that will be reviewed and updated at least every 5 years.
16. Except under approved circumstances, all development shall connect to the City water system.

Sanitary Sewer System

17. The City shall maintain and implement a Sewer System Master Plan that will be reviewed and updated at least every 5 years.
18. Existing development utilizing on-site disposal systems with identified health or pollution hazards shall be required to connect to the municipal sewer system.

19. Except under approved circumstances, all development shall connect to the City sewer system.

Storm Drainage

20. The City shall complete and implement a Drainage System Master Plan that will be reviewed and updated at least every 5 years.
21. Future developed areas shall be provided with an adequate storm drainage system with full the costs being borne by the developer unless approved otherwise by the City.
22. Storm drainage shall be a consideration in the City's review and approval procedures to determine potential impacts on existing and future land uses and the natural environment.
23. No development shall obstruct the natural drainage channels in Lowell, as identified on the Drainage System Master Plan.

Police Protection

24. The City shall strive to expand the level of police and emergency service.

Fire Protection

25. The City shall closely coordinate with the Fire District for the protection of life and property and reduction of fire insurance ratings.
26. As municipal water service is extended, fire hydrants shall be provided with the extended system.
27. Lands divisions and commercial and industrial development proposals shall be submitted to the Fire District for review and recommendation.

Emergency Response

28. The City of Lowell shall coordinate disaster planning efforts with other Emergency Response Agencies in the local area.

Schools

29. The City shall closely coordinate with the Lowell School District as part of its ongoing planning effort.
30. The City shall partner with the School District to improve facilities that benefit the entire community.

Post Office

31. The City shall coordinate addressing and street names for new subdivisions and new developments with the Post Office.

Health and Social Services

32. The City shall cooperate with federal, state and county agencies providing health and social services to residents of Lowell.

Energy & Communication Systems

33. All new and replacement utilities including electric power and communication lines shall be located underground.
34. The City shall encourage serving utilities to convert existing overhead utilities to underground service.
35. Multiple use of single utility easement corridors shall be encouraged wherever possible.
36. Energy conservation shall be encouraged in the development and use of public facilities.
37. The City shall seek to up-grade the City's communication services.

Solid Waste

38. The City shall encourage recycling efforts within the community.
39. Hazardous wastes shall not be imported, stored for unreasonable periods of time or disposed of within the City of Lowell.

SECTION 9.970 TRANSPORTATION

The purpose of the transportation element of the Plan is to provide guidelines for the orderly and efficient provision of transportation facilities needed to support urban development.

SECTION 9.971 LOWELL TRANSPORTATION

In response to Goal 12, the City has completed and adopted a **Lowell Master Road Plan (LMRP)** in 1999 and is incorporated by reference into the Lowell Comprehensive Plan. The City of Lowell needs to prepare and adopt a **Lowell Transportation System Plan (LTSP)** when funds are available. The elements summarized herein will provide the basis for a Lowell Transportation System Plan

The **LMRP** is summarized herein in the format that will be utilized in a Lowell Transportation System Plan (**LTSP**). For more detailed information refer to the existing **LMRP** on file at the Lowell City Hall.

A **LTSP** will address five transportation Elements:

- **Street System**
- **Pedestrian System**
- **Bicycle System**

- **Public Transportation System**
- **Air, Rail, Water and Pipeline Systems**

Although the major element of the transportation system is the street network, the Plan seeks to strengthen all modes of transportation and thereby facilitate the improved flow of people, goods and services.

It is also important to recognize that transportation systems function as more than systems for the safe and efficient movement of people and goods. They also become the basic structural and organizational framework on which a community grows and develops. The Comprehensive Plan recognizes this interrelationship with other Plan elements and seeks to improve it through recommended improvements to the primary transportation system.

Changes to the transportation system can have a wide variety of economic, social and environmental impacts. Major transportation facilities should efficiently meet economic and social needs, without disrupting urban social units, unique natural resources, or cohesive land use districts.

SECTION 9.972 STREET SYSTEM

(a) Regional Connections

Lowell is located along Oregon State Highway 58, which intersects Interstate 5 to the west at a point south of Eugene, and intersects U.S. Highway 97 to the east at a point between the communities of Crescent and Chemult in Klamath County. Interstate 5 runs through the length of the Willamette Valley, serving inter-city commuters, tourists and freight, connecting the region to Washington and California.

The majority of workers who live in Lowell commute to Eugene-Springfield to work. Lowell's transportation system consists primarily of streets and highways. The two major routes to the metro area are one heading northwest to Springfield through Jasper via Pengra Road and Jasper-Lowell Road, and one to Interstate 5 (I-5) by way of Highway 58, passing Dexter and Pleasant Hill. Highway 58, a major freight route, continues past Lowell, southeast through Oakridge, and later intersects with Highway 97. Lowell is 15 miles from Eugene-Springfield and is 125 miles from Portland..

Improvements to Highway 58 between Lowell and I-5 have improved safety and reduced congestion.

The City's local and regional access networks are excellent while the local transportation systems within the community are less adequate since they are in the early stages or development.

(b) Jurisdictional Responsibility

Most of the primary streets in the City are owned and maintained by Lane County or the Oregon Department of Transportation (ODOT). The following identifies jurisdictional responsibility:

ODOT

- State Highway 58

Lane County

- Pengra Road / North Shore Drive / West Boundary Road.
- Jasper-Lowell Road / Moss Street north of North Shore Drive.
- Pioneer Street/Jasper-Lowell Road from North shore Drive to Highway 58.

City of Lowell

- Pioneer Street (north of North Shore Drive)
- Moss Street (south of North Shore Drive)
- Hyland Lane
- Main Street
- Summit Street (private)
- Lakeview Street
- Alder Street
- Everly
- Loftus Avenue
- Parker Lane
- Cannon Street
- Damon Street
- Marina Vista Drive
- Carol Street
- “D” Street
- . Wetleau Drive
- . Sunridge Drive
- . Trailblazer Court
- 1st Street
- 2nd Street
- 3rd Street
- 4th Street
- 6th Street
- 7th Street
- Industrial Way
- . Seneca Way

(c) Lowell Streets

The principal means of transportation in Lowell is by automobile. The City is a commuter town where many residents are employed outside of Lowell and depend upon private transportation to get to work and shopping areas.

Most of the existing roadways in Lowell have been built to rural standards with minimum pavement widths, no curb and gutter and with open drainage ditches.

Most of the traffic is concentrated on the principle route through town – Pioneer Street, North Shore Drive and Moss Street. Existing traffic volume on City streets is low. Traffic volumes projected for the next 20 years are based primarily on the Lane County traffic model. All of the

streets are expected to operate at acceptable levels (Level of Service C or better) during the next twenty years. No intersections within the City are expected to operate at unacceptable levels during the next 20 years, however left turn lanes may be required at the intersections of Moss Street and North Shore Drive and Pioneer Street and North Shore Drive as traffic increases.

Livability factors and community appearance need to be considered in the design of the City's street system. Increased traffic flows can cause higher noise levels, and commercial and industrial land uses may need to have buffer zones or street landscaping to lessen noise and maintain the community's livability.

Land use and traffic have a direct relationship. Each type of land use has its own traffic generation characteristics. Commercial businesses and public facilities generate higher levels of traffic than residential areas where through traffic should be minimized. A circulation system should make it easier for people to reach their destination without conflicting with adjacent land uses. Conflicts can occur when too many businesses have individual access drives that can cause congestion and traffic hazards particularly on Pengra Road and Jasper-Lowell Road.

By using a street functional classification system, land use conflicts can be minimized. Standards for street design and construction are derived from the functional street classifications and are detailed in the Lowell Land Use Development Code.

(d) Future Streets

The **LMRP** indicates suggested locations for future streets. These streets are conceptual in nature but are provided as a guide for future development. Future street locations are depicted in the **LMRP** Map on page 8. They are subject to adjustment in conformance with specific development proposals and approval by the City of Lowell.

(e) Functional Street Classification

Street planning plays a significant roll in determining the growth and the form of a community. Streets are classified according to their function including the degree of access and the need for efficient movement of through traffic. Future streets include proposed extensions in the Low Elevation Service Area (**LESA**) below elevation 880 feet and street extensions in the High Elevation Service Area (**HESA**) above the 880 foot elevation. Lowell's traffic circulation is based on five interrelated types of streets:

- **Major Collector Streets**
- **Minor Collector Streets**
- **Local Streets**
 - **Future LESA Extensions**
 - **Future HESA Extensions**

(1) Major Collector Streets

The Major Collector Streets are the principal mover of traffic within and through the community. It connects with other regional routes outside of the City. Major Collector Streets generally emphasize mobility over access. Major Collector Streets require access management to protect their mobility function.

Lowell Major Collectors include:

- **Pioneer Street** (Jasper-Lowell Rd) south of North Shore.
- **North Shore Road** (Pengra Rd.) from Pioneer westward to City Limits.
- **Moss Street** (Jasper/Lowell Rd.) north of North Shore.

(2) Minor Collector Streets

The collector street collects traffic within an area and distributes it to the arterial street system. Collectors provide links between community areas or neighborhoods and the arterial system.

Lowell Minor Collectors include:

- **North Shore Road** (West Boundary Road) east of Pioneer
- **Main Street** to Moss.
- **Hyland Lane** to 4th Street.
- **4th Street** Hyland to Moss.

Future LESA Extensions

The **LMRP** identifies a loop extension from Main Street to 4th Street and an extension of Hyland Lane to 6th Street together with other shorter street connections.

Future HESA Extensions

The **LMRP** identifies other connecting loops in the High Elevation Service Area together with other street connections when services including a water reservoir are provided to the **HESA**.

(3) Local Streets

A Local Streets provide direct access to abutting land and offers the lowest level of traffic mobility. Through traffic on local streets is discouraged. All of the streets not otherwise classified are Local Streets.

(f) The Jasper-Lowell Corridor

The "Jasper-Lowell Road Corridor" includes the Causeway, Pioneer to North Shore, North Shore from Pioneer to Moss and Moss Street to the City Limits where it becomes Jasper-Lowell Road. It is the primary corridor of Lowell where most of the City's businesses and High School are located with direct access to the City Hall and Fire Station. Future improvements to the "Corridor" will be needed as growth occurs including curb & gutters, storm drainage, sidewalks and bicycle lanes. Further upgrading of the street system could include turn lanes, raised medians, traffic signals and controls, limited access management, parking and street lighting,

(g) Downtown Core Area

The Downtown Core Area is centered on Main Street and extends from the High School to North Shore Drive, which is part of the Jasper-Lowell Corridor. This area has struggled to maintain itself over the years. Public and commercial businesses have located outside of the area causing fragmentation and dispersal of facilities that usually define a City. Renewal of the "Downtown" should begin immediately and should be continually improved as the community grows. The City should seek participation in a downtown planning program with the Oregon Downtown Development Association that can help provide the impetus needed to initiate this important effort. Pedestrian facilities, pedestrian scaled street lighting, sidewalks, landscaping and ties to

the Park can also provide an attractive identification feature for the Downtown Core Area of the corridor.

(1) Pedestrian Enhancements

The addition of sidewalks with curbside landscaping between the curb and sidewalk would soften and enhance the appearance the Corridor and make it more pedestrian friendly and add to the attractiveness of the Downtown area. Raised medians and crosswalks on North Shore Drive can help control traffic and provide pedestrian crossings and refuge helping to increase safety and connectivity between the north and south sides of North Shore Drive in the Downtown Core Area where school children and elderly residents of Lowell will walk. Pedestrian scaled street lighting can also provide an attractive identification feature

(2) Parking

Parking needs will increase as the City grows. Head-in parking requires backing and maneuvering onto the street system. This can work well on secondary streets but can cause traffic conflicts and hazards on Major Collectors like the Corridor Roads. Improved on-street and off-street parking will be needed as growth occurs. A centralized parking lot in the Downtown Core Area should be investigated. This will be needed in the future and will help in the revitalization of the downtown core area.

(h) Pedestrian Facilities

The State Transportation Planning Rule requires sidewalks along Arterials, Collectors and most local streets in the urban area of the City. Sidewalks are now lacking on most of Lowell's streets and these are curbside walkways.

The most basic form of transportation is walking. Walking lends itself to Lowell's small community size with low density residential development and pleasant open space areas, that provide a relaxing walking environment. Little attention has been previously directed toward the provision of sidewalks and other pedestrian facilities in the community due to its rural nature. The need to provide more pedestrian facilities along major streets will increase as the community grows. Areas that generate pedestrian traffic such as the schools, commercial areas, and recreational facilities need to be improved to provide safety and encourage pedestrian use. Pathways and trails along tree lined drainageways should also be pursued, particularly those connecting residential areas with the Downtown area and City Parks would be a valuable recreational and transportation asset to the community.

(i) Bicycle Facilities

A bikeway is a facility designed to accommodate bicyclists. They may be a shared roadway, a shoulder bikeway, an identified bike lane or off-street bikeways. There are no bike lanes or off-street bike paths in Lowell. Bicycles must use road shoulders, where they exist, and share roadways with vehicles on the City's other streets. The use of bicycles, both for recreation and as an alternative form of transportation has continued to increase. Use of bicycles can reduce street congestion and the consumption of fuel resources. In small communities with open space amenities, a system of bikepaths and walkways can interconnect and unite the community,

improve safety and reduce reliance on the automobile. Lowell's close proximity to Lane County and State recreation areas suggests the need for a regional bikeway system.

Walkways and bikeways are needed facilities. Sidewalks and bikeways should be provided on all the Major Collector Streets and in the vicinity of the proposed Downtown Core Area.

SECTION 9.973 PUBLIC TRANSPORTATION SERVICES

The Mass Transit Division of the Oregon Department of Transportation estimates that fully one-third of all Oregonians are "transportation disadvantaged". They are either too old, too young, too poor, or are unable to use private vehicles as a means of transport. At present, the transportationally disadvantaged are limited to the young and elderly in Lowell. Their needs are primarily associated with the rural isolation from large shopping areas and medical services. A more detailed analysis of the needs of the transportationally disadvantaged in Lowell and the possible solutions to their problems need to be addressed

Public transportation is available to local residents. Lane County Transit (LTD) provides bus service between Eugene and Lowell via Highway 58.

The present outlook for Lowell is for the continued use of the automobile as the principal means of travel unless a regional transit system is successful. The success of public transportation depends on demand, which depends on population and a willingness to use the service. It also requires the coordination and cooperation of neighboring communities with transit facilities.

SECTION 9.974 AIR, RAIL, WATER & PIPELINE FACILITIES

(a) Air

There are no public or private airports in Lowell. The nearest commercial airport is located in Eugene approximately 30 miles away and Portland International Airport, the largest commercial airport in Oregon, is located approximately 130 miles north of Lowell.

(b) Rail

The Union Pacific Railroad main line passes by Lowell adjacent to Highway 58 across Dexter Lake. Railroad service continues to move freight and passengers throughout the Willamette Valley region and the Union Pacific and Burlington Northern Santa Fe provide freight service to industrial sites throughout Lane County. Amtrak provides passenger rail service from Eugene to Portland, Seattle, and major cities in California. Approximately 20 to 24 trains pass by Lowell each day including 4 passenger trains. Although no passenger service is available in Lowell, service is provided in 20 miles away in Eugene connecting the area to national routes as an alternative to other modes of travel.

(c) Water

There are no water transportation services in or servicing the City of Lowell.

(c) Gas Pipelines

There are no pipeline transportation services in or serving the City of Lowell.

SECTIONS 9.975-9.977 RESERVED FOR EXPANSION

SECTION 9.978 REFERENCED ASSOCIATED DOCUMENTS

1. **Lowell Master Road Plan**, Branch Engineering, 1999 Update.
2. **Lowell Public Works Construction Standards**, City of Lowell, February 2003 Edition.
3. **Lowell Comprehensive Plan**, Land Council of Governments; 1978, 1980, 1981, 1982 LCDC Acknowledged and 1989 Amended.
4. **Lowell Economic Development Strategic Plan**, Lane Council of Governments, 2003.

SECTION 9.979 TRANSPORTATION GOALS & POLICIES

(a) **Statewide Planning Goals: Statewide Planning Goal 12, Transportation** reads: "To provide and encourage a safe, convenient and economical transportation system."

(b) Lowell Transportation Goals

- GOAL 1.** To develop a street network that is safe, accessible and efficient for motorists, pedestrians, bicyclists and transportation disadvantaged in Lowell.
- GOAL 2.** To encourage continuance and expansion of public transportation services to major activity centers for the residents of Lowell.
- GOAL 3.** To encourage alternatives to the use of private automobiles.
- GOAL 4.** To prepare a Transportation System Plan for the City of Lowell.

(c) Policies

Transportation Planning

1. The City shall seek funding to prepare and implement a Lowell Transportation System Plan to expand on and replace its Master Road Plan which will be maintained in the interim as the plan for future transportation facilities.
2. All development proposals, plan amendments, or zone changes shall conform to the Lowell Master Road Plan or Transportation System Plan.
3. The City shall include consideration of impacts on existing or planned transportation facilities in all land use decisions.
4. The City shall develop a Capital Improvement Program to identify, prioritize and construct transportation projects.

Street System

5. The City of Lowell shall protect the function of existing and planned roadways identified in the Lowell Master Road Plan or Transportation System Plan through the application of appropriate land use regulations, exactions, voluntary dedication, or setbacks.
6. Access to lots shall be provided before they are developed.
7. Planning or improvements to any transportation shall include a workable drainage plan to reduce drainage problems and prevent ponding and flooding.
8. New developments shall comply with the Lowell Design Standards and Public Works Construction Standards for all street right-of-ways and parking areas, except when site specific conditions require a flexible interpretation or enforcement of the adopted standards.
9. Off-street parking shall be provided by all land uses to improve traffic flow, promote safety, and lessen sight obstruction along the streets.
10. Street and pedestrian lighting that utilize proper lighting levels, low energy fixtures, and do not cause nuisance conditions to adjacent areas shall be provided in all new developments.

Pedestrian & Bicycle Ways

11. The City of Lowell supports the development of the Eugene to Pacific Crest Trail and will work with all appropriate agencies to ensure its realization.
12. The City shall require developers of property adjacent to open space and park land to construct bike paths and pedestrian trails to access these areas.
13. The City shall encourage agencies having jurisdiction over open space and park lands adjacent to the City to provide trails and bike paths connecting to any City trail and bike system.
14. The City shall continue a program of providing sidewalks and paths to encourage and increase safety for pedestrian traffic.
15. City shall include requirements for pedestrian ways and bikeways when approving development proposals and street improvements.

Public Transportation

16. The City, County and Lane Transit District shall address the needs of the transportationally disadvantaged in Lowell and shall make recommendations for possible solutions to identified problems.
17. The City shall encourage greater use of public transportation systems and shall work with regional transportation officials in the siting of public transportation stops and commuter transfer points in Lowell.

18. The City shall encourage the use of carpools and park-and-ride lots in the area and other strategies to reduce the number of single occupant vehicles.
19. The City of Lowell shall participate with other agencies to maintain and expand a regional transportation system..

Rail Transportation

20. The City shall cooperate in regional planning to assist the railroad in providing safe convenient rail service to the region.

SECTION 9.980 GROWTH MANAGEMENT

Note: The information contained in Section 9.980, Growth Management, must be amended before the City makes application to the County for Urban Growth Boundary Expansion or establishment of an Urban Reserve, unless a specific Urban Reserve for the City of Lowell is established through the Region 2050 Planning Process. An amendment is required to update data contained in Tables 9.980 A and 9.980 C relating to land area by land use district and land area for which development constraints are identified/quantified and for text language which discusses land use constraints and conclusions drawn from those tables. Funding was not available for this Comprehensive Plan revision to verify accuracy of current land area by land use district or to identify and quantify all development constraints including, but not limited to, hillside development, protected drainageways, landslide risk, flood hazards, wetlands, public and private easement agreements and certain deed restrictions. There were also minor changes to specific comp plan/zoning district map proposals that were incorporated into the tables prior to the changes being made. These realignments of land area by land use district are minimal and will be corrected when this section is amended.

The Growth Management Section of the Plan builds on the background data and findings in the previous Plan Sections to provide the basic framework for future development in the City of Lowell. It addresses the basic issues of growth and urbanization in response to Statewide Planning Goal 14: "To provide for an orderly and efficient transition from rural to urban land uses to accommodate urban population and urban employment inside urban growth boundaries, to insure efficient use of land, and to provide for livable communities".

The primary focus of the Growth Management Section is to ensure an orderly and efficient conversion of land to urban use. This Section presents the overall development strategy for the lands within the City of Lowell

As an introduction to the Growth Management strategy for the City of Lowell, this Section begins with a brief historical profile that responds in part to **Goal 5, Historic Resources**. Subsequent Sections address the overall pattern of development in Lowell and the issues posed by urban growth.

The final Section assesses the energy implications of both the overall growth strategy as well as the energy implications of other elements of the Plan and responds to **Goal 13**, "To conserve energy".

SECTION 9.981 HISTORICAL BACKGROUND

It is the City's desire to preserve and protect the historic structures in Lowell. In this regard, there are a number of laws which seek to protect historic and archeological sites. Applicable Federal laws are the National Historic Preservation Act (Public Law 89-665) and the National Environmental Policy Act (Public Law 91-910). The State of Oregon also has laws on the books, specifically Oregon Revised Statutes 273.705, 273.711 and 273.990, which require protection of historic sites and objects on all state-owned lands

The land surrounding Dexter Lake was examined in April 1973 by members of the University of Oregon Museum of Natural History and the Department of Anthropology. No paleontological sites were found, but five archaeological sites were discovered. Four of these were open camp sites and one was a quarry. All four of the camp sites found during this survey had been damaged in part by construction. The camp sites are located within the government reserve and are the responsibility of the U.S. Army Corps of Engineers.

Lowell has two areas of historical significance: the Lowell Covered Bridge and the Hyland Cemetery. There are also individual buildings within Lowell that have local historical significance or meet age requirements to be considered historic resources, however no historic context statement or survey of historic sites has been accomplished in Lowell.

The Lowell Covered Bridge, first built in 1907, spans what was the old stream bed of the Middle Fork of the Willamette River. In 1945, the bridge was raised and rebuilt to accommodate the creation of the Dexter Dam reservoir. In 1978, a new bridge structure was constructed parallel to the covered bridge to accommodate the increased truck traffic with larger and heavier loads. The Lowell Covered Bridge was essentially abandoned in place. A project has been funded and designed to repair the bridge and convert it into an interpretive center to highlight and inform the public about the history and significance of Oregon covered bridges. The Lowell Covered Bridge is on the Statewide Inventory of Historic Properties and has been added to the National Register of Historic Places.

The Hyland Cemetery is located off North Shore Drive and contains 30 marked gravesites. The oldest of the graves dates back to 1868. The City of Lowell maintains the cemetery and is in the process of acquiring ownership.

The Wetleau House, located at 220 East Main Street, is a two-story, wood frame building constructed in 1902. The Wetleau House has a gable roof with a cross gable on its north elevation, and is noted for a window in the parlor on the northeast corner which is turned at an angle. The Wetleau House is on the Statewide Inventory of Historic Properties.

The Lowell Grange Hall, constructed in 1914 on property owned by the Hyland family, was entered on the Nation Register of Historic Places in 2005. The building was Lowell's Grade School until 1940. The building's original construction has been largely covered and includes a cedar shingle roof, cedar lap siding and square nails. The school was expanded in the 1930s to include a stage. Its kitchen and indoor plumbing were added after the Hyland family sold the property to the Grange in 1940. Lowell's city council meetings were held in the Grange Hall from 1954 until the current City Hall was constructed in the 1970s. The Grange continues to serve Lowell as a traditional community gathering spot and location for public events and activities.

Originally settled in 1852, Lowell was initially named Cannon, after an early settler by that name. The town site of Lowell was known by the landmark of Butte Disappointment, which

locals now call Lowell Butte. The town was originally located on a portion of 2,450 acres of land owned by Amos D. Hyland, who held many thousands of acres of timberland in the area. In 1882, Hyland named the town Lowell after his hometown in Maine.

Lowell was a timber town until the late 1980s. The early industries in the area were hop raising, stock raising, and logging. The present town site of Lowell was once a huge hop yard.

The first sizable increase in population occurred in conjunction with the building of the Lookout Point Reservoir and Dexter Reservoir by the U.S. Army Corps of Engineers in 1948. The Dam ushered in a new era for the people who had settled on the Middle Fork of the Willamette River near Lowell. Much of the town of Lowell was relocated when the Dexter dam was built. Many of the houses had to be moved out of the river bottom east of town and new houses were built north of town for the new employees hired to build the dam.

The City was incorporated in 1954. Timber related activities, public lands management and some agricultural uses, which have significantly declined over the last 30 years, are still evident in the Lowell area.

Over the years, the city has sought to maintain its viability as an attractive residential community with a local employment base.

SECTION 9.982 CHARACTERISTICS & DEVELOPMENT PATTERNS

The City of Lowell contains 737 acres. An additional “Area of Interest ” is also provided around the City. This is an area of influence that could have an impact on the community and is identified in Exhibit “A” of the “Joint Agreement for Planning Coordination Between Lane County and the City Of Lowell”.

Currently, the City Limits and Urban Growth Boundary (UGB) are the same therefore the City has no UGB area outside of the City Limits.

(a) Characteristics

Lowell was founded in 1852 as a farming and timber community. With the construction of the Lookout Point and Dexter Dams in 1948 much of the town was relocated and new construction established the City’s present location. Butte Disappointment has remained a local landmark together with Dexter Lake formed by the lower Dexter Dam. These settings at the foothills of the Cascade Mountains, together with the Lowell Covered Bridge entrance to the City from Highway 58, contribute significantly to Lowell’s unique image and character.

Other significant features include a complete high school and grade school system, an abundance of local parks within and adjacent to the community and US Forest Service, Corps of Engineers, and State Parks facilities.

(b) Development Patterns

Today Lowell contains approximately 737 acres, however only 445 acres are developed or developable properties. The remainder is Federal Reservation including the portion of Dexter

Reservoir and its shoreline within the City and public rights-of-way. The City has a 2004 resident population of 900 people and 353 dwelling units.

Lowell is organized around the Jasper-Lowell Road Corridor, the north-south transportation spine of the community linking Highway 58 with Unity, Fall Creek, Jasper and Springfield. Within the City, the Jasper-Lowell Road Corridor consists of Pioneer Street entering from the south off Highway 58, North Shore Drive between Pioneer Street and Moss Street, and Moss Street north of North Shore Drive. Prior to the construction of Dexter Reservoir, the City's original development was located between North Shore Drive and the Willamette River. When portions of the City were relocated, development extended north and continues to extend north and east along the lower slopes of Butte Disappointment.

(1) Industrial development is located immediately adjacent to the Jasper-Lowell Corridor at the north end of the City. This is a relatively new development that has room for expansion.

(2) Commercial development is located immediately adjacent to the Jasper-Lowell Corridor from the High School on Pioneer Street in the south to Third Street in the north and in the older Downtown Core Area centered on Main Street, one block south of North Shore Drive.

(3) Residential development is characterized by single-family homes and manufactured homes on individual lots. Two-thirds of these homes are site built and one-third are manufactured homes. There is one multiple-family development and one manufactured home park that is presently being converted to individual lots.

Newer developments to the north, east and west of the core area have been developed with larger lots that, while they could be re-divided in the future, partitioning is unlikely on a large scale as a result of deed restrictions and property owner preference for these oversized lots.

SECTION 9.983 DEVELOPMENT CONSTRAINTS

Constraints to future development in Lowell include economic, availability, and environmental constraints.

(a) Economic constraints are related to Lowell's small population, location and proximity to a wide range of commercial services and established industrial development in the Eugene/Springfield metropolitan area.

(b) Availability constraints include a lack of large lots conducive to subdivision development and the likelihood that many of the smaller parcels will not be further divided because of deed conditions, property owner preference and other constraints on additional development. Currently, water service is not available above the 880 foot elevation for lack of an upper level reservoir. Construction of an upper level reservoir is provided for in the Water System Master Plan, but until constructed, all land above 880 feet will be unavailable. The majority of the land to be served by this reservoir also has the additional development constraint for having steep slopes. Lack of availability of public roads and public utilities is a constraint to partitioning or subdivision of many of the 1 to 5 acre parcels because these were developed as large residential parcels with no provision for City streets and public water and sewer lines. Further dividing these larger residential parcels would require replacement of private drives and private water and

sewer lines serving a small number of residences with public roadways and utilities because of the additional development.

(c) Environmental constraints to development include flood hazard areas, wetlands and riparian areas and steep hillsides. These are summarized below and in **Section 9.920**.

(1) Topography & Slope

Hillside slopes in the east and northeast portions of Lowell often exceed 15 percent. Development of areas with slopes exceeding 15 percent should be carefully controlled. It is possible to develop home sites in these areas provided the slope is adequately addressed in the design and construction of a development. However it is not always possible to develop hillside land to normal urban densities. Some of these hillside slopes exceed 25%, further impacting development. Street widths and locations must be carefully chosen to avoid large cuts and fills. The excessive slope designation is intended to be used as a guide in preparing and reviewing specific development requests and as a basis for the application of adequate development standards. The City has adopted specific Hillside Development Standards to guide development on slopes over 15 percent.

The City has no detailed study of the developability of its undeveloped hillside areas. The Lowell UGB Land Analysis quantifies the amount of excessive slope areas, but only provides unsupported assumptions as to the density of development that the hillside areas can economically support. A Study of the City's hillside areas should be undertaken as soon as possible to determine the future development density that should be expected.

(2) Soils & Geology/Landslide Hazards

The soils and geology within the Lowell area present concerns regarding the location and density of development. Shallow clay soils over weather rocks present drainage problems and potential slide conditions. These problems become more hazardous as slopes increase. During heavy rains the water table extends to the surface and causes ponding and surface flow in some places. The State of Oregon has identified hillside slide hazards as a particular problem within State and has recently required local jurisdictions to develop plans to identify areas of potential slide hazards and to develop plans to mitigate slide hazard potential and/or restrict development on hillsides that may be susceptible to landslides. The City has no comprehensive geological study related to the potential for landslide hazards as a result of additional development, especially in those areas of steep slopes, and without such information, is unable to quantify the extent of landslide hazard development constraints.

(3) Drainage

Drainage courses are essential community elements that direct water to Dexter Reservoir. Drainageways impact developmental decisions and building locations and need to be protected as development occurs. Maintaining drainageways as open linear greenways within developments can provide a significant amenity while protecting these necessary elements and the environmental function they serve. The extent to which these drainageways take away from a buildable lands inventory needs to be quantified.

(4) Wetlands

The Lowell UGB Land Analysis identifies a small portion of Lowell undeveloped property as constrained as a result of wetlands. It is highly likely that, due to the clay-type soils found in much of the City and wetlands that have been identified during recent studies, that there may be

significantly more wetlands constraints than were identified in the UGB Land Analysis. The City should consider completing a City-wide wetlands survey to determine the extent of development constraints associated with wetlands.

(5) Flood Hazard

The City participates in the federal National Flood Insurance Program and has adopted Flood Hazard standards and policy, however the impacts of flood hazards are minimal within the City of Lowell. According to the Flood Insurance Rate Map for Lowell, the only land within Lowell that is within Zone A is Dexter Reservoir itself and the shoreline areas to the elevation of the top of the Dexter Dam. This land is entirely within the US Army Corps of Engineers federal reservation.

Section 9.920, Environment, has a description and references to other sources for a more detailed summary of environmental constraints.

(d) Other Constraints.

The City has a large amount of publicly owned land which is developed for a specific purpose, including land owned by the City for facilities, parks and open space, by the School District, by the Fire District and by the U.S. Forest Service and Corps of Engineers. The special public use of these properties precluded further development for other uses. The City also has a Bonneville Power Transmission line constructed going east to west across the City from Lookout Point Dam which is established by easements that don't allow development within the easements. Finally, the City has a previous subdivision containing 25 two acre plus parcels containing a single residential dwelling that, by deed restrictions, can not further divided.

e) Constrained Lands Summary

Table 9.980 A summarizes the developed, vacant and constrained lands in Lowell. This Table was derived from the 2001 UGB Land Analysis after being updated to the current year, including land use changes made at the time of the 2005 revision of this Plan. Of the 445 tax lot acres 174 are developed and 271 are vacant or partially vacant. The UGB Land Analysis identifies 204 acres as constrained vacant lands leaving only 66 acres of unconstrained "Buildable Land". Constrained Lands are 78% of the vacant land in the City and 46% of the City's total Tax Lots. What is unclear is the level to which the constrained lands may be developable until a more detailed study can be made of the above identified development constraints.

**TABLE 9.980 A
LAND USE CONSTRAINTS**

2005 CITY LAND USE DISTRICTS							
	Land Area Acres	R-1	R-3	C-1	C-2	I-1	PL
TOTAL TAX LOTS	444.77	376.55	14.56	6.12	3.72	7.42	36.40
	100.00%	84.66%	3.27%	1.38%	0.84%	1.67%	8.18%
DEVELOPED LAND	174.30	125.86	2.43	5.74	2.51	2.07	35.69
% DEV LAND	39.19%	72.21%	1.39%	3.29%	1.44%	1.19%	20.48%
% DISTRICT DEV		33.42%	16.69%	93.79%	67.47%	27.90%	98.05%
VACANT LAND	270.47	250.69	12.13	0.38	1.21	5.35	0.71
% VAC LAND	60.81%	92.69%	4.48%	0.14%	0.45%	1.98%	0.26%
% DISTRICT VAC		66.58%	83.31%	6.21%	32.53%	72.10%	1.95%
CONSTRAINED LAND	204.00	202.20	1.80	0.00	0.00	0.00	0.00
% CONST LAND	45.87%	99.12%	0.88%				
% DISTRICT CONST		53.70%	12.36%				
% VACANT CONST	75.42%						
STREETS	<u>73.00</u>						
	9.91%						
LAKE	<u>219.00</u>						
	29.72%						
TOTAL AREA	<u>736.77</u>						
	100.00%						
HOUSING 2003							
	<u>Homes</u>	<u>Percent</u>					
Single-Family	215	53.88%					
Manufactured Homes	134	33.58%					
MH in Parks	6	1.50%					
Multiple-Family	44	11.03%					
	<u>399</u>	<u>100.00%</u>					

SECTION 9.984 DEVELOPMENT OPPORTUNITIES

The City has well defined areas available within the City to accommodate needed industrial, commercial and residential expansion.

Industrial land is zoned and available for development in the northwest corner of the City adjacent to the Jasper-Lowell Corridor. There are approximately 5.5 acres of developable property within the Industrial Park together with available leased space in existing buildings.

(a) Commercial land is zoned for development although most of the property is in other uses except for approximately 1.5 vacant acres. There is vacant property in the Downtown Core Area where the City is seeking to encourage development to restore the community's center. There are other properties that have potential for redevelopment for commercial use including the school bus yards and several residential dwellings.

(b) Residential land is zoned and available for development within the City. However, of the 270 acres of vacant residential land, 204 acres are constrained leaving only 66 acres of unconstrained buildable residential land. Much of this land is comprised of small sized rural parcels that could be divided to urban sized lots although this in-fill process usually develops more slowly than larger parcels that could accommodate larger subdivisions. There are few developable properties within the City large enough to support more economically developed larger residential subdivisions.

(c) Open Space

Drainage channels together with steep hillside areas containing trees and native vegetation offer an opportunity to provide valuable open space for the community while providing habitat protection and additional safeguards from landslides. These areas can add visual amenities and buffers that enhance developments environmentally and economically.

(d) Planning Considerations

Present community attitudes appear to prefer maintaining the livability of the community with a preference for larger residential lots, expanded commercial services and low impact industrial development. However, emerging growth pressures together with the availability of municipal water and sewer service suggest the City should incorporate planning policies and guidelines to provide for the orderly and efficient conversion from rural to urban densities to maximize service economies.

Three factors will play an important role in Lowell's potential for growth. First is the communities shared desire to increase population to increase enrollment in the Lowell School District and to attract needed commercial businesses. Second is the improved capacity in the municipal water and sewer systems. Second is the proximity of Lowell to the Eugene/Springfield Metropolitan Area. The livability of a small rural community together with accessibility to regional market places and employment centers enhances Lowell's potential for residential growth.

SECTION 9.985 PROJECTED GROWTH NEEDS

Because projected growth needs, especially as they relate to residential growth, are a function of population projections, a discussion of historic trends and future growth goals is important. As identified in the Lowell UGB Land Analysis as corrected following the 2000 Census, Lowell's annual average growth rate for the 40 years between 1960 and 2000 was 1.42%. This growth rate, while steady over the 40 year period, is lower than County average growth rates. This can be attributed to two factors. The first is that during this entire period, there was a gradual decline in jobs generated by the forest products industry and related U.S. Forest Service jobs in the area. Secondly, as the residential migration from the Eugene/Springfield urban area to outlying small cities started increasing in the last 20 years, Lowell was limited in its ability to attract residential development as a result of nearly continuous moratoriums on development caused by water and sewer system capacity limitations.

**TABLE 9.980 B
POPULATION, HOUSING & LAND NEEDS**

Year	Population aagr 2.22%	Housing 2.5 ph+5.8%V	Housing Increase	Land Area 6 u/acre+50%
2000	880	346		0
2001	880	346	0	0
2002	880	346	0	0
2003	890	349	3	1
2004	900	353	7	2
2005	923	390	44	11
2006	946	400	54	14
2007	969	410	64	16
2008	993	420	74	19
2009	1018	431	85	21
2010	1044	442	96	24
2011	1070	453	107	27
2012	1097	464	118	30
2013	1124	476	130	32
2014	1152	488	142	35
2015	1181	500	154	38
2016	1210	512	166	42
2017	1241	525	179	45
2018	1272	538	192	48
2019	1303	552	206	51
2020	1336	565	219	55
2021	1369	580	234	58
2022	1404	594	248	62
2023	1439	609	263	66
2024	1475	624	278	70
2025	1512	640	294	73
2026	1549	656	310	77
2027	1588	672	326	82
2028	1628	689	343	86
2029	1669	706	360	90
2030	1710	724	378	94
2031	1748	740	394	98
2032	1787	756	410	103
2033	1827	773	427	107
2034	1867	790	444	111
2035	1909	808	462	115
2036	1951	826	480	120
2037	1994	844	498	125
2038	2039	863	517	129
2039	2084	882	536	134
2040	2130	902	556	139
2041	2177	922	576	144
2042	2226	942	596	149
2043	2275	963	617	154
2044	2326	984	638	160
2045	2377	1006	660	165
2046	2430	1028	682	171
2047	2484	1051	705	176
2048	2539	1075	729	182
2049	2596	1098	752	188
2050	2653	1123	777	194

The City completed upgrades on both its water and sewer systems in 2004, increasing capacity in both as identified in Section 9.600. Because of experienced population growth in other small communities in the County, projected growth needs for both the water and sewer system were estimated at approximately 3%. This is consistent with the City's desire for growth to support School District enrollment, to provide a commercial business customer base and to increase the revenue base for the City. Lane County coordinated population projections adopted in 2005 recognized some increase in growth rates in Lowell by setting the City's growth projections at 2.22% through 2030. The City also feels that it needs to project growth needs to 2050 to provide for a longer planning period to provide for public infrastructure needed to support growth that is anticipated to occur. **Table 9.980 B and C** provides projections of growth in population, housing needs and land needs over 50 years at the County coordinated population growth projection of 2.22%. The 2050 population projection is consistent with the average of the Lane County Region 2050 planning projections for the various County growth scenarios being studied.

A 3.0% growth rate over the same planning period as projected in the water and sewer system master plans would result in a population of 3,858, a housing need of 1,665 and a land area need of 357, or 291 acres of additional land.

Because of the recent completion of capacity building improvements to the water and sewer systems, there has not been adequate time to evaluate the effect of those improvements, and their resultant end to building moratoriums, on growth. Growth should be evaluated and new population projections made within 5 years without the former growth constraints, to include an updated buildable lands inventory.

(a) Residential Acreage Needs

Lowell will need approximately 73 additional gross acres of unconstrained buildable residential land to accommodate the additional housing needs of the community based upon the coordinated population projections to the year 2025 for a UGB change.

Table 9.980 C identifies 194 acres needed for residential growth by 2050 based upon a 2.2% projected population growth rate. The following distribution of needed land is greater than the available unconstrained buildable land within the Lowell City Limits:

- a. R-1 Single-family, 155 acres Less 48 unconstrained buildable acres, a need of 107 acres.
- b. R-3 Multi-family, 39 acres Less 10 unconstrained buildable acres, a need of 29 acres.

It is evident from the needs analysis summarized in **Table 9.980 C** that additional residential land is needed to support the City's growth projections to the year 2050. As growth occurs additional commercial and industrial lands will also be needed.

**TABLE 9.980 C
PROJECTED LAND NEEDS**

2005 CITY LAND USE DISTRICTS							
	Land Area Acres	R-1	R-3	C-1	C-2	I-1	PL
TOTAL TAX LOTS	444.77	376.55	14.56	6.12	3.72	7.42	36.40
	100.00%	84.66%	3.27%	1.38%	0.84%	1.67%	8.18%
DEVELOPED LAND	174.30	125.86	2.43	5.74	2.51	2.07	35.69
% DEV LAND	39.19%	72.21%	1.39%	3.29%	1.44%	1.19%	20.48%
% DISTRICT DEV		33.42%	16.69%	93.79%	67.47%	27.90%	98.05%
VACANT LAND	270.47	250.69	12.13	0.38	1.21	5.35	0.71
% VAC LAND	60.81%	92.69%	4.48%	0.14%	0.45%	1.98%	0.26%
% DISTRICT VAC		66.58%	83.31%	6.21%	32.53%	72.10%	1.95%
CONSTRAINED LAND	204.00	202.20	1.80	0.00	0.00	0.00	0.00
% CONST LAND	45.87%	99.12%	0.88%				
% DISTRICT CONST		53.70%	12.36%				
% VACANT CONST	75.42%						
UNCONSTRAINED LAND	66.47	48.49	10.33	0.38	1.21	5.35	0.71
% BUILD LAND	14.94%	72.95%	15.54%	0.57%	1.82%	8.05%	1.07%
% DISTRICT BUILD		12.88%	70.95%	6.21%	32.53%	72.10%	1.95%
STREETS	<u>73.00</u>						
	9.91%						
LAKE	<u>219.00</u>						
	29.72%						
TOTAL AREA	<u>736.77</u>						
	100.00%						
YEAR	POP PROJ	HOUSING NEED	LAND NEED	PROJECTED LAND NEED ACRES			
2025 PROJECTIONS	1512	640	73	65.70	7.30		
NEEDED LAND				17.21	-3.03		
2030 PROJECTIONS	1710	724	94	79.90	14.10		
NEEDED LAND				31.41	3.77	3	5
2050 PROJECTIONS	2653	1123	194	155.20	38.80		
NEEDED LAND				106.71	28.47	6	2
						10	

(b) Commercial Acreage Needs

There is no anticipated need for additional designated commercial land initially. What is needed is an emphasis on downtown renewal to attract additional commercial uses to the Downtown Core Area to revitalize the community. As the City grows, it is anticipated that the need for additional commercial lands will increase to 4% of the City's land use.

(c) Industrial Acreage Needs

There is no anticipated need for additional designated industrial land initially. However as growth occurs additional industrial demand may occur. The City should be prepared to expand the industrial land base to always have a small inventory of Industrial land available for industrial development opportunities that may present themselves.

(d) Public Lands Acreage Needs

Additional designated Public Lands are not anticipated. However, growth of public and semi-public areas can be accommodated within the other land use districts as needs arise. Therefore, there is no need for additional designated public lands.

Based upon the City's Population Projections there is a need for additional residential land to accommodate the growth of the City through the 2050 Planning Period.

SECTION 9.986 LOWELL URBAN GROWTH STRATEGY**(a) Lowell Urban Growth Boundary History**

The City of Lowell does not have an Urban Growth Boundary (UGB) beyond the City Limits. However, there is a demonstrated need to expand the UGB during the planning period based upon the City's population projections over a planning period extending to 2050.

In order to expand an Urban Growth Boundary or to annex any portion of land outside of the City Limits, the City and County must comply with Statewide Planning Goal 14.

Statewide Planning Goal 14 reads: "to provide for an orderly and efficient transition from rural to urban land use to accommodate urban population and urban employment inside urban growth boundaries, to insure efficient use of land, and to provide for livable communities". Urban Growth Boundaries shall be established to identify and separate urbanizable land from rural land.

An Urban Growth Boundary is a boundary that is intended for application in the urban-rural fringe, or the area surrounding a city that contains urbanizable lands that are:

1. Determined to be necessary and suitable for future urban uses;
2. Can be served by urban services and facilities; and
3. Are needed for the expansion of an urban area.

According to **Goal 14**, establishment or change of the boundary shall be based upon consideration of the following factors.

Urban Growth Boundaries

Urban growth boundaries shall be established and maintained by cities, counties and regional governments to provide land for urban development needs and to identify and separate urban and urbanizable land from rural land. Establishment and change of urban growth boundaries shall be a cooperative process among cities, counties and, where applicable, regional governments. An urban growth boundary and amendments to the boundary shall be adopted by all cities within the boundary and by the county or counties within which the boundary is located, consistent with intergovernmental agreements.

Land Need

Establishment and change of urban growth boundaries shall be based on the following:

1. Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and
2. Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks or open space, or any combination of the need categories in this subsection (2).

In determining need, local government may specify characteristics, such as parcel size, topography or proximity, necessary for land to be suitable for an identified need.

Prior to expanding an urban growth boundary, local governments shall demonstrate that needs cannot reasonably be accommodated on land already inside the urban growth boundary.

Boundary Location

The location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of the following factors:

1. Efficient accommodation of identified land needs;
2. Orderly and economic provision of public facilities and services;
3. Comparative environmental, energy, economic and social consequences;
4. Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.

Urbanizable Land

Land within urban growth boundaries shall be considered available for urban development consistent with plans for the provision of urban facilities and services. Comprehensive plans and implementing measures shall manage the use and division of urbanizable land to maintain its

potential for planned urban development until appropriate public facilities and services are available or planned.

(b) City/County Coordination & Cooperation

Statewide Planning Goals require that planning for areas adjacent to a city be a cooperative process between the City and County. Accordingly, the City of Lowell and Lane County have established a Lowell Planning Area as an area of mutual interest requiring City and County planning coordination.

The **City/County Management Agreement** specifies the procedures and standards for management of the Planning Area outside the City Limits.

(c) Comprehensive Plan / Zoning Map

The Comprehensive Plan Map is often thought of as "The Plan". Although a key component of the Comprehensive Plan, the Plan Map is only one part of the plan. The Plan is composed of information and goals and policies as well as a map. It is the interrelationship of these components that gives the map its significance. The Plan Map identifies the intended urban land use for all lands within the City of Lowell in terms of the plan designations explained below.

The City has combined the Comprehensive Plan and Zoning Map into a single map that identifies the City's Land Use and Zoning Districts. The Map identifies six land use categories or districts on 445 acres in addition to streets and a portion of Dexter Lake that together comprises 737 gross acres within the existing City Limits.

The Comprehensive Plan Map identifies the various land use designations that apply in the City of Lowell. . A brief description of the Land Use Districts in the City follows.

(1) Residential designations identifies areas for site-built single-family or manufactured housing and multiple-family housing. Residential land use and zoning designations that apply in the City of Lowell include:

Single-Family Residential District R-1 (7,000 sf minimum lot size.)
Multiple-Family Residential District R-11 (7,000 sf minimum lot size.)

(2) Commercial designations identifies areas for commercial development. Land designated for commercial use reflects consideration of parcel size, adjacency to primary transportation routes and access to the community. Commercial land use and zoning designations that apply in the City of Lowell include:

General Commercial C-1
Downtown Commercial C-2

(3) Industrial designations identifies areas for industrial development. Land designated for industrial use reflects consideration of parcel size, topography, existing and surrounding land uses, and access to highway transportation. Industrial land use and zoning designations that apply in the City of Lowell include:

Light Industrial District I-1

(4) **Public and Semi-public** land is accommodated within all other designated land use districts. In addition, a Public Lands designation is applied to permanent governmental land and associates facilities and uses in the City of Lowell as:

Public Lands PL**(d) Growth Management**

The following needs assessment provides much of the criteria for the management of growth within the City of Lowell:

- The need to accommodate long-range urban population growth requirements consistent with Statewide Planning Goals.
- The need for housing and employment opportunities consistent with the existing livability of the community.
- The need to provide for the orderly and economic provision of public facilities and services consistent with existing development patterns.
- The need to maximize efficiency of land uses within and on the fringe of the existing urban area in order to provide for orderly growth.
- The need to establish compatibility of proposed urban uses with adjacent rural activities and to ensure a smooth transition from rural to urban uses.
- The need to maintain an adequate supply of land, which can be economically developed, for each land use to insure competitive choices in the market place and reduce land costs.
- The need to support the local School District and other governmental agencies having facilities and programs in the City.
- The need to encourage economic growth in the Lowell area to capitalize on underutilized human and infrastructure capabilities.
- The need to provide industrially designated lands of sufficient size to accommodate a diversity of possible uses with adequate space and buffers to ensure compatibility with surrounding uses.
- The need to reestablish the Downtown Core Area as the City's centralized service commercial area.
- The need to preserve buildable lands for residential use that are suitable, available and not subject to hazardous development limitations.

- The need to establish growth policies and patterns that are consistent with the growth needs and desires of the community.
- The need to retain adequate open space and recreational areas consistent with the rural character and livability of the Lowell area.
- The need to include large parcels of urbanizable land that are of adequate size to support subdivision so as to maximize the utility of the land resource and enable the logical and efficient extension of services.
- The need to maintain a Planning Area between the Lowell City Limits and the rural areas of the County
- The need to initiate an Urban Reserve area as a reserve for future growth of the community.
- The need to initiate an Urban Growth Boundary expansion to accommodate the projected growth needs of the City.

The growth of the City is a natural process that results from an increasing population and the associated urban services needed to support that population. The manner in which a city grows is important because it reflects the shape, form and character of the community.

Growth should seek to contribute to a city's livability and environmental quality. Orderly urban growth within the City should yield an urban pattern that avoids areas of critical environmental concern while accommodating the needs of its citizens. The logical progression for growth in a community is from the core area outward so efficient and economical extension of public facilities and services is phased and coordinated with the need for additional land. Incremental and systematic expansion from the core area outward along existing service corridors is the preferred growth pattern and offers the greatest efficiency and economy of development.

For the City of Lowell, this outward growth will likely be concentrated to the west along Pengra Road, north along Jasper-Lowell Road, and east along West Boundary Road. Expansion southward across Dexter Reservoir to Highway 58, while providing some opportunities for economic development, is unlikely due to the cost to provide public utilities across the reservoir. The City is the logical provider of public facilities and services. It is the objective of the City's Growth Management Strategy for Lowell to encourage urban development and the conversion of rural land to urban uses in such a way that the expansion of public facilities and services can be accomplished in a fiscally sound manner, while still providing required City services on an equitable basis to all residents.

The underlying growth management strategy focuses on the current ability of the City to adequately support future development without detracting from the community's livability.

(e) Needed Studies & Information

The **Lowell Comprehensive Plan 2005** is a compilation of existing data recognizing that additional information is needed to provide a more complete framework for community growth and development. Existing Plan Policies prepared in 1980 have been reviewed and amended by the Lowell Planning Commission and Citizens Advisory Committee to bring them into compliance with Statewide Planning Goals and the current needs and aspirations of the community.

The following data and studies are needed:

- A Wetland & Riparian Area Inventory.
- A Transportation System Plan.
- A Downtown Development Plan.
- A Buildable Lands Inventory.
- A Drainage System Master Plan.
- An update of the Water System Master Plan.
- An update of the Sanitary Sewer System Master Plan.
- A Parks & Recreation Plan
- A Capital Improvement Program.

Lowell's Growth Management Strategy is a dynamic process. It is a continuing on-going process that must be reviewed and periodically updated to meet the changing needs of the community.

SECTION 9.987 ENERGY

Energy may not traditionally be considered an aspect of a City's economy, however, the growing demand on energy resources, coupled with the resultant cost increases for energy, impact the economic future of a community. This element looks at energy impacts on Lowell and identifies various energy conservation measures, as well as energy conservation programs available to Lowell's residents.

As the United States enters a future of increasing energy demands, a local comprehensive plan must consider the topic of energy. Lowell's current status as primarily residential community could place the City in a vulnerable position as future energy prices increase. A reduction in petroleum, or major price increases, could affect Lowell's citizens by increasing cost to access employment and market opportunities outside of the community.

The Comprehensive Plan promotes energy conservation through various techniques. Some techniques include the use of efficient land use patterns, encouraging effective housing rehabilitation and construction methods, and formulating energy efficient transportation policies, such as those encouraging pedestrian ways, bikeways, public transportation and carpools.

The greatest potential for the consumer to conserve energy is through measures such as the use of energy efficient appliances, better management of home energy uses, home improvement programs and the recycling of domestic waste products. The consumer can also greatly reduce home heating and cooling bills through improved home insulation.

In recent years, new developments have focused on utilization of the LEED Program (Leadership in Energy and Environmental Design), Green Building Guidelines and Sustainable Development Attachment A, Ordinance 244

to reduce energy consumption and provide more environmentally friendly developments. The City supports these efforts and encourages their use in all future development within the City of Lowell.

Because much of the developable land within the City of Lowell is on south facing hillsides, there is an additional opportunity to take advantage of active and passive solar energy technology. The use of solar energy can greatly reduce the need for more traditional and costly energy resources and should be encouraged for development within Lowell.

Federal and state legislation together with the utility companies have provided incentives for energy conservation. The following items are some recommended measures that can be taken by the homeowner to reduce energy consumption.

1. More than 70% of the average Oregon household's energy expense (other than transportation) is for space heating. Water heating is another major energy user. Lowering of the thermostats of both appliances, or the use of semi-automatic thermostat setbacks can help cut back on energy demand.
2. Insulation installed in ceilings, exterior walls, heated basements or crawl spaces, around heating ducts and water heaters in unheated spaces.
3. Weatherproofing windows and doors, including weather-stripping, double glazing windows, and installing storm windows and doors.
4. Furnace improvements, replacement of old burner units with more efficient ones, the use of forced air units, chimney heat recovery devices, automatic furnace flue dampers and heat pumps.
5. Fireplace improvements such as outside air inlets, glass screens, fireplace grates and flue heat exchangers.
6. Ground cover, usually consisting of plastic sheets under the house in crawl spaces.

All the above actions qualify for and meet state guidelines for insulation programs that may be eligible for refunds, tax credits, and loans for home insulation projects.

The federal government also has various programs operating under different agencies, that subsidize energy conservation measures.

Anyone interested in applying for any of these programs, either at the state or federal level, should contact the Oregon Department of Energy for additional information.

SECTION 9.988 REFERENCED ASSOCIATED DOCUMENTS

1. **Lowell Comprehensive Plan**, Lane Council of Governments; 1978, 1980, 1981, 1982 LCDC Acknowledged and 1989 Amended.
2. **Lowell Urban Growth Boundary Land Analysis Draft**, Lane Council of Governments, 2001.
3. **Lowell Economic Development Strategic Plan**, Lane Council of Governments, 2003.
4. **GIS Tax Lot Data**, Lane Council of Governments, 2005.
5. **Region 2050**, Lane Council of Governments, 2001-2005.

SECTION 9.989 GROWTH MANAGEMENT GOALS & POLICIES

(a) Statewide Planning Goals: The primary **Statewide Planning Goals** (Goals) related to this Section of the Plan are **Goals 5, 7, 13** and **14**, although Goals 5 and 7 are also included in Section 9.200, Environment.

Goal 5, Historic Resources reads: "To protect natural resources and conserve scenic and historic areas and open space." In response to the historic preservation portion of this goal the following Lowell Policies are included to help insure the protection and maintenance of historic resources for future generations.

Goal 7, Areas Subject to Natural Disasters and Hazards reads: "To protect life and property from natural disasters and hazards." Developments subject to damage or that could result in loss of life shall not be planned nor located in known areas of natural disasters and hazards without appropriate safeguards. Plans shall be based on an inventory of known area of natural disaster and hazards.

Goal 13, Energy Conservation reads: "To conserve energy." Land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles.

Goal 14, Urbanization reads: "To provide for an orderly and efficient transition from rural to urban land uses to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities." The Growth Management Element of the Plan builds on the data in all the other plan sections to provide the basic framework for future development in the City of Lowell by addresses the basic issues of growth and urbanization.

The Policies of this Section of the Plan are intended to implement the City's overall growth management strategy and provide for continued intergovernmental coordination as the basis for the orderly development of the City of Lowell.

(b) Lowell Growth Management Goals

- GOAL 1.** To preserve historic resources and other places of special significance in the Lowell area.
- GOAL 2.** To provide a planned and efficient transition from rural to urban land use.
- GOAL 3.** To provide conservation and development policies to guide future development.
- GOAL 4.** To allocate enough land in each land use category to accommodate the anticipated growth needs of the City through 2050.
- GOAL 5.** To protect life and property from natural disasters and hazards.
- GOAL 6.** To promote energy conservation in all developments.
- GOAL 7.** To promote residential growth in order to create a more self-sustaining community.

(c) Policies**Historic and Cultural Resources**

1. The City shall encourage preservation of significant historical, archaeological, cultural and other areas of local significance, including structures, objects and sites.
2. The City shall cooperate and assist agencies, organizations or groups in preserving places of historic, cultural, or special significance to the Lowell area.
3. The City shall assume responsibility for maintenance of the Hyland Cemetery and shall consider acquiring the Cemetery and pursue designation as a "Pioneer Cemetery.
4. The City shall cooperate with Lane County to maintain the Lowell Covered Bridge as a Historic Site and Interpretive Center for the State's covered bridges and other significant resources.
5. The City shall support owners of historically significant structures in efforts to gain recognition on County, State or Federal historical registries and in obtaining available funding for maintaining such historically significant sites.

Environmental Quality

6. The City shall ensure that potential adverse environmental impacts from development proposals are mitigated as part of the City's project review approvals.
7. The City shall encourage quality in the design of places and buildings that is responsive to the needs of the people and the opportunities and constraints of the environment.

8. The City shall require protective conditions for natural drainage channels, wetlands, riparian areas and hillside vegetation as part of the City's project review approvals.
9. Landscaping shall be included as an integral part of site development standards.

Constrained Lands

10. The City shall enforce development standards and apply review procedures for identified constrained lands and shall require investigations and, if necessary, design and engineering plans for developments proposed for such lands.

Urban Growth Strategy

11. The City shall accommodate long-range urban population growth requirements consistent with Statewide Planning Goals.
12. The City shall encourage housing and employment opportunities consistent with the existing livability of the community.
13. The City shall provide for the orderly and economic provision of public facilities and services consistent with existing development patterns.
14. The City shall maximize efficiency of land uses within and on the fringe of the existing urban area in order to provide for orderly growth.
15. The City shall establish compatibility of proposed urban uses with adjacent rural activities and ensure a smooth transition from rural to urban uses.
16. The City shall maintain an adequate supply of land for each land use to insure competitive choices in the market place and reduce land costs.
17. The City shall encourage industrial and business developments that are compatible with the area's environmental assets and the livability of the community to help improve the economy of Lowell.
18. The City shall re-establish the Downtown Core Area as the City's centralized service commercial area.
19. The City shall provide buildable lands for residential use that are suitable, available and not subject to hazardous development limitations.
20. The City shall support and encourage planning and projects to provide affordable housing to families with children in support of increasing enrollment in the Lowell School System.
21. The City shall encourage a variety of housing types and densities and shall support innovative and creative housing methods and planning alternatives.

22. The City shall retain adequate open space and recreational areas consistent with the rural character and livability of the Lowell area.
23. The City shall initiate an Urban Reserve area as a reserve for future growth of the community and shall emphasize inclusion of large parcels free from significant development constraints.
24. The City shall review and update growth projections within 5 years and at least every 5 years thereafter and initiate an Urban Growth Boundary expansion at such time as those projections indicate a need for urban expansion to maintain a reasonable inventory of buildable land.

Energy

25. The City of Lowell shall encourage energy conservation measures and energy efficiency for all development proposals as part of its project review criteria.
26. The City shall support energy conservation and efficiency programs including:
 - a. Utilization of alternative energy sources including solar energy.
 - b. Energy efficient site development standards including solar orientation.
 - c. Utilization of the LEED Program (Leadership in Energy and Environmental Design), Green Building Guidelines and Sustainable Development.
27. The City shall support insulation and weatherization of existing homes and encourage energy conservation measures in new construction.

SECTION 9.990 COMPREHENSIVE PLAN MAPS INDEX

The following maps are incorporated into the Lowell Comprehensive Plan 2005:

9.990 A Comprehensive Plan Use & Zoning Districts

This map was updated and adopted with the 2005 Comprehensive Plan Revision.

9.990 B Master Road Plan Map

The Road Master Plan Map is dated October 1999 and is contained in the 1999 Update of the City of Lowell Master Road Plan

9.990 C Topographic Map

This Map is from the 1982 DLCD Acknowledge Comprehensive Plan and has not been reviewed or updated.

9.990 D Slopes Exceeding 15%

Attachment A, Ordinance 244

TC-108

11/15/05

This Map is from the 1982 DLCD Acknowledge Comprehensive Plan and has not been reviewed or updated.

9.990 E Soil Map

This Map is from the 1982 DLCD Acknowledge Comprehensive Plan and has not been reviewed or updated.

9.990 F Development Constraints Map

This Map is from the 1982 DLCD Acknowledge Comprehensive Plan and has not been reviewed or updated.

9.990 G Forest Productivity

This Map is from the 1982 DLCD Acknowledge Comprehensive Plan and has not been reviewed or updated.

9.990 H Agricultural Suitability

This Map is from the 1982 DLCD Acknowledge Comprehensive Plan and has not been reviewed or updated.

9.990 I Vegetation Map

This Map is from the 1982 DLCD Acknowledge Comprehensive Plan and has not been reviewed or updated.

9.990 J Drainage Map

This Map is from the 1982 DLCD Acknowledge Comprehensive Plan and has not been reviewed or updated.

9.990 K Floodplain Map

This Map is a copy of a portion of Flood Insurance Rate Map Number 41039C1695 F with an effective date of June 2, 1999.

9.990 L Area Public Lands Map

This Map is from the 1982 DLCD Acknowledge Comprehensive Plan and has not been reviewed or updated.

9.990 M Community Facilities Map

This Map is from the 1982 DLCD Acknowledge Comprehensive Plan and has not been reviewed or updated.

9.990 N Historic Map

This Map is from the 1982 DLCD Acknowledge Comprehensive Plan and has not been reviewed or updated.

9.990 O County/City UGB Management Agreement Area of Interest

This is a copy of the map attached to the Joint Agreement for Planning Coordination Between Lane County and the City of Lowell, signed by the City of Lowell on November 7, 2000. The map shows a section of Urban Growth Boundary (UGB) extending beyond the Lowell City Limits on the northeast side of the City for which no documentation of approval can be found in City records.