Oregon
Theodore R. Kulongoski, Governor

Department of Land Conservation and Development
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Salem, Oregon 97301-2524
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NOTICE OF ADOPTED AMENDMENT

October 20, 2006

TO: Subscribers to Notice of Adopted Plan
or Land Use Regulation Amendments

FROM: Mara Ulloa, Plan Amendment Program Specialist

SUBJECT: City of Medford Plan Amendment
DLCD File Number 006-06

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office. This amendment was submitted without a signed ordinance.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: November 1, 2006

This amendment was submitted to DLCD for review 45 days prior to adoption. Pursuant to ORS 197.830 (2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

***NOTE:** **THE APPEAL DEADLINE IS BASED UPON THE DATE THE DECISION WAS MAILED BY LOCAL GOVERNMENT. A DECISION MAY HAVE BEEN MAILED TO YOU ON A DIFFERENT DATE THAN IT WAS MAILED TO DLCD. AS A RESULT YOUR APPEAL DEADLINE MAY BE EARLIER THAN THE ABOVE DATE SPECIFIED.**

Cc: Gloria Gardiner, DLCD Urban Planning Specialist
John Renz, DLCD Regional Representative
Steven Santos, DLCD Economic Development Planning Specialist
Suzanne Myers, City of Medford

<paa> ya

FORM 2 Notice of Adoption

THIS FORM **MUST BE MAILED** TO DLCD
WITHIN 5 WORKING DAYS AFTER THE FINAL DECISION
PER ORS 197.610, OAR CHAPTER 660 - DIVISION 18

DEPT OF
OCT 13 2006
LAND CONSERVATION
AND DEVELOPMENT
STAMP
For DLCD Use Only

Jurisdiction: **Medford** Local file number: **CP-06-244**

Date of Adoption: **10/5/2006** Date Mailed: **10/10/2006**

Date original Notice of Proposed Amendment was mailed to DLCD: **8/11/2006**

- [x] Comprehensive Plan Text Amendment
- [ ] Comprehensive Plan Map Amendment
- [ ] Land Use Regulation Amendment
- [ ] Zoning Map Amendment
- [ ] New Land Use Regulation
- [ ] Other: _____

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached".

The City of Medford proposes to revise the Economic Element of its Comprehensive Plan. The purpose of the revision is to update the element with new information from two studies from 2003 and 2004 by E.D. Hovee regarding: inventory of vacant and underutilized land; target industries; site requirements; employment forecasts; and labor market factors.

Describe how the adopted amendment differs from the proposed amendment. If it is the same, write "SAME". If you did not give Notice for the Proposed Amendment, write "N/A".

SAME

Plan Map Changed from: **NA** to: **NA**

Zone Map Changed from: **NA** to: **NA**

Location: **NA** Acres Involved: **NA**

Specify Density: Previous: **NA** New: **NA**

Applicable Statewide Planning Goals: **1, 2, 9, 12, 14**

Was and Exception Adopted? ☐ YES ☒ NO

DLCD File No.: 006-06 (15457)

Did the Department of Land Conservation and Development receive a Notice of Proposed Amendment.....

Forty-five (45) days prior to first evidentiary hearing?	☒ **Yes**	☐ **No**
If no, do the statewide planning goals apply?	☐ **Yes**	☐ **No**
If no, did Emergency Circumstances require immediate adoption?	☐ **Yes**	☐ **No**

Affected State or Federal Agencies, Local Governments or Special Districts:

DLCD, OECDD

Local Contact: **Suzanne Myers** Phone: **(541) 774-2375** Extension:

Address: **200 S. Ivy** City: **Medford**

Zip Code + 4: **97501-3188** Email Address: Suzanne.Myers@cityofmedford.org

ADOPTION SUBMITTAL REQUIREMENTS

This form **must be mailed** to DLCD **within 5 working days after the final decision**
per ORS 197.610, OAR Chapter 660 - Division 18.

1. Send this Form and **TWO (2) Copies** of the Adopted Amendment to:

ATTENTION: PLAN AMENDMENT SPECIALIST
DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
635 CAPITOL STREET NE, SUITE 150
SALEM, OREGON 97301-2540

2. Submit **TWO (2) copies** the adopted material, if copies are bounded please submit **TWO (2) complete copies** of documents and maps.

3. Please Note: Adopted materials must be sent to DLCD not later than **FIVE (5) working days** following the date of the final decision on the amendment.

4. Submittal of this Notice of Adoption must include the text of the amendment plus adopted findings and supplementary information.

5. The deadline to appeal will not be extended if you submit this notice of adoption within five working days of the final decision. Appeals to LUBA may be filed within **TWENTY-ONE (21) days** of the date, the Notice of Adoption is sent to DLCD.

6. In addition to sending the Notice of Adoption to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.

7. **Need More Copies?** You can copy this form on to 8-1/2x11 green paper only; or call the DLCD Office at (503) 373-0050; or Fax your request to:(503) 378-5518; or Email your request to **mara.ulloa@state.or.us** - ATTENTION: PLAN AMENDMENT SPECIALIST.

Pls note:
As per DLCD's request, we made these changes to the first page.
LK

Proposed Revision
CITY OF MEDFORD
COMPREHENSIVE PLAN

ECONOMIC ELEMENT

Adopted _____

INTRODUCTION

The purpose of the "Economic Element" of the Medford Comprehensive Plan is to determine the City's economic goals and policies concerning commercial and industrial development within City limits and the Urban Growth Boundary.

An Economic Opportunities Analysis, which analyzes the past, present, and future economic opportunities for the City and surrounding region was prepared in 2003-2004 for the City by E.D. Hovee and Company. This analysis is contained in the *"Medford Economic Market Analysis"*, March 2003 and the *"Medford Commercial and Industrial Land Supply Goal 9 Supplement"*, December 2004, collectively referred to as the "Hovee Report". The Hovee Report is being ~~adopted~~ incorporated into the Medford Comprehensive Plan "Economic Element" by reference as Appendix A, and utilized to update and supplement the conclusions and policies of this document.

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Section I of the Element presents an economic history of the region. Section II provides an Economic Opportunities Analysis that includes: an analysis of significant national, state, and local trends; a forecast of employment and the demand for employment lands; and an inventory of vacant and underutilized lands. Section III presents an Assessment of Community Economic Development Potential. This section includes an analysis of Medford's competitive position and target industries. It examines the City's comparative advantages and disadvantages for economic development and reports on labor factors that influence current and future economic life. Hovee Report research and findings are integral to the update of this "Element". The final section, Section IV of the Economic Element, outlines the City's economic goals and policies that will guide the City through the twenty-year planning period (2004-2024).

This element is intended to satisfy the requirements of the Oregon Administrative Rules, Chapter 660, Division 9.

Proposed Revision

CITY OF MEDFORD
COMPREHENSIVE PLAN

ECONOMIC ELEMENT

Adopted October 5, 2006

INTRODUCTION

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I. ECONOMIC HISTORY

Medford's economic history is one highlighted by the search for gold, the development of major natural resource-based industries involving forest products and agriculture, and the evolution of the area as a major tourism center. As early as 1850, the settlement potential of the fertile land in the Rogue River Valley was recognized by the forty-niners on their way to the California gold fields. Soon thereafter, gold was discovered in Jackson County itself. The mining boom that resulted gave way eventually to the more stable economic bases of agriculture and lumber, which remain important elements in Medford's livelihood today.

One of the most exciting periods in Jackson County history was the gold mining boom. The area's "gold rush" lasted from 1850 to 1856. In 1851, the area's three houses provided residences for pilots of the ferryboats that carried early pioneers across the Rogue River. In 1852, gold placers were discovered. The settlers' population in the Valley numbered 28 in January 1852, but by March of that year had increased to 150. With the arrival of summer in 1852, the local population had soared to include 1,000 miners who were new residents of the Rogue Valley.

Jacksonville was the center of trade activity for the area's economy during this period. Prosperity that accompanied the gold rush was apparent. In 1884, a Wells Fargo agent testified to having forwarded $10,000,000 worth of gold from the company's Jacksonville office during the preceding two decades. He estimated that at least that much more had gone out of the area in other ways.

Meanwhile, some settlers began planting crops, and moved to take advantage of the bountiful resources of the surrounding timberlands. In 1852, the area's first lumber mill was built. By 1854, there were two flouring mills in operation, processing wheat and other grains planted by those hoping to make a living supplying the demand of the miners for basic staples.

In 1855, Jackson County was the most populous and wealthiest county in the region of the Oregon Territory that would, four years later, become a state. The "boom" prosperity brought by mining was destined to be short-lived, however. Marked declines in annual mining income and shipments were apparent as early as 1860. As miners left the area, the economy began to change. Without the market created by the miners residing in the area, the local demand for wheat fell. The farmers' markets deteriorated because of the lack of transportation to export goods to other markets on the West Coast. Farmers recognized that maintaining their incomes would require cultivation of higher-priced crops as the mining boom slowed. As a result, wheat was replaced by apple and pear orchards, many of which were planted in the following two decades.

By 1884, the Medford settlement had grown into a community of some note in the region. According to an account written that year, there were about 40 wooden buildings, and the foundations of a brick building "of considerable size" were laid. Up until this time, Jacksonville continued to serve as the trade center for the Rogue Valley. When the railroad came to southern Oregon, however, Jacksonville was bypassed. The decision was made to create a formally-established town at the middle ford of Bear Creek. The town was named by a railroad

engineer from Medford, Massachusetts. Thus, in 1884, the town of Medford was incorporated, although residents of Jacksonville continued to refer to their new neighbor as "Chaparral City." Medford was to become the outbound shipping point for the agricultural and forest products of the Rogue River Valley. During the next few years, the community began to take shape. By 1885, a school, a newspaper and a railroad station were in operation. In 1888, $5,000 worth of bonds was sold to finance a fire water main, sewerage, purchase of fire apparatus, and the construction of a reservoir.

Another boom in growth and development began in Medford in the "Gay Nineties" and lasted until the Depression. In 1890, 967 persons lived in the town. By 1906, nearly 3,000 people lived in what had become the home of many wealthy easterners eager to invest in pear orchards. The same year marked the first effort to secure an integrated irrigation system for the area. This, along with the completion of the Pacific and Redwood Highways, marked the direction Medford had taken after the gold boom ended.

In 1909, the Medford Commercial Club (forerunner of the Chamber of Commerce) published a brochure urging young men at universities on the East Coast to come west to a valley of fertile soil, beautiful scenery and wildlife, mountains with gold, copper and coal, and "a contented, progressive people." Farmers claimed to clear $500 - $1,500 an acre yearly. Meanwhile, families on their way to California were urged by Union Pacific men to first consider the Rogue River Valley.

With the completion of the Gold Ray Dam in 1903, the city's inhabitants were assured a reliable supply of electricity. Rogue River Electric merged with Siskiyou Power and Light in 1913 to become the predecessor to Pacific Power & Light. In 1910, Main Street was paved. Medford pears were bringing premium prices in the markets of New York and London. The many orchards planted in response to these prices caused a short-term oversupply of pears. More export markets were developed and pear farming flourished. The shipping of fruit, in turn, created a demand for wooden boxes, and the expanding population needed housing. Pine and fir mills were built to provide the needed lumber. In the early 1920s, lumber businessmen arrived from the south with established lumber manufacturing businesses. Among them was James Owen, who established the Owen-Oregon Lumber Company, the predecessor of the Medford Corporation.

The twenties roared in Medford as elsewhere. The population was nearly 11,000 by 1930, a 92 percent gain from the resident tally a decade earlier. In 1929, the 3,660 carloads of pears that were shipped represented more than a fourfold increase during the decade. A total of $12,000,000 worth of various products was shipped in 1929, including 4,000 carloads of lumber. By this time, 21 fruit packing and exporting firms and five modern cold storage plants were in operation. There were 11,700 acres of pear trees in the district that year, which accounted for four-fifths of the world's production capacity of Bosc pears.

The county seat had been moved to Medford from Jacksonville in 1926. An airport serving the City and Rogue Valley was completed in 1930, one of the first in the state. Medford was advertised in travel brochures as the heart of the southern Oregon recreation district, within a few hours' drive of Crater Lake, Diamond Lake, Crescent City, and numerous other tourist attractions. Throughout

the 1920s, the community prospered. Medford had four major banks with deposits of more than $7 million. The City also boasted five "modern" theaters, four with talking picture equipment. The town had established a reputation for being progressive, with plenty of diversions to attract both wealthy residents and tourists.

The lumber business did well during the post-World War I building boom of the early 20s, but construction activity had slowed by 1927. In addition, the premium prices of the past ten years had created more competition within the industry. Difficulties in maintaining and expanding markets were compounded by the stock market crash in 1929, which marked a sharp decline in the demand for housing. The fruit industry suffered as well during the Great Depression. Harry and David, one of the area's major fruit processors, rescued their operation in 1933 by creating a new market for their products with gift packages. This proved to be a lucrative solution. Harry and David is, to this day, world famous for its gift packages.

The onset of World War II brought another surge of prosperity and technology to the lumber industry. Several new factors began to affect the forest products business. By 1944, much of the lumber came from federal timber holdings. At the same time, railroad logging had become outdated and was supplanted by the increased use of logging trucks. The market for lumber continued to be strong after the war as the demand for housing, stifled during the war, rose. This demand, for the first time, exceeded supply - many areas had been over cut during the war. Despite short term difficulties, the lumber and wood products industry continued its dominance of the area's manufacturing sector.

Between 1940 and 1958, the population in Medford again doubled to more than 23,500. A brochure published by the Jackson County Chamber of Commerce in 1958 listed Medford's attributes as a growing city. Effective buying income in the City was $1,717 per capita, compared to a $1,601 state average. New construction projects were underway to remedy a slight housing shortage. Bank deposits totaled nearly $51 million and loans exceeded $22.7 million. The community was in a stage of development that would allow the business and commercial sector to establish the growth patterns that persist today.

During the 1960s, the lumber industry was forced to diversify its production base to more fully utilize the available timber. Plywood mills sprang up, and a growing volume of wood chips was exported to Japan. The emergence of new industries also began to influence the community during this time. Firms from the urban centers of California, the Mid-West, and the Atlantic seaboard states began to recognize that the Pacific Northwest offered a desirable "quality of life" and could still provide ready access to western markets. This attraction drew many new firms of varying size and production to the region. The Rogue Valley shared in this popularity and became a favorable locale for immigrants.

Tourism, strong on the heels of national prosperity, drew increasing numbers of visitors to the area. Completion of the Interstate through Medford in the mid 60s further enhanced this trend creating more jobs for local residents. Today, tourism continues as a key element of the economies of Medford and the Rogue Valley.

In the past, the commercial sector of the community's economy functioned mainly in support of the manufacturing and industrial sectors. This changed during the 1960s. As with the nation as a whole, rising incomes set the stage for a decade of growth in trade and commerce, particularly in the service industries. By 1970, Medford had established a solid position as the commercial center for the Rogue Valley, as well as a broader market area that reached into northern California and north toward the Willamette Valley.

By the end of the 1960s, the evolution of the area economy away from its historical roots was solidly underway. The wood products industry, however, again brought a boom to the area. This occurred as a result of low interest rates, which encouraged a strong long-term demand for housing nationwide. A forty percent growth in the population of Jackson County during the 1970s further fueled the demand for goods and services, but the nationwide recession that began in 1979, brought evidence that the area was still too heavily reliant on the timber industry. The early 80s saw a high unemployment rate, and people began to leave the area in search of jobs. Only continued growth in the retired population, drawn by the excellent health care services and quality of life, kept the area from losing population between 1979 and 1982.

From the 1980s to the present, Medford's service and retail trade sectors experienced substantial growth. The entire region has been transitioning to a commercial- and service-based economy. This transition has been fueled, in part, by the growth in population and Medford's growing role as a commercial, services and medical hub for a market of more than 500,000 people in northern California and southern Oregon.

II. ECONOMIC OPPORTUNITIES ANALYSIS

A. REVIEW OF NATIONAL, STATE, AND LOCAL TRENDS

1. Employment Trends

In both the United States and Oregon, the market share of jobs in the manufacturing sector (goods production) decreased substantially between 1980 and 1990. In the United States, it went from 22.5 percent to 17.4 percent, and in Oregon it went from 20.6 percent to 17.6 percent. There are two primary reasons for this trend. One is the availability of low wage production workers in foreign countries resulting in the exportation of jobs outside the country. A second reason for the decrease in the number of people employed in the manufacturing sector is the increased use of automation causing a decline in the number of workers required to supply the same product.

In Jackson County, the share of manufacturing jobs decreased slightly less than that for the Nation and the State between 1980 and 1990, with the most notable decrease in the category of Lumber and Wood manufacturing. As noted previously, this region has traditionally relied on the timber industry as a primary source of income for the area. The timber industry is, therefore, referred to as a "basic industry" or "income-generating" industry. The other sectors which primarily respond to the needs of the workers employed by the basic industry are referred to as "non-basic" industries. In the past, when the demand for one of the area's basic industries (such as lumber) fell nationally, the area generally saw a decline in activity in all non-basic sectors of the economy. This occurred because other sectors were dependent on the basic industry for income generation. A decline of this nature was particularly evident in the early 80s when interest rates rose, causing a slump in new home construction nationally, and a coinciding decrease in the demand for lumber.

As with other industries in the manufacturing sector, the trend toward automation has cut down on the number of workers employed by the timber industry through the years. More recently, however, the decline in the number of jobs in the timber industry has resulted from a decrease in the supply of federally-owned timber.

The reason there has not been an even greater decrease in the share of jobs in the manufacturing sector in Jackson County is that manufacturing industries outside of the primary timber industry have grown. There has been a shift towards the manufacture of secondary wood products, meaning that, rather than shipping raw logs out of the area for production of finished products, there has been an effort to produce more finished wood products locally. Other manufacturing industries in the Rogue Valley which grew notably during the 1980s were electronics-related industries producing scientific and measuring equipment, industries involved in printing and publishing, and fabricated metals and machinery production. These are all included in the categories "other non-durable" and "other durable," both of which increased slightly during the decade in Jackson County. Such was not the case statewide or nationally, however, as both the state and nation saw a decrease in all categories of manufacturing including the "other durable and non-durable" categories.

Service Sector. In the non-manufacturing (service producing) sector, there has been an increase in the market share of jobs nationally, statewide, and locally. The greatest contributor to the increase is the service category which includes personal, business, health, amusement and recreation, legal, social, educational, auto, and miscellaneous repair services, as well as hotels and other lodging places. The service sector employment increased its market share by 6.13 percent nationally, 5.34 percent statewide, and 4.58 percent in Jackson County. As a result, it has been said that the country is moving away from a manufacturing economy to that of a service economy.

Medford contributes a great deal to the increase in service sector employment in Jackson County due to the broad array of services that satisfy the needs of the regional population, particularly in the health services field. In 1990, 36 percent of all service jobs in Jackson County were in the health services field. In 2003, most of these jobs are related to the two major medical facilities in Medford, namely, the Rogue Valley Medical Center and Providence Hospital. The Rogue Valley Medical Center is the largest medical facility between Eugene and San Francisco and had 2,200 people on its staff in 2006. It is expected that the health services sector will continue to attract health professionals to the area in the future, as well as those within the region in need of their services.

Trade Sector. The second largest sector to show an increase in its market share for all three geographic areas was that of trade. This category includes both retail and wholesale trade. Here the market share increases were 1.01 percent nationally, 0.54 percent statewide, and 2.06 percent in Jackson County. A partial explanation for the notable increase in trade in Jackson County is the fact that throughout the 70s and 80s, Medford established itself as a regional commercial trade center, as well as a regional service center for a market area population of approximately 350,000 people. This market area includes all or parts of seven (7) counties in northern California and southern Oregon.

Prior to the development of the Rogue Valley Mall, leakage to other regional trade and service areas like Eugene, Portland, and, in some cases, the San Francisco area occurred. However, with the construction of the Rogue Valley Mall in 1986, the draw to Medford became even stronger as a big jump in retail employment and sales occurred in the valley. According to the 1987 Census of Retail Trade, Jackson County had more than one billion dollars worth of retail sales in 1987 and ranked third in the state for retail sales per resident. At $7,400 per person, Jackson County was 18 percent above the state's per capita retail sales figure of $6,253 per person.

Government Sector. During the 1980s, there was a decrease in the market share of government employment in all three geographic areas. In the United States, there was a drop of 1.37 percent. For Oregon the decrease was 1.6 percent, and in Jackson County the market share went from 21.72 percent to 17.47 percent for a decrease of 4.25 percent. While all three areas saw a decrease in market share of government employment, Jackson County experienced an actual decline in the total number of people employed in government jobs. It should be noted here that the government sector includes those employed in the public school system.

Much of the decrease in government programs during the 1980s was due to national policy. While a change in administration at the federal level may cause a reverse in this trend nationally, at the state and local level the market share of government employment is expected to level off, and possibly continue to decline. Jackson County employment is expected to decline, because one of the factors which caused the significant decrease in County government employment during the 80s is still in effect. That factor is, and will continue to be, a decrease in the Oregon and California Railroad (O and C) revenues upon which the County relies heavily for operating expenses. The O and C revenues come from an old agreement whereby a portion of the money from timber cut on land once owned by the Oregon and California Railroad, went back to the county in which the land was located. There was a drop in that revenue in the early 1980s when a recession caused a decrease in the amount of logging on federally owned land, and there has since been a gradual decrease in the funds coming from that revenue source, as the amount of timber available for harvest on those lands becomes scarcer.

Other Non-Manufacturing Sectors. For the nation, state, and county, the category of construction and mining decreased its market share slightly, while the overall employment in that category increased between 4 and 11 percent.

The market share in the category of Transportation/Communications/ Utilities decreased slightly in Oregon and the United States from 5.79 percent to 5.15 percent and from 5.97 percent to 5.32 percent, respectively. In Jackson County, however, the market share increased in that category for a total increase in the category's employment of 31 percent. According to the Oregon Employment Division, this increase was primarily due to an increase in the motor freight and broadcasting industries in Jackson County.

FIRE stands for finance, insurance, and real estate. In this category there was a decrease in the market share of employment for both the county and the state, while the nation saw an increase in the market share for that category. Certainly, this category has been affected by deregulation, and the savings and loan crisis.

2. Other Significant Trends Affecting Medford

The following three categories have had a significant effect on the economy of the Rogue Valley in the past. While none of the three were discussed earlier, a discussion of trends affecting the Rogue Valley would not be complete without mentioning them.

Agriculture. As discussed earlier, agriculture has long been an important basic industry in the Rogue Valley, particularly the growing of pears. In 1990, the Oregon State Extension Service estimated that 37 percent of the total gross farm sales in Jackson County were from tree fruits and nuts. That same year they estimated that in Jackson and Josephine County, there was a total of approximately 8,600 acres in orchards, with 90 percent devoted to the raising of pears. While this is substantially less than the 12,000 acres devoted to orchards after World War II in Jackson County alone, the pear industry continues to play an important role in the Rogue Valley economy.

Several of the pear packing plants are located in Medford. It is difficult to estimate the total economic impact of agriculture on the area's economy, as employment in this sector is highly seasonal. According to the Oregon Employment Division, the average employment in agriculture in 1990 was about 2000 for Jackson County. However, during harvest season, between mid-August and early-October there may have been as many as 3500 employees. Another method of determining the economic importance of the agricultural sector to the area's economy is to determine the amount of income generated from farm sales. According to the Oregon State University Extension Service Economist, the income multiplier would be two to two and one-half times the total gross farm sales. In other words, for every dollar of income generated by the sales of crops and livestock, another dollar to a dollar and one half is generated in other economic sectors. In 1990 the total gross farm sales figure for Jackson County was near 53 million dollars, with tree fruits and nuts sales making up nearly half of that total.

Tourism. Medford is surrounded by many recreational opportunities, which attract tourists to the area every year. The Rogue River is famous for its fishing and boating; and opportunities for skiing, fishing, swimming, boating, hiking, and snowmobiling abound in the area. In addition, the historic town of Jacksonville - home of the Britt Festival 5 miles to the west, and the Shakespeare Festival in Ashland located 15 miles south, are only two of the areas many cultural attractions.

The number of jobs created by an increase in the number of tourists visiting an area is generally counted in service and trade sectors of the economy. This makes it difficult to determine the market share of the number of jobs created as a result of tourism. according to the Visitors and Convention Bureau, Greater Medford Chamber of Commerce 1992-1993 Marketing Plan, "In 1990, tourism accounted for just under 4600 jobs in Jackson County," while a state tourism study indicated that in 1990, 2,438 jobs were created as a result of travel in Jackson County.

Another way to measure the impact of tourism on the local economy is to examine the growth in the transient occupancy tax revenue for the City of Medford. Revenue from this tax grew steadily from $508,697 in 1985-86 to $834,347 in 1990-91. This is a growth rate of approximately 10.6 percent per year. While some of the increase can be attributed to inflation, much of the increase can be attributed to an increase in visitors staying in lodging in the city. A second statistic that indicates that tourism to the area has been steadily increasing in recent years is the number of visitors to the Medford Visitors and Convention Bureau Information Center. In 1989, the center had 19,097 visitors. The center had 19,260 visitors in 1990 and 23,018 visitors in 1991. Since many of the attractions which bring visitors to the area are here to stay, it seems safe to assume that tourism will continue to be an important element of the area's economy.

Retirement. In the last decade, nationally, statewide, and locally there has been an increase in the number of retired people. This is partially a result of the fact that Americans are living longer. When they are no longer tied to a specific location for their livelihood, many retired people relocate to an area with a better quality of life and a lower cost of living. Medford's temperate climate and rural setting, well-developed health services sector, have caused it to become a sort of "Mecca" for the retired. Attracted originally by the area's numerous cultural and recreational opportunities,

many retirees have decided to make Medford their permanent home. Between 1990 and 2000, according to the Bureau of the Census, the over 65 population of the United States increased from 25,549,000 to 31,224,000; an increase of only 22 percent. While both are noteworthy increases, considering the general population of the United States increased by only 10 percent, the increase is particularly outstanding in Medford. As a result, Medford has been discussed by several major business magazines as a growing market for retirees. As the baby-boom generation (those born between 1945 and the early 1960s) ages, this trend is expected to continue to have an increasing effect on Medford.

Many of the retirees coming to the area are bringing income with them in the form of transfer payments, and a windfall from the sale of a home in a larger city where housing costs are much higher. This trend can have the same effect on the area as that of an expanding basic industry. Both bring income from outside the area into the local economy.

3. Conclusion

Medford, while still somewhat dependent on timber and agriculture, is moving away from its historical reliance on these two sectors for income generation. Instead, the area is becoming more dependent on services and trade as it has assumed the role of a regional trade and service center for northern California and southern Oregon. As a result of this shift, Medford is finding that more and more of the new jobs created in the area are in lower paying service and retail jobs, while many of the higher paying manufacturing jobs are being lost. Only jobs in the health services field have average earnings per job similar to that earned by those employed in the timber industry.

Service and trade jobs in a community are generally dependent on the size of the population that the area serves, and as such, are considered non-basic industry. The seven county area served by Medford is projected to grow in the future; therefore, it is predicted that employment in these non-basic sectors will grow.

Basic industry is industry that brings income to an area, and has traditionally relied on the natural resources of an area. In the past, primary basic industries in the Rogue Valley have been timber and agriculture. Due to decreases in the availability of the natural resources needed for these industries, as well as the availability of automation, employment in these sectors is declining. Tourists and retirees are expected to continue to bring income into the area; however, much of the money that is brought to the Valley is retained only in the form of minimum wage jobs, while the remainder goes out of the area to pay producers, distributors, and stockholders.

It has been a goal of the city to diversify and strengthen the mix of economic activity in the local marketplace and provide employment opportunities for local residents. If this is to continue to be a goal of the city, there will need to be more emphasis placed on encouraging basic industry, which is income-generating, value-adding, and higher-paying to expand and locate in the Valley. The country as a whole is seeing a decline in the number of manufacturing jobs, and as will be discussed in the section on site requirements, heavy industry moving to the valley is being drawn to the White City area. As a result, Medford will likely see its greatest success in attracting services, information-processing industry, and light manufacturing.

B. EMPLOYMENT FORECAST AND LAND DEMANDS

To arrive at future demands for employment lands, the Hovee Report (2004) uses a long-term average employment growth rate of 1.8% for Medford over the next twenty years. That employment growth rate is used to project growth under three different, potential employment mix scenarios. Assumptions about job density per acre are then used to determine the number of acres of land needed to provide for that job growth on commercial and industrial lands. Using this methodology, it is projected that Medford will have 16,200 new jobs by 2024.

Each of the three employment mixes assumes a 20-year Medford overall job target of an added 16,200 jobs. An "employment mix" is an assumption about how jobs will be distributed between commercial, industrial and "other" job categories. These mixes are explained below.

- **Current Mix.** This assumes employment growth occurs on lands according to employment distributions examined in the 2003 study. For example, 21% of Medford's employment was located on industrial land. Under this forecast scenario, commercial lands would accommodate 10,370 jobs, with 3,400 jobs allocated to industrial properties, and 2,430 to other lands (e.g., residential, agricultural, etc.).

- **Changing Share.** This forecast alternative presumes a focus on commercial development, and assumes that Medford's economy continues some transition toward a greater mix of commercial-related jobs, with a tightening of land use regulations that preserve industrial land for industrial-related jobs (i.e., manufacturing, distribution, wholesale, etc.). Allocations are consistent with growth trends observed from 1999 to 2004.

- **Industrial Land Focus.** This mix assumes that job creation on industrial properties will continue to occur at an annual rate of approximately 400 jobs per year. Commercial uses will still be permitted, but restricted to smaller, highly visible properties on parcels smaller than 5 acres. This forecast would result in a 50/50 mix of added jobs between commercial and industrial lands.

The Hovee Report recommends using the Changing Share mix to make projections. For purposes of comparison, the following charts present information on all three employment mix scenarios.

Table 1. Medford Job Growth Allocations by Land Type

	Land Type			
	Commercial	**Industrial**	**Other**	**Total**
20 Year Job Growth				16,200
Current Mix:				
Allocations	64%	21%	15%	100%
Added Jobs by Land Type	10,370	3,400	2,430	16,200
Changing Share:				
Allocations	75%	25%	0%	100%
Added Jobs by Land Type	12,150	4,050	0	16,200
Industrial Land Focus:				
Allocations	50%	50%	0%	100%
Added Jobs by Land Type	8,100	8,100	0	16,200

Source: E.D. Hovee & Company using information obtained from the City of Medford and Oregon Employment Department.

Each alternative employment mix forecast can be translated into a corresponding set of land demand projections by making assumptions about the "job density per acre" of the different job categories. Current employment densities specific to commercial and industrial lands are assumed to continue into the future. A job density of 18.7 jobs per acre is assumed for commercial lands; a density of 4.8 jobs per acre is assumed for industrial lands.

Per Table 2 below, the projected 20-year demand or need for commercial land ranges from 430 to 650 acres. Between 710 and 1,690 acres of industrial land would be required to meet future needs. These broad ranges come from the differences in the employment mix scenarios.

Specifically noted is that approximately 15% of the job allocation with the Current Mix scenario is to lands designated for uses other than industrial and commercial development – reflecting current development patterns. These "Other" uses include residential, agricultural, parks/schools, etc. Under the Current Mix scenario, 13,770 jobs (or 85% of the employment forecast) would be allocated to industrial and commercial use. With the other two scenarios, 100% of projected employment growth is allocated to industrial and commercial lands.

Table 2. Medford Employment Land Demand Forecasts (Commercial vs. Industrial)

	Land Type		
	Commercial	**Industrial**	**Total**
Employment Density (Jobs per Acre)	18.7	4.8	
Current Mix:			
Job Growth (2000-2020)	10,370	3,400	13,770
Land Demand (Acres)	555	708	1,263
Changing Share:			
Job Growth (2000-2020)	12,150	4,050	16,200
Land Demand (Acres)	650	844	1,494
Industrial Land Focus:			
Job Growth (2000-2020)	8,100	8,100	16,200
Land Demand (Acres)	433	1,688	2,121

Source: E.D. Hovee & Company, using information obtained from the City of Medford and Oregon Employment Department. Land needs are based on use rather than the designation of the land on which the employment actually occurs. To the extent that, for example, commercial use is encouraged or actually occurs on industrial land, the resulting zoning allocations between commercial/industrial could be shifted accordingly.

Total industrial and commercial land demand is minimized at 1,263 acres with the Current Mix – which assumes a continued pattern of some employment growth elsewhere, rather than industrial or commercial lands. Examples include schools, self-employed and expansion of otherwise non-conforming uses.

Total twenty-year land need would be greatest at 2,121 acres with the Industrial Land Focus. This assumes continued use of at least some industrial lands by commercial uses and/or much more active effort to increase industrial investment in the Medford area.

Summary of Employment Lands Forecast

To summarize the City's situation vis-à-vis land demand and supply, we rely on the numbers associated with the Changing Share Scenario. As stated earlier, this approach is recommended by the Hovee Report.

With respect to the supply of vacant employment land (both commercial and industrial) to meet future market demand, Medford may have just enough land *in the aggregate* to meet demands through 2020. In 2004, Medford had 1,640 acres (both industrial and commercial) of vacant employment properties. Under the Changing Share employment mix scenario, demand for industrial and commercial land over the next 20 years is estimated to be 1494 acres. Consequently, Medford could experience a potential surplus of 146 acres of employment lands.

Commercial. Medford has a limited supply of commercial land. With only 350 acres of unconstrained vacant commercial property in 2004, Medford is likely to experience a 300 acre deficit through 2020. The lack of commercial property will increase market pressure for commercial uses to locate on industrial lands.

In 2004, there were 210 acres of industrial land comprised of parcels less than 2.0 acres in size, and another 157.43 acres ranging from 2.0-4.99 acres in size. Medford could rezone a portion of these smaller sites for commercial uses to alleviate market demands in existing commercial areas. There is enough surplus vacant industrial land with the Current Mix and Changing Share scenarios to absorb the commercial deficit. However, if the City chose to pursue an industrial land focus strategy, Medford would have to consider other means to balance commercial demands with available lands (e.g., more focused development in commercial nodes, much greater utilization of downtown sites, etc.).

Industrial. Industrial land comprised almost 80% of Medford's vacant employment property in 2004. According to the Changing Share scenario, given a supply of 1,288 acres of industrial land and a demand of 844 acres, Medford will have a 444 acre surplus of industrial land during the 20-year period ending in 2020. This surplus could be applied to alleviate potential market pressures on commercial lands.

Table 3. Land Demand/Supply with Alternative Forecasts

Employment Lands*	Current Mix	Changing Share	Industrial Land Focus
Commercial Lands:			
Land Supply (acres)	349.71	349.71	349.71
Land Demand (acres)	555.00	650.00	433.00
Surplus (+)/Deficit (-)	- 205.29	- 300.29	- 83.29
Industrial Lands:			
Land Supply (acres)	1,287.77	1,287.77	1,287.77
Land Demand (acres)	708.00	844.00	1,688.00
Surplus (+)/Deficit (-)	579.77	443.77	- 400.23

***Note:** Includes the total of commercial and industrial lands. Land supply numbers are for unconstrained acreage per E.D. Hovee & Company July 22, 2004 memorandum.

Source: E.D. Hovee & Company.

C. SITE REQUIREMENTS

A site requirements analysis is essentially an analysis of the economic opportunities and trends projected in the Comprehensive Plan compared to the land use designations and sites available to accommodate those opportunities. Due to inventory and land use designation changes since the Economic Element was published in 1994, a new site requirements analysis was required. The Goal 9 Supplement prepared by Hovee (2004) provides a preliminary site requirements analysis based upon land use designation alternatives recommended By Hovee.

The following analysis describes the land needed to serve the target industry opportunities identified in Section III.A. of this element. It assumes that land use designations and permitted uses are held constant for each land use category during the next 20 years within the existing UGB. The target industry opportunities identified are compared to the site characteristics typically demanded by those target industries and the availability of those types of sites. The analysis also includes a more general analysis of site requirements for industries not identified as target industry opportunities.

In addition to determining supply adequacy, it is important to determine where land will be needed with that land use designation. Proper location of future commercial and industrial sites is important so that future land use patterns blend with current activities and public facilities are used efficiently.

1. Service Commercial Site Requirements

In evaluating the supply of Service Commercial (SC) sites, it is important to bear in mind that the only zone permitted in the SC land designation is C-S/P and that virtually all of the uses permitted in the C-S/P zone are permitted under all zones in the Commercial GLUP Map designation. What is more, many of the uses allowed in C-S/P are allowed in the light industrial (I-L) zone under the General Industrial GLUP designation. Thus, there is no absolute way of determining how much land is available for service commercial uses. Limiting the supply of service commercial land does not necessarily limit the amount of land available for service commercial uses.

Since most service commercial uses are permitted in other commercial zones, there is really no need to designate a minimum amount of service commercial land, but there must then be an adequate supply of commercial and service commercial land in total. The primary purpose for having the separate service commercial designation is to be able to designate some commercial development without the intensity normally associated with a commercial designation. This has been effective near the major medical centers where there is a desire to allow health services, and in decaying neighborhoods where the service commercial designation has been used as a redevelopment tool without causing too much disturbance to the nearby residences.

The table below evaluates the supply conditions for Target Industry Opportunities which may demand land under the Service Commercial land use designation.

Target Industries	**Demanded Site Amenities**	**Supply Conditions**
Retail Trade (Those permitted in C-S/P, and Non-professional Business Services, and Insurance Agents/Brokers.)	Customer accessibility, site visibility and transportation facility capacity and accessibility are important. Users seek high visibility spaces in large employment clusters.	Uses that site in Service Commercial areas tend to rely on the surrounding businesses for their customer base. Thus, land supplies for this category of ancillary activities can be expected to vary directly with supply conditions for the other uses which demand service commercial lands and the relative availability of commercial lands close to the principal uses that demand service commercial space.

Target Industries	Demanded Site Amenities	Supply Conditions
Community Branches for Banking, Security and Commodity, Real Estate, and Insurance Carriers, and Community Healthcare	Site visibility, transportation facility capacity and accessibility are important. Community branches are sensitive to household customer base proximity and community branches seek high visibility sites within community employment areas that usually include a mix of office and community retail.	Supply conditions for community branches appear constrained over both the short-term and the long-term, but less so over the long-term. There are lands planned as service commercial that will likely accommodate community branches in the future. These lands are mostly located in the Southeast Plan area and in the Hillcrest Orchard district. However, these are both developing areas and until additional households are added these sites are unlikely to serve short-term market demands. There are relatively few available sites in more centrally located areas of the city with sufficient existing households to support new community branches; land values in these areas are high.
Main Branch Offices for Banking, Security and Commodity, Real Estate, and Insurance Carriers, Healthcare	Site visibility, transportation facility capacity and accessibility are important. Main branches are sensitive to business client proximity. Main branches seek larger anchor locations in professional office clusters that are centrally located to serve the entire region.	New main branches tend to demand sites that are over one acre in size or at least a quarter city block downtown where buildings over three stories may be appropriate. There are very few vacant sites that could accommodate a new main branch in centrally located portions of the city with good proximity to business clients. Land values are high in these areas.

Target Industries	Demanded Site Amenities	Supply Conditions
Healthcare-Regional Facilities and Dependent Specialty Healthcare	These uses require large campus style sites of at least thirty acres. Because these sites become destinations unto themselves, accessibility from at least one high capacity transportation corridor is essential.	Medford contains two of the region's three hospitals. Dependent specialty healthcare uses have developed around these hospitals. RVMC has recently undergone an extensive upgrade and Providence Hospital is in the process of completing a similar upgrade. Based on future demographic conditions and these recent upgrades it appears unlikely a new regional hospital site will needed over the planning horizon. However, these campuses and adjacent lands are mostly built out. It is expected that additional specialty healthcare sites may be needed around the hospitals and that these high value uses may displace lower value uses around both hospitals and these displaced commercial uses will need alternative sites.
Professional Business Services, Legal Services, Communications, Transportation Services	These uses tend to seek Class A professional office space in a central location such as downtown or integrated into a large centrally located employment center.	Sites for these uses are constrained. Legal services are not allowed in the I-L zone and Professional Business Services may find many I-L zoned lands unsuitable. There are few new buildings downtown with modern design and amenities suitable for these uses. Redevelopment of downtown sites will usually require an alternative relocation site for the current user. There is a cluster of transportation services between the King Center and the Airport that is zoned I-L and has been developed as an office park.

The above table and analysis indicates supply deficiencies for several of the target industry opportunities where growth is projected. There are fewer in-fill opportunities for service commercial lands in central portions of the City than there were in 1993, but the City should still encourage the service commercial designation where there is the potential for in-fill. Through the addition of commercial and/or service commercial designations, the City will need to add lands to serve the target industry opportunities identified above.

2. Commercial Site Requirements

According to the inventory of commercial land projections in the Hovee Report, there is a projected deficit of commercial land within the urban growth boundary of 300 acres over the planning horizon. Designating more land than will actually be used in a planning period allows for choice in the market. The more vacant land there is available, the less incentive there will be

to redevelop underutilized existing areas. If less vacant land is available in a certain category, there will be more incentive to use land more efficiently and increase employment density. However, it may also inflate the cost of land in that category, possibly causing employers to locate elsewhere. Therefore, the proper supply of land to create a balance between these two considerations must be determined. The State of Oregon Goal 9 administrative rule requires cities to plan for a supply of commercial land to accommodate a twenty-year demand.

The Site Requirements section in the Economic Element adopted in 1994 addressed commercial land supplies in aggregate, but included recommendations to change the commercial zoning districts to better reflect different types of commercial land uses. The City of Medford now has five commercial zoning districts that reflect the unique commercial land demands for different types of commercial uses. The table below compares target industry opportunities with the supply conditions for those commercial uses.

Target Industries	**Demanded Site Amenities**	**Supply Conditions**
Transit	Transit is a unique use whose demands must be integrated with commercial and employment centers and nodes.	Transit is a use that demands lands that must be considered in the total acreage needed for all commercial uses.
Transportation Services, Communications, Banking, Security & Commodity, Real Estate, Insurance Carriers, Insurance Agents and Brokers, Business Services and Legal Services	These target industry opportunities were addressed under the section on Service Commercial site requirements. The demand for commercial site amenities is similar.	The supply of commercial lands for these uses is constrained. Values are high and there are relatively few suitable and available sites in the Commercial designation and the factors are similar to those discussed under the Service Commercial designation above.

Target Industries	Demanded Site Amenities	Supply Conditions
Regional Retail Trade	Regional retail trade uses sites of at least 15 acres and preferably 20 plus acres with excellent visibility from and access to high capacity transportation corridors such as I-5 and Highway 62. These uses usually cluster in large destination centers that attract consumers from a seven county region.	There are very few sites currently designated commercial for this type of end-user. There is a large site south of the Manor that has no access to a high capacity transportation corridor planned in the next 20 years. There are a few smaller sites near the airport that will serve short-term demand. The previous Economic Element identified the Heitkamp site for the City's future regional commercial needs for the time period from 2003 to 2013. This site has since been committed to a regional sports park facility and is no longer available as a regional commercial site. There are a few smaller sites still available in the South Gateway.
Community and Neighborhood Retail Trade	These neighborhood and community retailers seek highly visible sites with good access to collector and arterial streets in close proximity to the households they serve.	Through the Planned Unit Development ordinance and the planning of Transit-Oriented Development sites, etc., Medford has planned for future neighborhood and community commercial sites in East Medford. There may be a need for additional community and/or neighborhood commercial in southwest Medford where there are only a few small areas of older strip commercial along Stewart Avenue.
Specialty Retail Trade	These users tend to seek small spaces in modern and sophisticated commercial centers and in boutique downtown spaces.	These uses tend to be excellent candidates for adaptive reuse of underdeveloped areas. There are few sophisticated modern commercial centers that would work well for larger than average specialty retail trade activities. There are relatively few vacant buildings downtown ready for occupancy that could accommodate a larger specialty retailer.

Target Industries	Demanded Site Amenities	Supply Conditions
Heavy Commercial Uses	These uses seek sites that are large and located along arterials, collectors and State Highways. These uses tend to have large outdoor inventories and can coexist with industrial uses without land use conflicts.	The land available for these uses is constrained. Many of these uses are located in central areas of the City. Constraints in the supply of lands for regional commercial, professional office space, multi-family and commercial development have limited the availability of sites at an acceptable price.

A constrained commercial land base can be beneficial by supporting efficient commercial development patterns and encouraging redevelopment. However, if the base is overly constrained, efficiencies may not be achieved, due to a lack of options. Efficient development patterns are characterized by high job densities and improvements on highly valued acres of land. Medford, on the other hand, currently contains several low efficiency commercial uses in downtown core areas, a prime example being the many lots for new and used car sales.

3. General Industrial Site Requirements

The Hovee Report demonstrates that general industrial land is plentiful in Medford. This might be interpreted to suggest that its supply should be constrained in order to encourage more efficient use of the land. However, industrial uses are not always dependent on being conveniently close to large populations. Constraining the supply of industrial land, and consequently, inflating the cost of industrial land within the city, may have the effect of driving industrial uses out of the city. This may be particularly true in Medford's case. There are attractive industrial sites very close to the city, but within unincorporated areas, i.e., Whetstone Industrial Park and White City. Part of the attraction of those areas is that there are no city property taxes. The table below analyzes the target industry opportunities likely to demand lands under the General Industrial designation.

Target Industries	Demanded Site Amenities	Supply Conditions
Instruments, Electronic Equipment, Printing & Publishing	Convenient access to the airport, major transportation facilities, and modern telecommunications are important. These uses tend to seek modern industrial park sites.	There is an adequate supply of land for these uses in the aggregate. Some desirable sites may be experiencing land value pressures from the tight commercial land supply.

Target Industries	Demanded Site Amenities	Supply Conditions
Transit	Transit sometimes demands industrial space for maintenance yards and fueling stations.	There is an adequate supply of sites for this type of use.
Transportation Services, Real Estate, Security & Commodity, Insurance Carriers, Insurance Agents & Brokers, Business Services	These sites demand office space and may find suitable sites under the I-L zoning district, especially where I-L zoning is located near existing commercial clusters.	Much of the I-L land that is well suited to an office park development pattern has been built-out or is platted for such use. Even with I-L zoned lands, the land supply for office development is somewhat constrained.
Communications	Employment in the Communications category can demand both office space for call centers and administrative facilities and industrial lands for equipment, maintenance and materials. Proximity to high capacity telecommunications infrastructure is essential for call centers.	As with other uses that demand office space, the supply of suitable sites is somewhat constrained. For uses that demand industrial land an adequate supply exists.
Construction, Lumber & Wood, Stone, Glass & Concrete, Trucking & Warehousing, Electric, Gas & Sanitation, Food Products, Transportation Equipment, Wholesale Trade	The uses in these employment categories that seek sites in the General Industrial designation tend to demand parcels in the two to ten acre range. Access to regional transportation facilities is important especially for trucking, warehousing, and wholesale trade activities.	The supply of lands to accommodate these uses appears adequate, based on the Hovee Report. Uses seeking an industrial park setting may find that available sites are limited. Potential sites for these uses may be experiencing market pressures being exerted from commercial land shortages.

Target Industries	Demanded Site Amenities	Supply Conditions
Air Transportation	Direct access to the airfield is essential.	The Airport Master Plan includes provisions for the expansion of air transportation uses and there is considerable vacant acreage available. FAA regulations make conversion of the lands controlled by the Airport to alternative uses difficult, minimizing pressures from higher value land uses.

The primary reason for an industry to locate in the City of Medford is to gain access to city public safety services and other urban services, and to increase access to the airport, as well as to the I-5 corridor. Since industrial land within the city tends to be more expensive, the city will mainly attract industries which are less land intensive and able to utilize smaller parcels of land in the one to five acre size.

4. Heavy Industrial Site Requirements

While there are not many larger lots in the city, the need for Heavy Industrial appears to be minimal. Most of the truly heavy industrial uses require large lots over five acres in size. Those heavy industrial activities, such as Amy's Kitchen, that have recently surveyed the area for development potential have focused their efforts in the White City area. This is primarily due to the availability of large lots with a full array of services, proximity to other existing heavy industrial uses, and a lower tax rate. In addition, many of the industries identified as target industry opportunities in a previous section, are not heavy industrial in nature. It is not likely that large-scale heavy industrial uses will locate in the city within the twenty-year planning period. The supply of sites for target industry opportunities is provided in the table below.

Target Industries	Demanded Site Amenities	Supply Conditions
Instruments, Electronic Equipment, Printing & Publishing	Convenient access to the airport, major transportation facilities, and modern telecommunications are important.	There is an adequate supply of land for these uses in the aggregate. Some desirable sites may be experiencing land value pressures from the tight commercial land supply.
Communications	Employment in the communications category can demand industrial lands for equipment, maintenance and materials. Proximity to major telecommunications infrastructure is essential.	For uses that demand industrial land, an adequate supply exists.

Target Industries	Demanded Site Amenities	Supply Conditions
Construction, Lumber & Wood, Stone, Glass & Concrete, Trucking & Warehousing, Electric, Gas & Sanitation, Food Products, Transportation Equipment, Wholesale Trade	Uses in these employment categories that would seek sites in the I-G zoning designation tend to demand parcels in the two to ten acre range. Uses in these employment categories that would seek sites in the I-H zoning designation tend to demand parcels in the fifteen plus acre range Access to regional transportation facilities is important especially for trucking, warehousing, and wholesale trade activities.	The supply of lands to accommodate these uses appears adequate based on the Hovee Report. With the exception of Sabroso, most major heavy industrial uses in the Medford UGB have adjacent lands that are expected to be adequate for expansion purposes.

5. Summary

There needs to be a balance between constraining the amount of land available in a category in order to encourage efficient use of land, and providing enough land to encourage business to locate in the city. It is also important to locate commercial and industrial land so that the best use is made of public facilities. In the Service Commercial designation, there does not appear to be a need to designate a specific amount of land, since all the uses permitted in that land use designation are also permitted in the other commercial designations. As long as there is a sufficient supply of commercial land there will always be enough land for office uses. The industrial designations both have over a twenty year supply of serviceable land within the city's UGB. However, if Medford decides to constrain the supply of industrial land, it needs to consider that land in the city is already more expensive than that outside the city.

D. INVENTORY OF VACANT AND UNDERUTILIZED LANDS

By taking an inventory of vacant and underutilized lands designated for industrial or commercial purposes, the City understands its existing supply of employment lands. Comparing that with the projected demand for employment lands, the City can quantify the need for additional employment lands. Hovee (2004) presents a recommended inventory to be carried forward for Goal 9 economic needs analysis. This inventory: includes vacant lands and sites of less than one acre; adds downtown sites and redevelopment sites; excludes only the portion of the site constrained; provides parcel size information and featured a manual parcel data review to adjust environmental constraints. (For further details on the methodology used and how that compared to other inventories, refer to the report.) Table 4 below presents the inventory of vacant and underutilized properties in 2004 resulting from this methodology; portions of properties that are environmentally constrained are removed from the inventory.

Table 4. Vacant and Underutilized Properties, 2004

Parcel Size	Industrial	Commercial
< 0.50 acres	33.84	45.75
0.5 -0.99 acres	101.82	43.50
1.0 – 1.99 acres	73.49	52.80
2.0 – 4.99 acres	157.43	64.05
5.0 – 9.99 acres	70.27	57.64
10.0 – 14.99 acres	93.19	23.49
15+ acres	757.73	62.48
All Properties	1,287.77	349.71

Thus, this inventory identifies an estimated 350 acres of vacant and redevelopable commercial land and almost 1,288 acres of vacant and redevelopable industrial land. This represents a combined developable commercial/industrial land inventory of approximately 1,638 acres.

OAR 660-009-0015 requires additional, detailed information regarding commercial and industrial parcels. That information shall be produced and incorporated into the proposed complete update of this element. In the meantime, the Hovee Report did provide very useful information on commercial and industrial lands. This information is provided below under Commercial Land Characteristics and Industrial Land Characteristics.

1. Commercial Land Characteristics

Between 1994 and 2003, commercial land developed at 17 acres per year: fifteen and one-half acres for commercial uses, 0.70 acres for industrial, and one acre for other uses.

- Greatest demand has been experienced for 1-2 acre parcels (23%), followed by 2-5 acre (21%) properties and 15+ acre parcels (19%).
- Nearly two-thirds of Medford's employment base is located on commercial properties.
- Retail provides 39% and services employ another 36% of jobs on commercial lands; health care represents 54% of all service sector jobs on commercial lands.
- Average employment density is 18.7 jobs per acre.
- Just over one-fifth (448 acres) of commercial land was vacant in 2003. Sixty-one percent (or 274 acres) of vacant commercial lands have environmental constraints; 125 vacant acres are properties 10 acres or larger.
- Medford has no vacant commercial properties greater than 10 acres in size and only 65 vacant acres in 1-5 acre properties.
- In contrast with industrial property, most of the large commercially-zoned vacant parcels are situated on the south side of Medford. In addition, some central downtown properties may have redevelopment potential even though they are not currently vacant.

2. Industrial Land Characteristics

In 2003, industrial land was found to be developing at 29 acres per year; sixteen acres for industrial uses, eight acres for commercial, and five acres for other uses (i.e. airport hangars).

- Greatest demand has been experienced for properties 15 acres or larger, constituting 37% of demand. Properties 5 acres in size account for another 28% and 1-2 acre parcels captured 11%.
- Commercial development is occurring on properties less than 10 acres in size, developing 48% of the 1-5 acre properties.
- One in five jobs is located on industrial properties; over the last five years, approximately 380 net new jobs have been created annually on industrial lands.
- Job growth is fairly evenly distributed between industrial and commercial-related sectors.
- Average employment density is 4.8 jobs per acre.
- Thirty-six percent (1,230 acres) of Medford's industrial land is vacant.
- Sixty-two percent (or 766 acres) of vacant industrial lands have environmental constraints; 590 acres are properties 10 acres or larger.
- Medford has only five large sites ranging from 10-35 acres in size. Fifty-six percent of the industrial land base consists of properties less than five acres in size; at least one-half are likely to develop with commercial uses based on past trends.
- The bulk of the existing vacant industrial land inventory is situated on the north side of Medford.

III. ASSESSMENT OF ECONOMIC DEVELOPMENT POTENTIAL

A. COMPETITIVE POSITION AND TARGET INDUSTRIES

1. Jackson County's Competitive Advantages

Economic development opportunities available to Medford result in part from the area's overall competitiveness in attracting industries relative to other regions nationwide. (For the details of this analysis, refer to Hovee 2003.) Jackson County's competitive advantages were studied by applying a series of screening criteria to identified industry sectors. Five sets of screening criteria were developed:

1. Current and changing competitive position of the industry relative to the nation
2. Worker productivity and change in productivity over time
3. Percent of Output Value-Added (More than 50% is viewed as most desirable.)
4. Employment multiplier above 2.0, meaning that at least two jobs are supported in the local economy for every new job directly created within the employment sector in question.
5. Wage levels including changes over time relative to other industries in the local area

Nine industries met four of the five criteria. Taken together, one-fifth of the industrial sectors portrayed Jackson County as being strongly competitive. Industries meeting four or more criteria included:

Mining	Instruments
Construction	Trucking & Warehousing
Lumber & Wood	Security & Commodity
Stone, Glass & Concrete	Real Estate
Electronic Equipment	Health Care

2. Medford's Competitive Advantages

In 2003, firms located within Medford's UGA employed almost 37,900 workers. Services represented the largest sector providing 12,980 jobs, with health care workers accounting for 54% of all service-related jobs on commercial lands. The manufacturing sector had less than 2,800 employees, but had increased by 12.5% since 1995. This job growth occurred at a time when manufacturing jobs both countywide and nationally were in decline (-7.2% and -0.6% respectively).

Based on this analysis, Medford's employment opportunities can be divided into three tiers:

- Tier 1 represents industries for which Medford is in the best position to realize opportunities due to its current and growing competitive advantage relative to other areas nationwide.
- Tier 2 industries constitute employment sectors for which Medford has a current but eroding competitive position or sectors where Jackson County may be competitive but represents more of a challenge to Medford.
- Tier 3 comprises sectors for which Medford is competitive relative to Jackson County, but is not competitive outside the Southern Oregon region.

Tier 1 Best Position	Tier 2 Strong but Challenging	Tier 3 Locally Competitive
Instruments	Mining	Food Products
Transit	Construction	Transportation Equipment
Transportation Services	Lumber & Wood	Air Transportation
Communications	Printing & Publishing	Wholesale Trade
Retail Trade	Stone, Glass & Concrete	Insurance Carriers
Banking	Electronic Equipment	Insurance Agents & Brokers
	Trucking & Warehousing	Business Services
	Electric, Gas & Sanitation	Legal Services
	Security & Commodity	
	Real Estate	
	Health Care	

As noted, Tier 1 industries represent the best opportunities for economic growth and diversification. Tier 2 and 3 sectors also are recommended for consideration – but may require more local initiative to market the opportunities available. Both Tier 2 and 3 industries will be particularly affected by policies and strategies Medford employs to maintain a competitive industrial and commercial land base.

Within any marketplace, the combination and dynamic influence of various economic factors create a number of advantages and disadvantages relating to economic development potential. Broadly characterized as "comparative economic advantages," they are conditions, which distinguish the suitability of Medford's economy to provide for certain marketplace functions. For example, Medford is served by several key segments of the regional transportation network, namely, highway, rail and air transport. Thus, for economic activities that are dependent upon these services for the supply of materials and distribution of products, Medford has a comparative advantage over Roseburg, which lacks a major air transportation facility. "Comparative economic disadvantages," on the other hand, are conditions, which cause Medford to be less than suitable for certain marketplace functions. The valley's air inversion problem can be considered a disadvantage for the location of industries which emit large quantities of airborne pollutants.

B. COMPARATIVE ADVANTAGES

Additional factors pertinent to Medford's economic development potential are addressed below. This information is used to determine the city's comparative economic advantages and disadvantages to be considered when forming the city's economic goals and policies.

1. Location Relative to Markets

Medford is located halfway between Portland, approximately 300 miles to the north, and the Sacramento-San Francisco area, approximately 300 miles to the south. Medford's central location is an asset when locating manufacturing or warehouse/distribution centers to serve these major markets. An increase in the population and in economic activity in major urban centers along the Interstate 5 corridor will also create the need for industrial activities to locate in the Medford area in the future.

As mentioned earlier, Medford has become the regional commercial trade and service center for a market area population of approximately 500,000 people. The market area includes all or parts of seven (7) counties in northern California and southern Oregon. As a result, Medford has a well-developed, diversified mix of business and personal services able to provide the commercial infrastructure required by new firms likely to locate in the area.

2. Key Transportation Facilities

Medford offers easy accessibility to West Coast, including overseas, markets due to the availability of rail and air service, and a network of state and interstate highways. These transportation facilities will encourage industry or warehouse activity to locate in Medford in the future.

Interstate 5 is the major north-south highway that bisects Medford. There are interchanges located at the north and south ends of the City that serve as the primary access points. In addition, there are several other state highways, which feed into Medford from the north, east, and west.

The Rogue Valley International – Medford Airport is the primary airport serving Medford. The airport has a full range of facilities available to accommodate commercial, general, and corporate aviation needs. Runway lengths and weight capacities are adequate to handle heavy airfreight services, and several commercial commuter carriers operate and connect with major airports in other cities. The Airport has completed a master plan, outlining improvements and expansions to be completed through the year 2011.

Central Oregon and Pacific (CORP) Railroad has a main line through Medford for freight only, providing rail access over the Siskiyou Mountains; however, the small tunnels on that line do not accommodate the current size of many ocean-going containers. Larger containers coming from the south travel through Klamath Falls, north to Eugene, and then south into Medford.

Rail access is currently available to only a small number of vacant industrial lands, as much of the land bordering the railroad in Medford is already developed.

3. Key Public Facilities and Services

The "Public Facilities Element" of the *Medford Comprehensive Plan* provides for short, mid, and long range public facilities projects, including plans for sewer, water, storm drain, and transportation projects. To implement these plans, a five-year capital improvement project plan is maintained by the City of Medford as part of the annual budget process. While some of the

facilities may be planned and not be in place, development of public facilities projects can be accelerated to meet the needs of anticipated development. In some cases, extension and expansion of a public facility is the responsibility of the developer. Under these circumstances, the developer makes the improvement to correct the deficiency as a condition of development of the property. In addition, System Development Charges (SDC's) provide a means of paying for upgrading and maintaining these key public facilities.

In 1990, the City of Medford expanded its urban growth boundary. There were commercial and industrial properties included in this expansion. During the analysis of potential land to be included, there was a property-by-property evaluation of public facilities availability. Of the commercial and industrial lands included, no long term deficiencies were identified that would have prohibited inclusion into the boundary.

Currently, according to the City of Medford Engineering Department and Medford Water Commission, all land within the urban growth boundary designated for industrial and commercial development has the full spectrum of public facilities available, or can be served with minor extensions to existing facilities, except in the case of some of the city's collector and arterial streets.

The Oregon Department of Transportation (ODOT) completed improvements to the Interstate 5 North Medford Interchange in 2006 and began constructing a new South Medford Interchange in 2006, slated to be completed by 2009.

Adequate public facilities, as well as public services like police and fire protection, are necessary for orderly growth and development of commercial and industrial activities. The key public facilities as defined by OAR 660, Division 11 are: (1) Water; (2) Sanitary sewer; (3) Storm sewer; and (4) Transportation.

Water. The Medford Water Commission (MWC) provides domestic water service within the incorporated city limits of Medford. The Commission is governed by a five-member board created by the City of Medford's Charter, and given the same authority as the City Council in matters of water supply. Members are appointed by the mayor for rotating five-year terms. The primary source of MWC water is Big Butte Springs, which has a capacity of 26.4 million gallons per day, with the Rogue River supplying additional water (current treatment capacity is 45 million gallons per day) during high summer demand periods.

Water service cannot be extended to properties outside city limits under most circumstances. Service is provided to a limited number of customers beyond city limits, most of who are within four long-standing Water Districts. However, servicing of new districts is not allowed and existing districts cannot expand. MWC also sells water to the cities of Central Point, Eagle Point, Jacksonville, Phoenix and Talent, as well as to customers within the Unincorporated Community Boundary for White City.

The planning horizon for MWC is based on its Water System Facility Plan. This plan is updated periodically, with a major analysis and update underway in 2006, which will extend the planning

horizon to 2055. Major water facilities are planned well ahead of the time they are needed, with construction of storage facilities and other infrastructure coinciding with development of an area.

Wastewater Treatment and Collection. Wastewater from Medford's sanitary sewer collection system is treated at the Medford Regional Water Reclamation Facility (RWRF), operated by the City of Medford. The RWRF serves all of the cities in the Bear Creek Valley with the exception of Ashland, as well as the sewered unincorporated areas of the Bear Creek Valley and the City of Eagle Point. Current capacity is 20 million gallons per day average dry weather flow, and 80 million gallons per day peak wet weather flow. Funding for the RWRF comes from monthly user charges and system development charges, both of which are uniform throughout the region served. The City of Medford maintains a 20-year planning horizon for RWRF capacity expansion and plant upgrades. The most recent Facilities Plan was completed in 2000.

Wastewater collection is handled by the City of Medford for those sewers within the city, and by Rogue Valley Sewer Service (RVS) for all other communities and the sewered unincorporated areas of the Bear Creek Valley. A regional system of transmission lines operated by RVS carries the wastewater from the collection systems to the RWRF for treatment and disposal. The Medford collection system is funded through city-wide monthly user charges and system development charges. Funding for the regional interceptor system comes from regional monthly user charges and system development charges. In 2005, the City of Medford revised its Sanitary Sewer Master Plan for those sewers within the city. RVS recently completed a long range Interceptor Master Plan.

Storm Drainage. The City of Medford has a master drainage plan that covers an area outside current city limits and in some areas, outside the urban growth boundary. This storm drain master plan has identified areas that have sensitive drainage problems, and contains policies for dealing with them. A Storm Drainage Master Plan was last adopted in 1981 and an updated version is in the last stages of review in 2006. A Stormwater Management Plan has also been developed and is being considered for adoption.

Storm drainage facilities are available or can be made available at the time of development to virtually all vacant commercial and industrial lands in the city. All commercial and industrial projects within the urban growth boundary are reviewed by the City of Medford Engineering Division to ensure that capacity will be available at the time of development. As development occurs, user fees and systems development charges are used to finance new storm drains.

Transportation. The City of Medford has an adopted Street Classification Map, which is part of the Transportation System Plan (TSP) of the Public Facilities Element of the *Comprehensive Plan*. This map defines the location and classification of all major order streets that serve commercial and industrial properties. Arterial and collector street development is funded by a number of sources. A Systems Development Charge for streets, adopted in 1991, assesses developers for the impacts that their development will have on arterial and collector streets. The city, then, improves the street when traffic levels dictate. In cases where there is a need to immediately improve the street, the

developer may be required to make an improvement in lieu of assessment prior to beginning construction.

In addition to the assessment for new construction, there is a monthly fee charged on all properties within the city for street maintenance. The assessment is based upon the impact that the particular activity has in terms of trip generation.

While the above references a predictable funding stream for transportation facilities, some arterial and collector streets, and both Interstate-5 interchanges, have struggled to keep up with transportation needs due to the rapid rate of growth during the past twenty years, as well as difficulty in implementing new collector and arterial streets. For this reason, a prudent approach to development may be necessary for the next planning period until the street system is upgraded.

Access to public transit varies greatly and generally reflects the lack of intensive development of public transportation systems throughout the community. The Rogue Valley Transportation District (RVTD) is the local bus service, which serves Medford, as well as the neighboring cities of Ashland, Talent, Phoenix, Central Point, White City, and Jacksonville. Increasing residential and employment densities may provide incentive for increased development of facilities and routes.

Federal monies, namely the Surface Transportation Program (STP) and Congestion Mitigation Air Quality (CMAQ) funds, are available for transportation facilities other than highway improvements throughout the valley as a result of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users Act (SAFETEA-LU). The Metropolitan Planning Organization (MPO) has developed a Regional Transportation Plan (RTP), as required for the acquisition of federal funding.

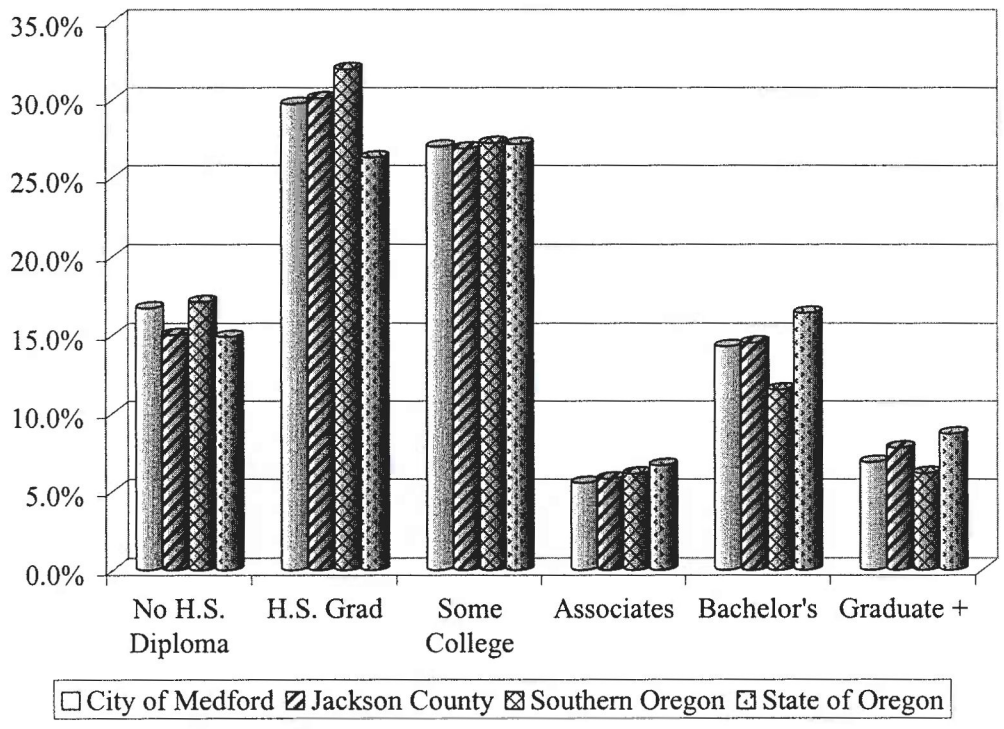
Police and Fire Protection. Police protection is available to all lands within the urban growth boundary. The Medford Police Department has a staff of 90, with an additional 12 in the central dispatch system. This radio communications section serves both police and fire, and uses a 911 emergency telephone system. The Jackson County Sheriff's Department serves unincorporated areas within Jackson County.

The Medford Fire Department covers an area of 42 square miles, part of which is on a contract basis to the Medford Rural Fire District. The Fire Department employs 68 firefighters and support personnel, and has four fire stations. Fire fighting equipment includes one ladder truck, one tender, 6 pumpers, a mini-pumper, a brush truck, and ten automobiles. Development of the water system in the urban area has been closely coordinated with proposed land development patterns, resulting in adequate fire flow capability throughout the community.

C. LABOR MARKET FACTORS

Educational Attainment. In 2000, a larger proportion of Southern Oregon residents (age 25 and older) had only a high school diploma, 32% region-wide versus 26% statewide. However, Medford and Jackson County were well represented within the higher education levels, with at least 55% having some college education compared to 59% statewide.

Graph 1. Education Attainment of Residents Age 25 and Older (2000)

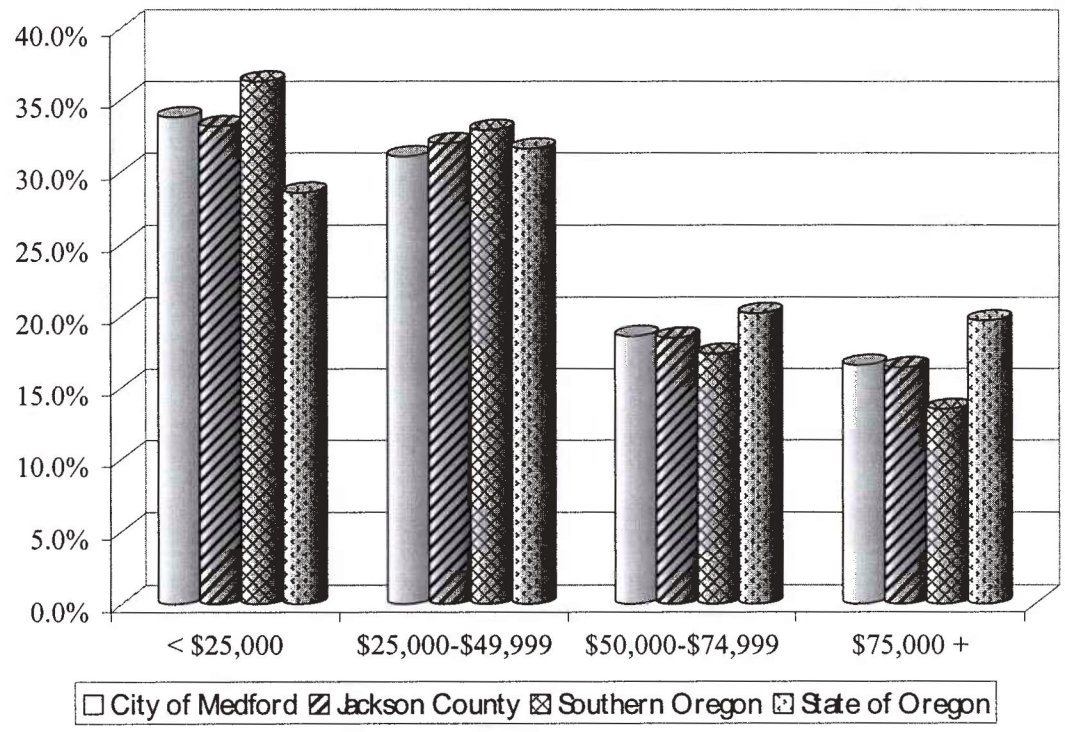


Source: U.S. Census Bureau.

Educational attainment of Medford and Jackson County residents compared favorably with the rest of the Southern Oregon region. This represents an economic development asset for marketing to new companies looking to locate in Medford and existing companies seeking to expand locally.

Household Income. In 2000, households in Medford and the Southern Oregon region tended to have lower incomes than residents statewide. Median income in Medford was $36,500 in 2000 compared to $40,900 statewide. Also, 65%-70% of households living in Medford/Southern Oregon had annual incomes below $50,000 versus 60% statewide. The lower incomes in Southern Oregon were primarily due to the presence of a significant senior population living on fixed incomes. Other factors include shrinkage of relatively high wage forest products employment, with shifts to service sector jobs and lower wage rates. This issue is discussed further in the competitive position section.

Graph 2. Household Income Distribution (2000)

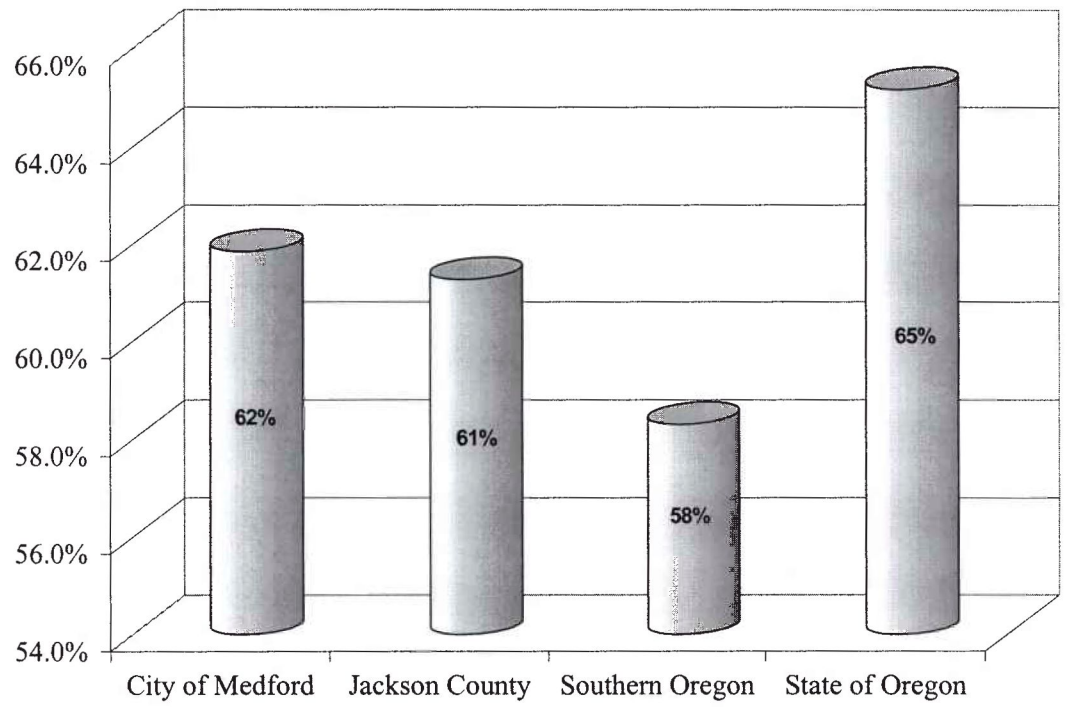


Source: U.S. Census Bureau.

Medford compared favorably to the entire Southern Oregon region with respect to the proportion of households earning $50,000 and above. This coordination of strong incomes with a younger demographic will continue to drive retail and service business opportunity in Medford.

Participation Rate. Labor force participation rates in 2000 were slightly lower locally and regionally than statewide. In Medford, 62% of residents age 16 and older (30,200) were in the labor force. By comparison, only 58% (or 193,000) participated region-wide versus 65% throughout the state of Oregon.

Graph 3. Labor Force Participation Rates (2000)



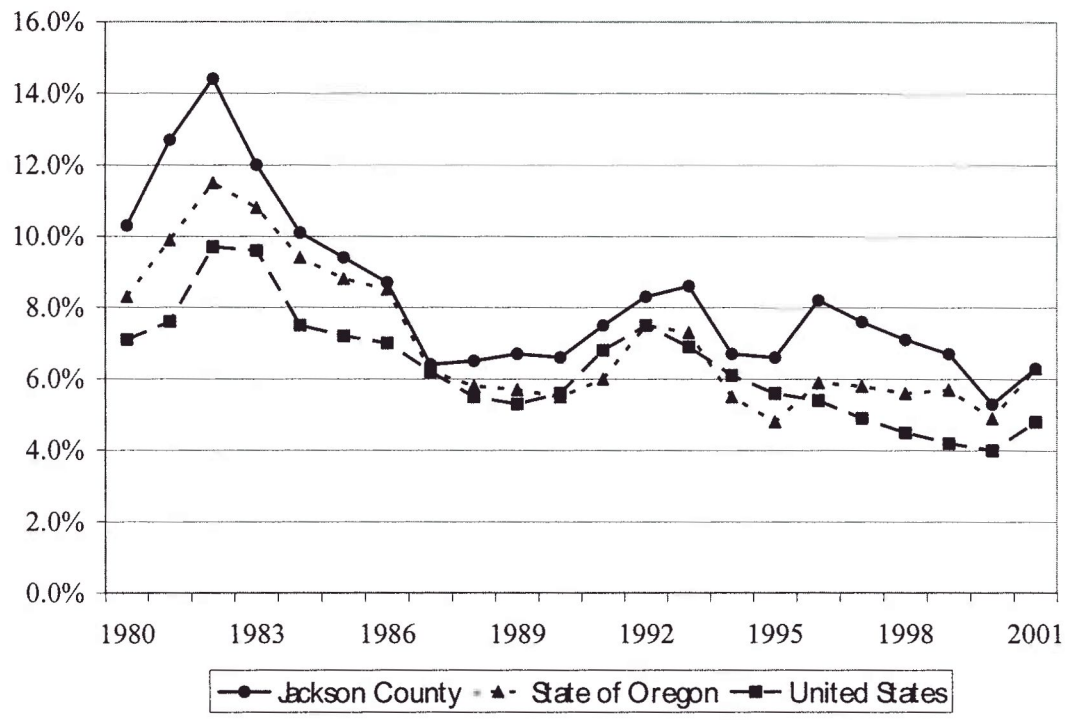
Note: Employment figures include workers covered and not-covered by unemployment insurance as well as self-employed. Adjustments were made to Medford using Jackson County data. Medford estimate for the city limits only.

Source: U.S. Census Bureau.

Lower participation rates reflected the presence of a large retired senior population. Another factor is unemployment which typically exceeds comparable statewide and national figures. However, a younger demographic in Medford could contribute to greater labor force participation rates in the years ahead.

Unemployment Rates. As of 2001, just over 6% of Jackson County's labor force was unemployed, up from 5% in 2000. Jackson County's unemployment rate had been declining since 1996, before the emergence of a recent national recession. However, unemployment rates were substantially lower than the 14% rate experienced during the last major recession in the early 1980s.

Graph 4. Average Annual Unemployment Rates (1980-2001)



Source: Oregon Employment Department.

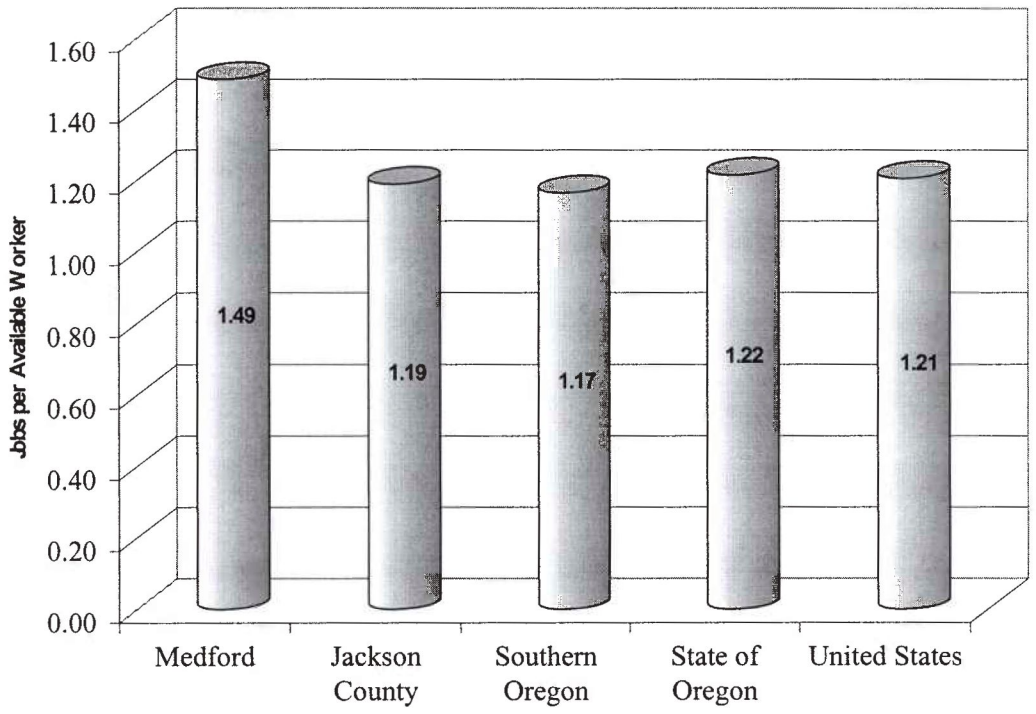
Of particular note is the observation that the gap between unemployment locally and statewide has been virtually erased. As of 2000, the unemployment rate for Jackson County was virtually identically with the rate statewide.

Jobs Balance. Communities statewide and across the nation are giving greater attention to improving their jobs balance to ensure adequate job opportunities are available for local residents and labor force. Two alternative measures are used to identify how well a community is performing relative to the region, state, or nation:

- Jobs per Available Worker. This is the number of jobs provided by local employers compared to the available supply of workers (local labor force). It measures how well a community provides jobs to local residents seeking work.
- Jobs-Housing. This is the ratio of local job opportunities per housing unit. This can also be used to assess job creation relative to residential growth.

Jobs per Available Worker. Medford serves as Southern Oregon's major employment hub. In 2000, Medford employers provided nearly 1.5 jobs per resident actively participating in the local labor force, substantially higher than regional, state, and national rates. (According to data provided by the Oregon Employment Department (OED), the City had 31,976 jobs within its city limits as of Year 2000. Adjusting OED data to include corporate officers, family workers, and proprietors brings the total employment estimate to 45,059. Adjustments were made by applying the ratio of Jackson County's BEA (U.S. Bureau of Economic Analysis) total employment estimate to OED covered employment estimates. The entire Southern Oregon region appears to be in-balance with state and national averages, further evidence that Medford serves as a regional jobs center.

Graph 5. Jobs per Available Worker (2000)

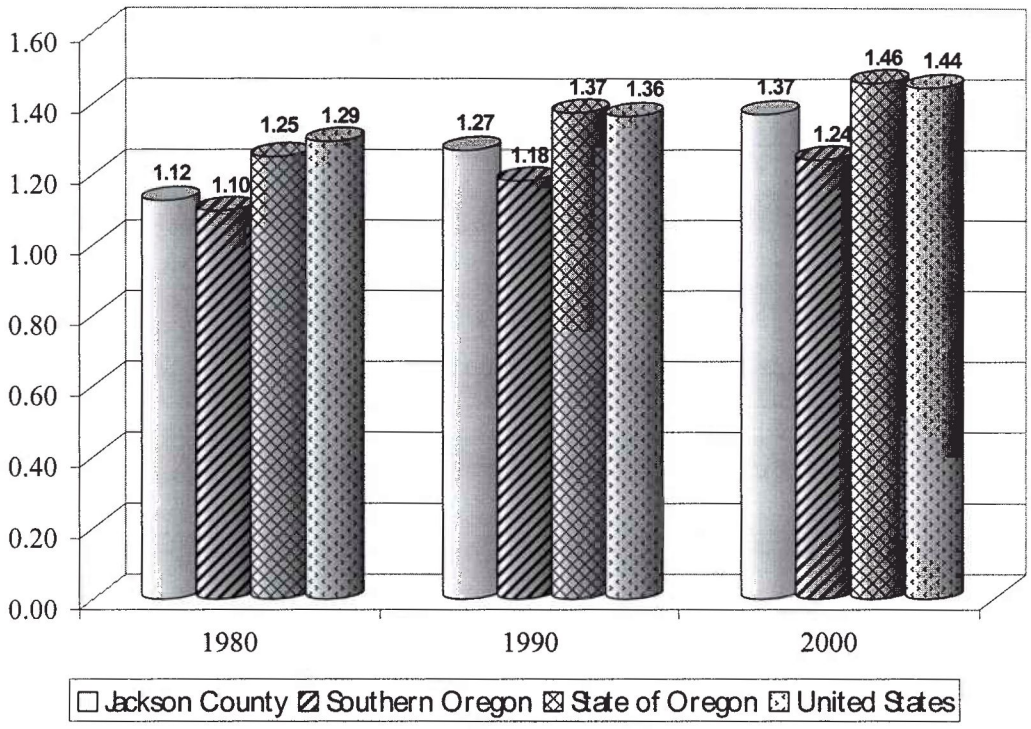


Source: U.S. Census Bureau and U.S. Bureau of Economic Analysis.

In effect, Medford is a net importer of labor force – from elsewhere in Jackson County and the Southern Oregon region. An important question for the community's future relates to the extent to which Medford retains or further strengthens this role – both as an industrial and commercial regional center.

Jobs-Housing. Nationally, the ratio of jobs to housing balance increasing between 1980 and 2000. In 1980, the U.S. jobs-housing ratio was 1.29, increasing to 1.44 by 2000. The main reason for the improved jobs-housing ratio was the increasing labor force participation including more double income households. Note: Medford's job-housing balance in 2000 was 1.49.

Graph 6. Jobs-Housing Balance (1980-2000)



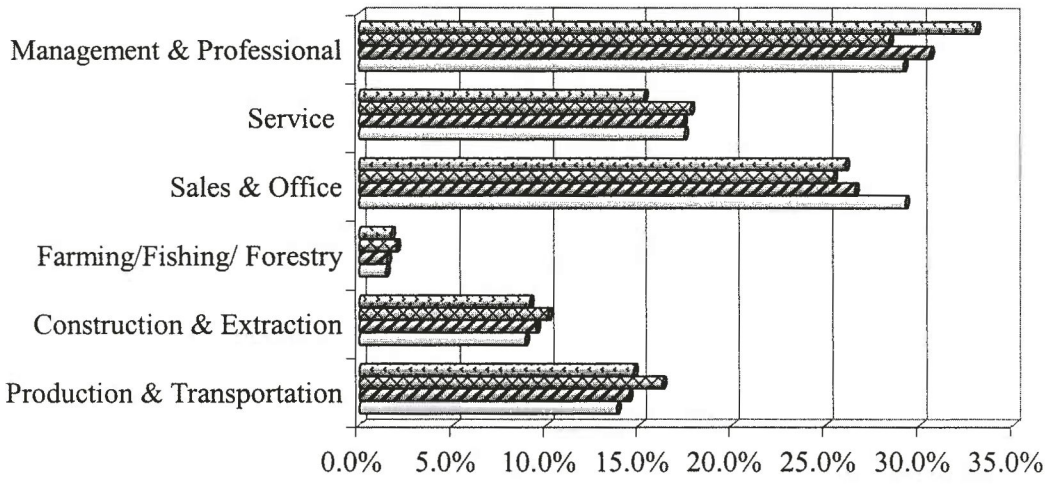
Source: U.S. Census Bureau and U.S. Bureau of Economic Analysis.

Region-wide, job growth has outpaced housing development. This is evident when examining the region's jobs-housing balance, as the number of jobs per housing unit increased consistently from 1980-2000. In 1980, the region's jobs-housing ratio was 1.10 jobs per housing unit increasing to 1.24 by year 2000. This also signals that the region is becoming more job rich. However, Medford's jobs-housing balance remains somewhat low as a result of having a large retired senior population.

Occupation Mix. The term occupation mix denotes the diversity of employment, by type of occupation in which a worker is employed. This discussion focuses on resident occupations and occupation balance.

Occupations of Residents. The occupations of Medford residents are essentially driven by local employment opportunities. In 2000, a high proportion (47%) of residents was employed in service, sales, and office occupations, as compared to statewide (41%). In contrast, Medford had a slightly lower representation (29%) in management and professional occupations (versus 33% statewide). The residential occupation mix region-wide has been geared more toward blue-collar jobs. Over one-fourth (26%) of Southern Oregon residents were employed in construction, extraction, production, and transportation occupations. In contrast, only 23% of Medford and 24% of statewide residents were employed in these same occupations.

Graph 7. Resident Occupation Mix (2000)



Source: U.S. Census Bureau.

The labor force that resides in Medford is particularly strongly represented in sales and office and service occupations compared to the rest of the county, state or region.

Occupation Balance. In 2000, the Southern Oregon economy appeared to present a number of occupational mismatches. The workforce appeared to supply a higher proportion of management and professional workers than area employers required, meaning the region exported these professions to other communities. The limited local employment opportunities for these occupations also contributed to the region's under-representation as compared to statewide.

Table 5. Occupational Profile by Place of Work and Residence (2000)

	Southern Oregon*	
Occupation	Workplace	Resident
Management & Professional	23.3%	28.4%
Service	17.4%	17.8%
Sales & Office	26.5%	25.3%
Farming/Fishing/Forestry	4.5%	2.1%
Blue-Collar	28.3%	26.3%
All Occupations	100.0%	100.0%

Note: The geographic definition of Southern Oregon is expanded to include Lake County due to data limitations.

Source: U.S. Census Bureau and Oregon Employment Department.

While the Southern Oregon region oversupplied management and professional workers, local employers had a greater demand for farming/fishing/forestry and blue-collar jobs. This often forces area employers to import workers from outside the region to fill these positions. This significant demand has led to the region's over-representation in these occupations.

D. MATERIALS, LAND AND ENERGY AVAILABILITY AND COST

In the past, major manufacturing in Jackson County has depended on a predictable and adequate supply of timber. Recent events have raised serious doubt as to the future of the timber industry's vitality due to the limited federal timber supply. Future wood products emphasis may need to be directed towards development of alternative processing of raw timber products that are not currently considered viable, such as plywood and particleboard manufacturing. As the supply of logs decreases, even production of these products will be limited. In some areas an effort is already underway to transform some of the primary wood products manufacturers into secondary wood products manufacturers to create new jobs for displaced workers from the primary wood products sectors. More movement in that direction may encourage an economically wiser use of the area's most dominant raw materials.

In a preceding section there was an inventory of commercial and industrial land. While having an adequate supply of land in each of these use categories is certainly important to the city's economic well-being, land available for agriculture adjacent to the city is also important to the city's economy, since agriculture supplies income-generating jobs to the region. As the City grows, the most easily and inexpensively developed land is in the flat valley bottom. This is also the land that is the most valuable for agricultural uses. The state's Land Conservation and Development Commission has recognized this conflict between the need for land for urbanization and the economic benefit of maintaining agricultural land with the Statewide Planning Goals. Goal 3 requires that localities preserve and maintain agricultural land, while Goal 14 is to provide for an orderly and efficient transition from rural to urban land use. Before making any major decisions concerning land use, and particularly when designating new land for urbanization, the city must determine that every effort has been made to preserve valuable agricultural land.

In the inventory of industrial lands, it was indicated that there is a 35.5-year supply of industrial land in the city. Since the state only requires that the city maintain a 5-year supply of zoned and serviceable industrial land, it might appear that the city has too much vacant industrial land. If that is the case, the law of supply and demand would indicate that industrial land should be very inexpensive in the city. However, according to a survey recently completed by the Oregon Economic Development Department that compares the price and quality of industrial land in Medford to that of other cities in Oregon, the price of much of the industrial land in the city of Medford is very expensive, sometimes double the price of comparable land in other cities. According to Southern Oregon Regional Economic Development, Inc. and Oregon Economic Development Department, the high price of industrial land in the city has made it very difficult to attract industrial development to Medford.

This certainly puts a constraint on industrial development in the city. A field survey of the city's industrial sites, completed in January 1994, indicated that there was indeed an adequate supply of industrial land in the city. A factor other than the supply must be playing a role in inflating the price of the land.

In the past the city has based many decisions on the understanding that the city had an almost excessive supply of industrial land; therefore, there was never a feeling that the supply needed to be maintained. This, along with industrial landowners' enthusiastic encouragement, made it easy to re-designate industrial land to commercial land, which generally commands a higher price. In addition, the City's Land Development Code permits many commercial uses in industrial zones. These policies are effectively allowing at least some of the city's industrial land to function as commercial land, and the price of the industrial land probably reflects this. If this is a valid conclusion, and the city wants to remove this constraint on industrial development, these policies must be changed.

Future development will not be constrained by the lack of adequate energy. Medford has access to an adequate supply of electricity and natural gas, both of which are considered relatively inexpensive as compared to the rest of the country. In addition, the mild climate does not warrant substantial investment in heating and cooling systems. There is a high potential for solar energy utilization, and there has been interest in the conversion of wood products waste material to energy during the past decade.

E. NECESSARY SUPPORT ORGANIZATIONS

A number of organizations provide a medley of support services that relate to commercial and industrial development.

The City has established an Economic Development Office to provide retention and expansion assistance to the local community, as well as support for new business locations. This Office provides one point of contact for development issues and inquiries.

Southern Oregon Regional Economic Development Incorporated (SOREDI) is a non-profit organization formed in 1987 as a two-county organization (Jackson and Josephine) to cooperatively promote economic development activities. SOREDI is funded by local private and public monies. It is staffed by a director and a small support staff. There is a board of directors that is responsible for policy development. The director coordinates, implements, and responds to the board of directors' marketing plan and organization "mission" for economic development activities.

Southern Oregon State College Small Business Development Center is also an active participant in economic development. Its primary mission is to counsel prospective and established business owners for the purposes of enhancing business efficiency and expansion. In addition to counseling, the center directs clients to other agencies as required.

The Medford Urban Renewal Agency was formed in 1988 for the purpose of revitalizing the downtown core area. The urban renewal area includes about 577 acres. The renewal agency's functions include promoting development of a 92 acre site at the south Interstate 5 interchange and redevelopment of the downtown core area. In the past, the downtown, as is true in so many older, cities has not been in a competitive posture relative to newer shopping centers and malls, which offer ample parking and shelter from the elements. The Medford Urban Renewal Agency is focusing upon the functional deficiencies of the renewal area as they relate to opportunities for development and redevelopment.

The Medford Chamber of Commerce is a community organization whose mission is to promote growth and prosperity of community commercial and industrial endeavors. The Chamber of Commerce is active in a variety of community affairs ranging from commercial development to tourism. They are called upon by local government agencies frequently to participate in community development issues and policy making. The Chamber is primarily composed of community business owners.

F. POLLUTION CONTROL REQUIREMENTS

Future industrial development may be constrained by the inability of the city's air shed to tolerate additional air pollution. Medford is within a "non-attainment area," a geographical area designated by the state as not meeting federal ambient air quality standards. The problem is particularly severe in the winter months when there is a strong tendency toward temperature inversions, which trap stagnant air in the valley. Carbon monoxide and particulate matter under 10 microns in size (PM10) are the two pollutants targeted by health officials for adversely impacting public health in the valley.

A primary source of PM10 is residential wood stoves. The state, together with the City of Medford and the Housing Authority of Jackson County, have participated in a wood stove replacement program for the purposes of replacing inefficient wood stoves with state certified stoves with lower particulate emissions. In addition, Medford, as well as several other communities in the Rogue Valley, has instituted a mandatory wood burning advisory program. The purpose of this program is to curtail wood stove use on days when the air quality in the valley is or is expected to be unhealthful.

A second major contributor to particulate pollution is industry, primarily wood products processors. The Department of Environmental Quality has instituted a program that requires industrial activities to upgrade pollution control devices as required by the amendments to the 1990 Clean Air Act. These pollution control requirements apply nationwide; therefore, there is no relative additional cost to industry in Jackson County. Even though pollution by these industries has been reduced, the air shed cannot tolerate additional emissions; therefore, any new industry coming into the area, which emits over 5 tons/year of particulate matter, must find a way to offset the emissions.

The main cause of the valley's unhealthful levels of carbon monoxide is car exhaust. As a result, carbon monoxide emissions are monitored for all motor vehicles registered within the Air Quality Maintenance Area (AQMA) of which the city is a part. An Inspection and Maintenance Program (I/M), which tests vehicles for emissions prior to registration, is administered by the state.

Stream flow and ground water pollutants are not as problematic in the city as in other parts of the county. In any event, the Department of Environmental Quality enforces state and federal laws to ensure that acceptable recognized levels of pollution are not exceeded. Since effluent guidelines are set by the federal government, the only additional relative costs to an industry locating in Jackson County would be those associated with sewer system pretreatment standards set by the local municipality.

G. EDUCATIONAL AND TECHNICAL TRAINING PROGRAMS

Several institutions located in and around Medford provide educational and skills training: Southern Oregon University, and Rogue Community College.

Rogue Community College (RCC) is an active vocational institution located in Medford and Grants Pass. RCC offers over 50 different two-year degree and one-year certificate programs. Vocational programs at RCC include training in art, automotive technology, accounting, business, computer science, criminal justice, electronics, nursing, office administration, manufacturing, and human services.

Southern Oregon State University (SOU) is located in Ashland, about 15 miles south of Medford. SOU is a liberal arts institution. The seven schools span a wide range of disciplines and include 28 departments and 35-degree programs at the undergraduate and graduate levels including the M.B.A., M.S. in education and M.A. in liberal arts. The School of Fine and Performing Arts includes the departments of art, music, and theater arts. The Schneider Museum of Art is also a center for the southern Oregon arts community.

The SOU Division of Continuing Education is designed to meet the demand for a lifelong learning program, including continuing professional education. The program is divided into five broad categories: off-campus programs (credit courses), non-credit programs, personal enrichment activities, conferences, institutes and international studies. Many of these programs are offered in the Mary Phipps Center located in Medford.

There are several organizations whose primary mission is to assess workers' skills and occupational preferences, and then coordinate with the appropriate educational institution for placement in the area. One such organization is the Job Council. The Community Response Team is a coordinated effort of the Job Council, Rogue Community College, and the State Employment Division whose main goal is to place workers in new industries or with new employers that are locating in the area. In the case of business failure, the Community Response Team attempts to either place workers in other jobs or direct them to training programs. The Job Council is also active in a vocational rehabilitation program whose primary purpose is to mainstream mildly disabled people in the work

place. The Jobs Advisory Board is formed by members from the State Adult and Family Services Division, Rogue Community College, and the State Employment Division for the purpose of placing welfare recipients.

H. SUMMARY

Based on the analysis in the preceding sections, Medford's comparative advantages that will influence future options for economic development include:

- Several locational factors offer excellent opportunities to expand service, commercial, and industrial development in the future. These include: Medford's location halfway between two major metropolitan areas (Portland and San Francisco), its proximity to the I-5 corridor, and its location relative to the southern Oregon-northern California market area.

- A well-developed transportation network that provides good freight access to West Coast markets, an air transport facility capable of handling heavy jet air transport and a rail system (for heavy equipment or bulk shipments) that can merge with mainline shipment routes with a one-day layover.

- A mild climate that does not require substantial investment for industrial heating and cooling facilities, good accessibility to electric and natural gas energy supplies, and high potential for solar energy utilization and waste-to-energy production.

- Good accessibility to public facilities (water, sewerage, and police and fire protection) required to support commercial and industrial development.

- A well-developed, diversified mix of business and personal services providing the commercial infrastructure required by new firms likely to locate in the area.

- A local labor force that is comprised of workers with a diverse skill mix, ranging from professional and technical, to operative and blue-collar occupations.

Constraints upon economic development are the counterpart to the community's advantages identified above. Among the most significant constraints that are presently impacting economic development options in the community are:

- Weakness in parts of the city transportation network. Some arterial and collector streets are near capacity. North-south connectivity needs to be improved.

- Air inversion problems in the valley that restrict the air shed's ability to tolerate additional air pollution.

- Traditional dependence upon a narrow resource-based industrial market as a key source of economic activity in the community.

- A limited number of technical training programs for retraining displaced industrial workers who are accustomed to earning relatively high wages.

- Relatively high-priced industrial land.

IV. ECONOMIC ELEMENT CONCLUSIONS, GOALS, AND POLICIES

A. CONCLUSIONS

1. The City of Medford, like the nation as a whole, is experiencing a shift away from industrial development toward service and trade development.

2. The majority of service and trade jobs in Jackson County tend to pay much less than the manufacturing jobs.

3. The inventory of vacant and underutilized employment land identifies 350 acres of vacant and underutilized commercial land and 1,288 acres of vacant and underutilized industrial land. This represents a combined commercial/industrial land inventory of 1,638 acres.

4. Using the recommended land demand scenario predicated on a changing share methodology with some continued shift from industrial to commercial use, demand for commercial land is projected at 650 acres over the 20-year period with demand for industrial land projected at 844 acres. This results in a combined commercial/industrial land need of 1,494 acres.

5. Based on the recommended employment forecast, a deficit of 300 acres of commercial land and a surplus of 844 acres of industrial land is projected for the 20-year period.

6. The major constraints on economic development in the City are: (1) The inability of the valley's airshed to tolerate additional pollution; (2) The over-burdened street system; 3) The increasing number of unemployed persons with job skills that do not match those required by new employers; and (4) The relatively expensive industrial land in Medford compared to that in other cities in Oregon.

B. GOALS AND POLICIES

GOAL 1: TO AGGRESSIVELY STIMULATE ECONOMIC DEVELOPMENT AND GROWTH THAT WILL DIVERSIFY AND STRENGTHEN THE MIX OF ECONOMIC ACTIVITY IN THE LOCAL MARKETPLACE AND PROVIDE EMPLOYMENT OPPORTUNITIES FOR LOCAL RESIDENTS.

Policy 1-1: The City of Medford shall explore opportunities and incentives that will encourage value-adding, family wage business to expand and locate in the community.

Policy 1-2: The City of Medford shall actively participate in a joint public/private business development and promotion program to identify opportunities for growth of existing businesses and attract new firms to the community, to diversify the mix of commerce and industry and employment opportunities for local residents.

Policy 1-3: The City of Medford shall encourage labor-training programs that match the mix of skills and occupations with the employment requirements of firms now operating in the community or that are suitable prospects for locating in Medford.

Policy 1-4: The City of Medford shall monitor and respond to growth and development patterns in the community to enable Medford to capitalize on its changing comparative advantages in the local and regional marketplace.

Policy 1-5: The City of Medford shall monitor the City's land development requirements concerning industrial development and remove any onerous restrictions and requirements.

Policy 1-6: The City of Medford shall continue to support the efforts of Medford Urban Renewal Agency.

GOAL 2: TO ASSURE AN ADEQUATE COMMERCIAL AND INDUSTRIAL LAND BASE TO ACCOMMODATE THE TYPES AND AMOUNT OF ECONOMIC DEVELOPMENT AND GROWTH ANTICIPATED IN THE FUTURE, WHILE ENCOURAGING EFFICIENT USE OF LAND AND PUBLIC FACILITIES WITHIN THE CITY.

Policy 2-1: The City of Medford shall maintain at least a five-year supply of commercial land within the City that is currently served or readily serviceable with a full range of urban public facilities and services.

Policy 2-2: The City of Medford shall continue to use the Service Commercial designation as a tool for redevelopment and for limiting the commercial activity to that which is compatible with adjacent uses.

Policy 2-3: The City of Medford shall expedite the designation of industrial land for industries identifying specific desired locations.

Policy 2-44: The City of Medford shall limit the commercial uses allowed in industrial zones.

GOAL 3: TO DEVELOP LOCATIONAL CRITERIA AND SITE DEVELOPMENT STANDARDS FOR COMMERCIAL AND INDUSTRIAL DEVELOPMENT WHICH WILL ENCOURAGE EFFICIENT USE OF PUBLIC FACILITIES, PARTICULARLY THE CITY'S TRANSPORTATION SYSTEMS.

Policy 3-1: The City of Medford shall designate commercial facilities of a regional nature along freeways and highways, and designate those serving the community near collector and arterial streets.

Policy 3-2: The City of Medford shall encourage mixed commercial and residential use developments through the use of the planned unit development, site design guidelines, and site development standards.

Policy 3-3: The City of Medford shall encourage cohesive, integrated commercial centers and industrial centers rather than traditional, unrelated, linear development patterns through site development design guidelines.

MEDFORD ECONOMIC MARKET ANALYSIS

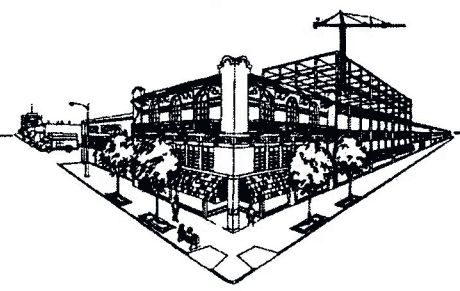
Prepared for:

City of Medford

March 2003

E. D. Hovee
& Company

Economic and Development Services



Medford Economic Market Analysis

Prepared for:

City of Medford
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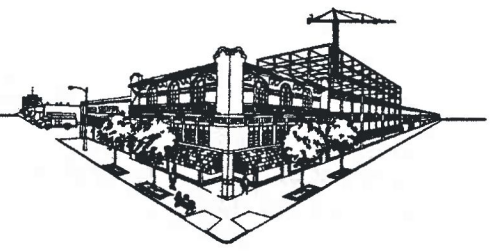
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March 2003

E. D. Hovee
& Company

Economic and Development Services



March 3, 2003

Mr. Bill Hoke, Economic Development
City of Medford
411 West 8th Street
Medford, Oregon 92501

Subject: Medford Economic Market Analysis

Dear Bill:

E. D. Hovee & Company has appreciated the opportunity to prepare a *Medford Economic Market Analysis*. This report reviews economic trends affecting the Medford community, discusses employment land characteristics, provides alternative economic forecasts and outlines resulting policy issues for consideration by the City of Medford. Key findings from this analysis include:

- A pace of population and employment growth that has exceeded statewide averages – expected to moderate over the next 20 years but with further increases of up to 25%.
- Continued strong demand for industrial and commercial land – as a regional employment and service center – averaging 46 acres of absorption annually over the past decade.
- A majority of employment land demand (51%) accounted for by commercial use with 36% for industrial and 13% for other non-industrial/non-commercial uses.
- An estimated 1,230 acres of vacant industrial land reduced to 385 acres that are not environmentally constrained and subject to ownership constraints – with only five large sites of more than 10 acres in size and no site of more than 35 acres. Approximately 56% of the industrial land base consists of parcels less than five acres in size; at least one-half can be expected to develop with commercial uses based on past trends.
- Less than 450 acres of vacant commercial land reduced to 153 acres without environmental and zoning constraints – leading to substantial commercial use of industrially zoned property.
- Resulting inadequate supply of developable industrial and commercial land anticipated through 2020 – under any of three employment scenarios related to: a) continued current mix of employment; b) changing shares toward more commercial use; and/or c) industrial focus.

I would be happy to respond to questions regarding any aspect of our analysis and look forward to discussing the economic market analysis and implications with the Medford City Council.

Sincerely,

Eric D. Hovee
Principal

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EXECUTIVE SUMMARY

Like many communities in the Pacific Northwest, Medford is in the midst of economic transition – from a resource dependent past to a more diversified economic base in the future. This economic market analysis is intended to address Medford's economic development prospects currently and over the longer 20-year planning horizon. The study also serves as a resource for the City as it proceeds with planning in compliance with the state's Goal 9 objectives – particularly in determining its industrial and commercial land needs.

ECONOMIC TRENDS

Regional Context. With 66,090 residents as of 2002, Medford is the largest city in Southern Oregon – accounting for 15% of all residents in a 4-county region. Of the region's cities, Medford has grown the fastest, averaging 2.7% per year versus 1.7% for both Southern Oregon and statewide over the last three decades.

Growth in Medford has translated into growth countywide. Jackson County as a whole accounts for 43% of Southern Oregon residents – 46% of all Southern Oregon jobs.

Age of Residents. As the population and employment hub of Southern Oregon, Medford residents are younger than residents in the rest of the region. Approximately 19% of residents are age 20-34, while only one-fourth are age 55 and older. Medford appears to be well represented across all age groups, but also has a large new retiree and senior population.

Age of Householder. Medford continues to attract households below the age of 45. Over the last decade, Southern Oregon lost nearly 2,500 householders age 25-34; Medford gained 270 such households.

Education Attainment. Medford and Jackson County are well represented within the higher education levels, with at least 55% of adults having some college education compared to 59% statewide. Education attainment compares favorably with the rest of the Southern Oregon region.

Jobs Balance. Medford employers provide nearly 1.5 jobs per resident actively participating in the local labor force, substantially higher than regional, state, and national rates. Medford serves as the Southern Oregon region's major employment hub.

Occupational Balance. The Southern Oregon economy currently appears to present a number of occupational mismatches. The workforce appears to supply a higher proportion of management and professional workers than area employers require, meaning the region exports these professions to other communities. Local employers have a greater demand for farming/fishing/forestry and blue-collar jobs; this forces area employers to import workers from outside the region to fill these positions.

Jackson County Competitive Advantages. To identify the industries that the region has the greatest advantage in competing for versus other areas around the U.S., a series of screening

criteria have been applied to the industry sectors identified. Five sets of screening criteria have been developed:

1. *Current and changing competitive position of the industry* – relative to the nation
2. *Worker productivity* – and change in productivity over time
3. *Percent of Output Value-Added* – with more than 50% viewed as most desirable
4. *Employment multiplier* – above 2.0 (meaning that at least two jobs are supported in the local economy for every new job directly created within the employment sector in question)
5. *Wage levels including changes over time* – relative to other industries in the local area

Nine industries meet four of the five criteria. Taken together, one-fifth of the industrial sectors portray Jackson County as being strongly competitive. Industries meeting four or more criteria include:

Mining	Instruments
Construction	Trucking & Warehousing
Lumber & Wood	Security & Commodity
Stone, Glass & Concrete	Real Estate
Electronic Equipment	Health Care

Medford Competitive Advantages. Firms located within Medford's UGA currently employ almost 37,900 workers. Services represent the largest sector providing 12,980 jobs, with health care workers accounting for 54% of all service-related jobs on commercial lands.

The manufacturing sector has less than 2,800 employees, but has increased by 12.5% since 1995. This job growth has occurred at a time when manufacturing jobs both countywide and nationally were in decline (-7.2% and -0.6% respectively).

Based on this analysis, Medford's employment opportunities can be divided into *three tiers*:

- *Tier 1* represents industries for which Medford is in the best position to realize opportunities due to its current and growing competitive advantage relative to other areas nationwide.
- *Tier 2* industries constitute employment sectors for which Medford has a current but eroding competitive position or sectors where Jackson County may be competitive but represents more of a challenge to Medford.
- *Tier 3* comprises sectors for which Medford is competitive relative to Jackson County but not outside the Southern Oregon region.

Tier 1 – Best Position	Tier 2 – Strong but Challenging	Tier 3 – Locally Competitive
Instruments	Mining	Food Products
Transit	Construction	Transportation Equipment
Transportation Services	Lumber & Wood	Air Transportation
Communications	Printing & Publishing	Wholesale Trade
Retail Trade	Stone, Glass & Concrete	Insurance Carriers
Banking	Electronic Equipment	Insurance Agents & Brokers
	Trucking & Warehousing	Business Services
	Electric, Gas & Sanitation	Legal Services
	Security & Commodity	
	Real Estate	
	Health Care	

As noted, Tier 1 industries represent the *best opportunities* for economic growth and diversification. Tier 2 and 3 sectors also are recommended for consideration – but may require more local initiative to market the opportunities available. Both Tier 2 and 3 industries will be particularly affected by policies and strategies Medford employs to maintain a competitive industrial and commercial land base.

EMPLOYMENT LAND CHARACTERISTICS

Over 3,400 acres (or 22%) of Medford's land base is classified as industrial under the City's General Land Use Plan (GLUP). Another 1,980 acres (or 13%) is designated as commercial. While there is general consistency between zoning and GLUP classifications, different development uses can be found across all GLUP designations.

Industrial Development. To date, nearly 790 acres in Medford have been developed with industrial uses:

- Eighty-three percent occur on land with an industrial GLUP designation.
- The remaining 17% occurs on commercial lands.
- One-fifth of Medford's industrial development transpired within the last ten years.
- Over the last decade, industrial development absorbed 160 acres; all but four acres occurred on industrial properties.
- Industrial development is absorbing an estimated 16 acres of industrial property per year and 0.40 acres of commercial land.

Commercial Development. Almost 1,500 acres of land have been developed for commercial uses:

- Sixty-five percent of commercial use is located on properties designated commercial.
- A remarkable 35% of all Medford's commercial development is occurring on its industrially zoned land.
- Commercial development absorbed 240 acres over the last ten years, 34% located on industrial properties (one-fourth for office-related uses).

- Commercial development is absorbing an estimated 8 acres of industrial land per year and 16 acres of commercial.

Industrial Land. Industrial land is developing at 29 acres per year; sixteen acres for industrial uses, eight acres for commercial, and five acres for other uses (i.e. airport hangars).

- Greatest demand has been experienced for properties 15 acres or larger, constituting 37% of demand. Properties 5 acres in size account for another 28% and 1-2 acre parcels captured 11%.
- Commercial development is occurring on properties less than 10 acres in size, developing 48% of the 1-5 acre properties.
- One in five jobs is located on industrial properties; over the last five years, approximately 380 net new jobs have been created annually on industrial lands.
- Job growth is fairly evenly distributed between industrial and commercial-related sectors.
- Average employment density is 4.8 jobs per acre.
- Thirty-six percent (1,230 acres) of Medford's industrial land is vacant.
- Sixty-two percent (or 766 acres) have environmental constraints; 590 acres are properties 10 acres or larger.
- Removal of another 79 acres associated with the PP&L and Medite sites leaves Medford with only 385 vacant industrial developable acres.
- Medford has only five large sites ranging from 10-35 acres in size. Fifty-six percent of the industrial land base consists of properties under five acres in size; at least one-half are likely to develop with commercial uses based on past trends.
- The bulk of the existing vacant industrial land inventory is situated on the north side of Medford.

Commercial Land. Over the last decade, commercial land has developed at 17 acres per year: fifteen and one-half acres for commercial uses, 0.70 acres for industrial, and one acre for other uses.

- Greatest demand has been experienced for 1-2 acre parcels (23%), followed by 2-5 acre (21%) properties and 15+ acre parcels (19%).
- Nearly two-thirds of Medford's employment base is located on commercial properties.
- Retail provides 39% and services employ another 36% of jobs on commercial lands; health care represents 54% of all service sector jobs on commercial lands.
- Average employment density is 18.7 jobs per acre.
- Just over one-fifth (448 acres) of commercial land is vacant. Sixty-one percent (or 274 acres) have environmental constraints; 125 acres are properties 10 acres or larger.
- Removal of EFU lands (21 acres) leaves Medford with only 153 acres of vacant developable commercial land.

- Medford has no commercial properties greater than 10 acres in size and only 65 acres in 1-5 acre properties.
- In contrast with industrial property, most of the large commercially-zoned vacant parcels are situated on the south side of Medford. In addition, some central downtown properties may have redevelopment potential even though they are not currently vacant.

ECONOMIC FORECAST

Even before considering development constraints, Medford may not have enough vacant employment land to meet future market demand. Medford currently has 1,678 acres (both industrial and commercial) of vacant employment properties.

Three alternative employment scenarios through the year 2020 have been outlined for consideration, involving: a) continued current mix of local area employment; b) changing shares toward more commercial use; and c) industrial lands focus.

With these scenarios, demand for industrial and commercial land over the next 20 years could range from 1,263 to 2,121 acres. After removal of constrained properties, Medford is left with only 538 acres, creating a potential deficit ranging from 725-1,583 acres. The land supply and demand implications of these alternative employment forecast scenarios are indicated by the following summary chart.

Employment Lands	Employment Scenario		
	Current Mix	Change Share	Industrial Land Focus
Land Supply (acres)	538	538	538
Land Demand (acres)	1,263	1,494	2,121
Surplus (+)/Deficit (-)	-725	-956	-1,583

Commercial. Medford currently has an extremely limited supply of commercial land. With only 153 acres of unconstrained vacant commercial property, Medford is likely to experience a 280-500 acre deficit through 2020. The lack of commercial property will increase market pressure for commercial uses to locate on industrial lands.

However, there are only 65 acres of 1-5 acre industrially designated parcels, fulfilling 53% of commercial demand over the last decade. Unless a framework for remediation of development constraints is implemented, land prices for vacant/unconstrained commercial land could escalate, having the effect of:

- Driving up industrial land prices as commercial demand competes with industrial
- Stimulating greater development of currently underutilized properties
- Pushing some commercial development to other sites outside of Medford

Redevelopment of smaller vacant and underutilized properties in Medford's downtown area could serve to reduce the need for added commercial Greenfield sites – particularly for office

and smaller scale retail uses. However, costs of development are often greater in a downtown area and the major impetus for new commercial uses in recent years has been to develop on larger sites outside the downtown core.

Industrial. Industrial land comprises 70%-75% of Medford's vacant employment property. However, 845 acres of the vacant 1,230 acres is affected by identified development constraints. Medford will need 708-1,688 acres to fulfill market demand over the next 20 years. With only 385 acres unconstrained, Medford could experience a deficit of 320-1,300 acres.

Even with remediation of constrained properties, Medford could have a 460-acre deficit (under the industrial land focus scenario). Furthermore, the lack of large industrial sites could result in Medford continuing to lose industrial development opportunities to other communities, such as White City or to other Southern Oregon communities outside Jackson County.

POLICY ISSUES

Medford economic development, planning and elected officials are faced with several policy questions pertinent to securing the City's economic future. The policies presented for consideration have been derived from this economic analysis. They represent the consultant's preliminary conclusions and are presented for purposes of discussing Medford's economic future.

1. **Determine Medford's regional employment role.** For Medford to continue as a regional job center, local officials should plan for an additional 16,200 jobs over the next 20 years and 30,000-38,000 over the longer 50-year Regional Problem Solving time frame.

2. **Chart Medford's economic identity.** Medford has a multitude of paths that could be chosen – setting a direction for the community's economic future. First option is to "stay the course," which would translate into Medford continuing to serve the region as a commercial center. A second alternative is to not only remain as the region's major commercial center but become more aggressive in attracting industrial investment.

3. **Consider local socio-economics as part of a jobs development strategy.** Medford should create a strategy for developing a skilled workforce to fill the deficiency in blue-collar occupations throughout the Southern Oregon region. As part of a workforce development strategy, Medford will have to provide access to a network of resources to serve their growing minority population. Southern Oregon University and Rogue Community College represent increasingly critical partners in work force skills training to effect a broader, community-wide economic development strategy.

4. **Focus economic development efforts where demonstrated competitive advantages are offered.** Medford has a number of business and industrial potentials for which it can competitively vie with other communities – segmented into three tiers of best, strong but challenging and locally competitive opportunities as described above.

These opportunities are consistent with the community's relative competitiveness for business investment. Medford also offers two additional distinct advantages that can serve to encourage business expansion or attract new firms, notably:

- Relatively low cost supply of labor compared to the nation, especially larger metro markets.
- Inclusion of all commercial and industrial properties within an enterprise zone.

5. **Ensure Medford has an adequate supply of employment lands.** Over the next 20 years, Medford faces a potential deficit of 725-1,583 acres. In response, the City should develop a series of strategies that remove or mitigate the constraints facing two-thirds of its vacant inventory. This may include consideration of adding new employment lands to the existing urban growth boundary.

6. **Provide a competitive supply of both commercial and industrial land.** Medford will need 430 to 650 acres to satisfy market demand over the next 20 years. If development trends over the last decade continue, 53% (or 230-350 acres) of *commercial* demand will be for 1-5 acre sites. With only 65 acres of unconstrained 1-5 acre parcels, Medford will only be capable of satisfying 19%-28% of anticipated market demand. The lack of sites will increase pressure for commercial to develop on industrial sites. An active downtown redevelopment program could potentially reduce, but is not expected to eliminate, the deficit of sites for future commercial use.

   Industrial development has been lagging for several factors. Parcelization of large industrial sites for smaller commercial development is significantly driving up land prices as well as reducing the competitive supply of large industrial sites. Industrial land demand projections translate into the need for between 260 to 630 acres of 15+ acres sites. With only 94 unconstrained acres in 15+ acre parcels, Medford can satisfy only 15%-36% of the anticipated demand for large sites.

7. **Consider revising zoning designations and land use regulations consistent with an adopted economic develop strategy.** Medford could consider rezoning a portion of its industrial land (parcels under 5 acres) to a heavy commercial and/or "business park" type of zone. This would allow development of uses with a mix of commercial/industrial activity to continue on industrial lands as well as small scale industrial activity.

   At the same time, action could be taken to limit commercial development on selected industrial properties 5 acres or larger, reserving these larger tracts for primarily industrial uses. Allowing some portion of office ancillary to the industrial development should also be considered given the type of industries for which Medford is competitive – reflecting the e-commerce overlay and higher proportion of on-site office use for many industries.

8. **Incorporate development standards into Medford's land use regulations.** The development review assessment currently underway by the City of Medford offers an opportunity to consider changes appropriate for commercial and industrial land

regulations. The City could also consider limiting the parcelization of large industrial sites by providing planning options for development to *phase in* more systematically.

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I. INTRODUCTION

Like many communities in the Pacific Northwest, Medford is in the midst of economic transition – from a resource dependent past to a more diversified economic base in the future. This economic market analysis is intended to address Medford's economic development prospects currently and over the longer 20-year planning horizon. The study also serves as a resource for the City's compliance with the state's Goal 9 objectives as well as assisting the City in determining its industrial and commercial land needs.

BACKGROUND

Historically, forest products and health services were the primary economic drivers in Medford/Jackson County. However, the forest products industry has contracted throughout the Pacific Northwest due to changes in industry technology and federal land management policies, i.e. significant restrictions of timber harvests on federal forest lands.

As the forest products sector has declined, growth in health services have dramatically increased – adding nearly 2,500 jobs over the last decade. Other economic growth sectors in Medford's/Jackson County's economy have included professional services, social services, and retail trade.

With substantial increases in services and retail trade sectors, Medford/Jackson County is transitioning to a commercial-based economy. This transition is similar to that being faced by numerous other urban areas and smaller communities throughout the Pacific Northwest. This has translated into increased development pressure on Medford's industrial land for commercial uses rather than industrial. With the uncertainty of the long-term economic effects of a lagging industrial base, Medford has chosen to examine its economic competitiveness to determine the community's long-term economic future.

PURPOSE

The City of Medford retained E.D. Hovee & Company to provide an economic market analysis. The intent of the analysis is to provide information that leads to a fundamental understanding of market forces affecting the need for industrial and commercial lands within Medford and the surrounding community. Specific tasks include:

- A review of available industrial sites in relationship to sizes, numbers, and vacancies in order to project the need for industrial land and building types within Medford relative to local and regional demands.
- Review available commercial sites, inventory commercial vacancies, and project the need and most appropriate locations for additional commercial projects.[1]
- Inventory brownfields within the City limits.
- Address the relationship of commercial development city and region-wide to downtown and its core area market role in commercial needs and utilization.

METHODOLOGY & QUALIFICATIONS

E.D. Hovee & Company obtained readily available data to assess Medford's economic future.[2] Specific information utilized in the analysis includes:

- City of Medford Planning Department, Industrial Land Analysis, August 2001.
- City of Medford Planning Department, Report on Economic Development, July 1998.
- Confidential employment by employer and location, Oregon Employment Department.
- Land use, tax lot, and environmental GIS files from City of Medford.
- Socioeconomic data from U.S. Census Bureau.
- Downtown market assessments being conducted by Bruce Ostley for the Medford Urban Renewal Agency.
- Proprietary IMPLAN economic data from Minnesota Implan Group.

ORGANIZATION OF REPORT

The remainder of this report is organized around the following topics:

Economic Trends
Employment Land Characteristics
Economic Forecast
Policy Issues

II. ECONOMIC TRENDS

The economic market assessment starts with an overview of local and regional economic trends. The evaluation examines Medford's role within the Southern Oregon economy, demographic trends, labor force characteristics, employment growth, jobs balance, and competitive position.

REGIONAL CONTEXT

With 63,154 residents as of the 2000 census (and 66,090 as of 2002), Medford is the largest city in Southern Oregon, accounting for 15% of all residents in a 4-county region. Of the region's cities, Medford has grown the fastest, averaging 2.7% per year versus 1.7% for both Southern Oregon and statewide over the last three decades.

Jackson County as a whole accounts for 43% of Southern Oregon residents with population growing at a pace of 2.2% per year. Jackson County also accounts for 46% of all Southern Oregon jobs. Jackson County's job base has been growing by 3.6% per year versus 2.7% region-wide and 2.8% statewide.

Figure 1. Southern Oregon Region

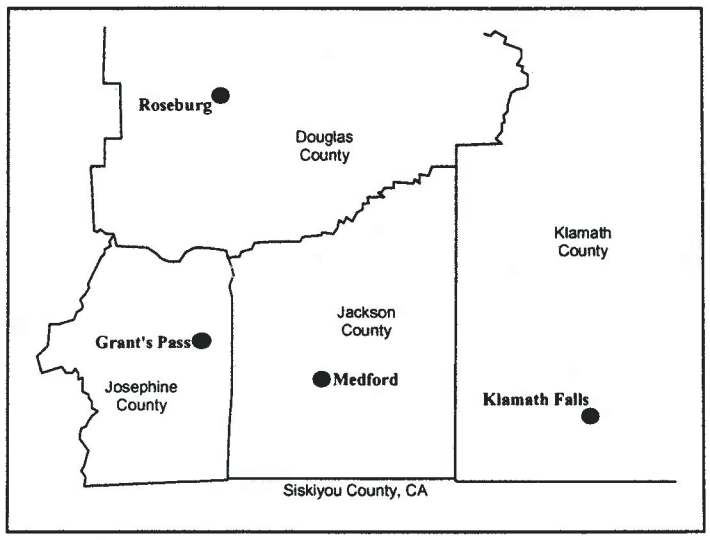


Figure 2. Comparison of Population & Employment Trends for Southern Oregon

Geographic Area	1970	1980	1990	2000	Annual Percent Change 70-80	80-90	90-00
Population:							
Grants Pass	12,455	15,032	17,503	23,003	+1.9%	+1.5%	+2.8%
Klamath Falls	15,775	16,661	17,737	19,462	+0.5%	+0.6%	+0.9%
Medford	28,454	39,746	47,021	63,154	+3.4%	+1.7%	+3.0%
Roseburg	14,461	16,644	17,069	20,017	+1.4%	+0.3%	+1.6%
Douglas County	71,743	93,748	94,649	100,399	+2.7%	+0.1%	+0.6%
Jackson County	94,533	132,456	146,389	181,269	+3.4%	+1.0%	+2.2%
Josephine County	35,746	58,855	62,649	75,726	+5.1%	+0.6%	+1.9%
Klamath County	50,021	59,117	57,702	63,775	+1.7%	-0.2%	+1.0%
Southern Oregon	252,043	344,176	361,389	421,169	+3.2%	+0.5%	+1.5%
State of Oregon	2,091,533	2,633,156	2,842,321	3,421,399	+2.3%	+0.8%	+1.9%
Employment:							
Douglas County	28,773	41,354	46,757	52,898	+3.7%	+1.2%	+1.2%
Jackson County	36,131	58,792	76,513	103,734	+5.0%	+2.7%	+3.1%
Josephine County	12,673	22,384	27,057	34,583	+5.9%	+1.9%	+2.5%
Klamath County	22,726	27,135	28,667	33,777	+1.8%	+0.6%	+1.7%
Southern Oregon	100,303	149,665	178,994	224,992	+4.1%	+1.8%	+2.3%
State of Oregon	925,914	1,353,338	1,639,255	2,118,403	+3.9%	+1.9%	+2.6%

Source: U.S. Census Bureau and U.S. Bureau of Economic Analysis (BEA).

As of 2000, Jackson County had a base of over 103,700 employees. In Jackson County, there are 0.57 jobs for every resident. By contrast, the other three counties have a jobs-to-resident ratio of only 0.51. This indicates the economic centrality and importance of Medford/Jackson County to the entire Southern Oregon economy.

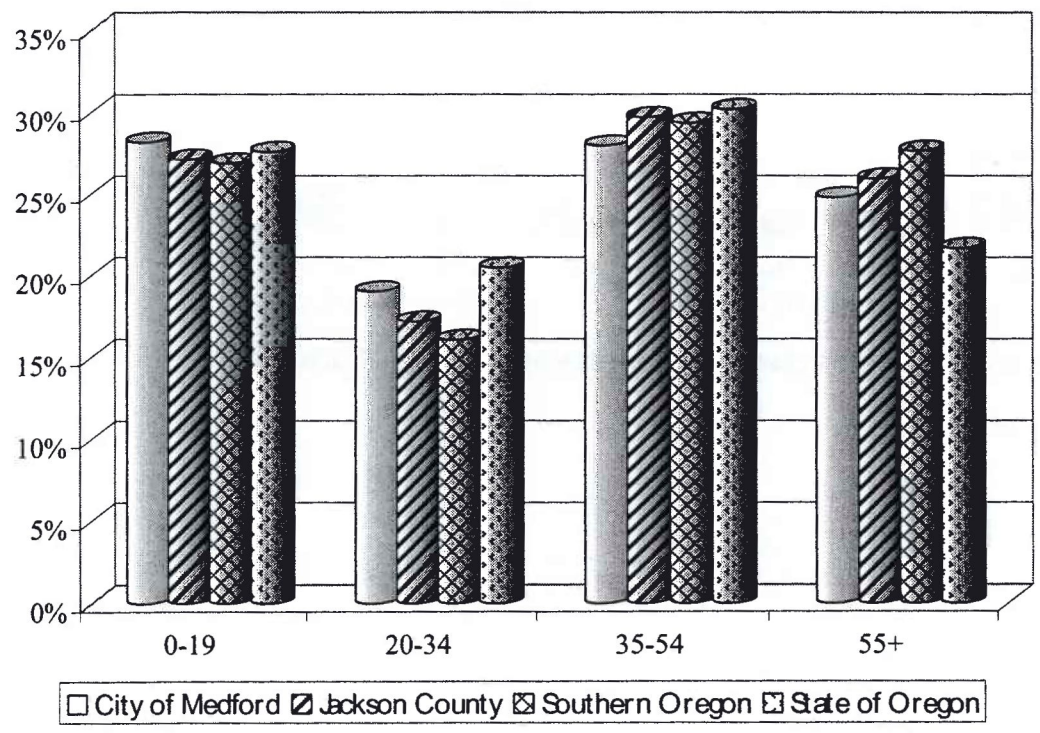
DEMOGRAPHICS

Demographic indicators important to this review of Medford area economic prospects include age of residents, race/ethnicity, household size, age of householder, householder growth, educational attainment and household income.

Age of Residents. Southern Oregon tends to have a slightly older population than the rest of the state. Approximately 28% of residents in Southern Oregon are age 55 and older versus 22% statewide.

However, the population and employment hub of Southern Oregon, Medford residents are younger than residents in the rest of the region. Approximately 19% of residents are age 20-34, while only one-fourth are age 55 and older. Overall, Medford has relatively low proportions of its population in age categories of 35 and over.

Figure 3. Population by Age Group (2000)



Source: U.S. Census Bureau.

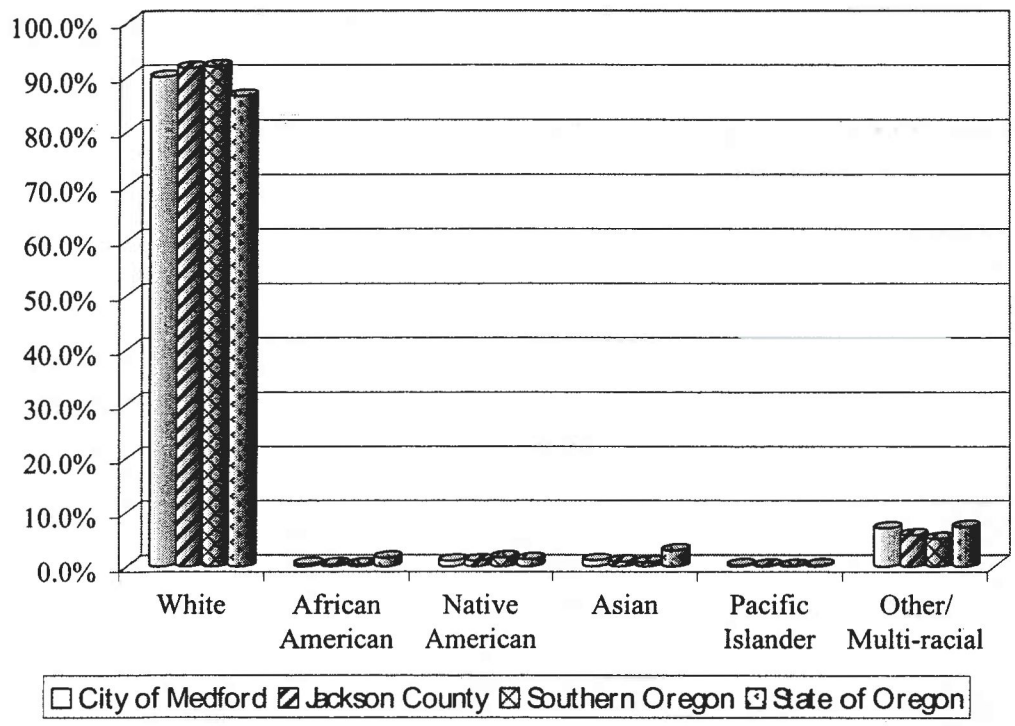
A relatively young population is an indicator of the city's vitality – attracting a more diverse population and younger adults that are relatively mobile. This younger demographic also creates

greater need for entry level jobs and early job advancement opportunities than may be the case elsewhere in Southern Oregon.

RACE/ETHNICITY

Racial make-up is fairly comparable throughout Southern Oregon. Ninety percent of residents are white, with other/multi-racial persons accounting for another 4%-7%. As compared to statewide averages, Southern Oregon has a lower representation of African Americans and Asians.

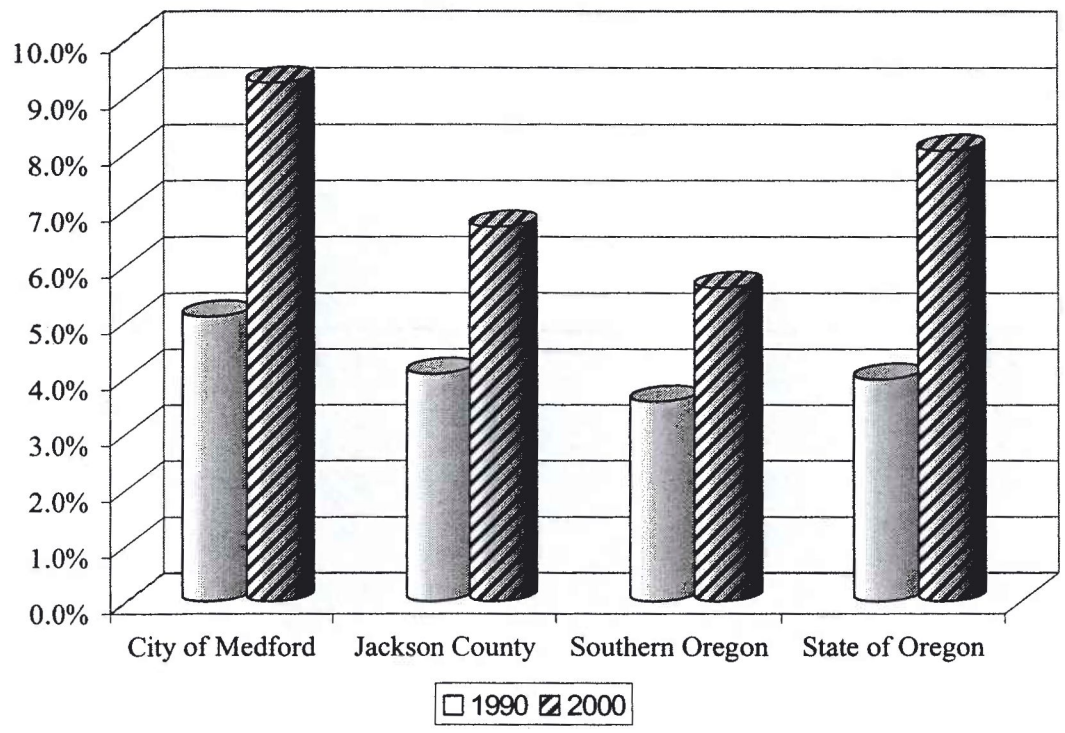
Figure 4. Racial Make-up (2000)



Source: U.S. Census Bureau.

Over 9% of Medford's population is Latino. This compares to 5.6% region-wide and 8% statewide. Latino representation has nearly doubled, increasing from 5.1% in 1990 to 9.2% in 2000. Latino's also accounted for 205 of Medford's population growth over the last decade.

Figure 5. Latino Population (1990-2000)

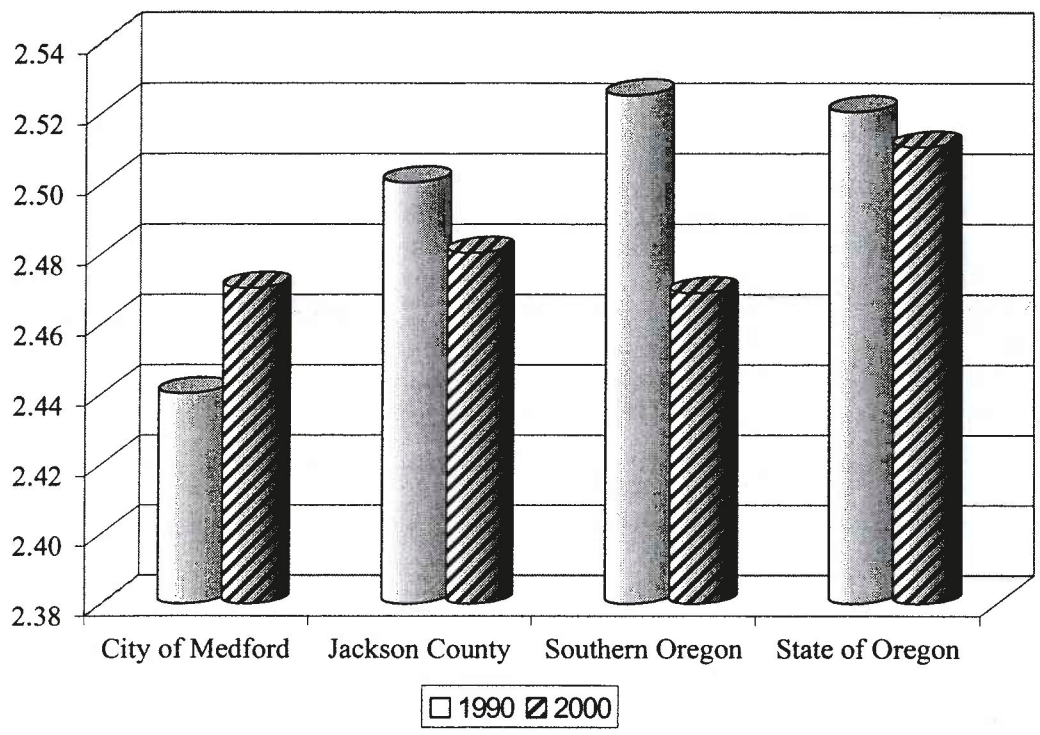


Source: U.S. Census Bureau.

Consistent with trends and projections nationally, the proportion of racial and ethnic minorities in the Medford area can be expected to increase in the years ahead. This more diverse population will contribute to labor force growth – creating both challenges and new opportunities for continued commercial and industrial employment.

Household Size. Southern Oregon households are somewhat smaller than statewide averages. Southern Oregon households average 2.47 persons versus 2.51 for the entire state. While Medford households are also smaller, household sizes increased over the last decade – a trend counter to regional and statewide trends.

Figure 6. Average Household Size (1990 & 2000)



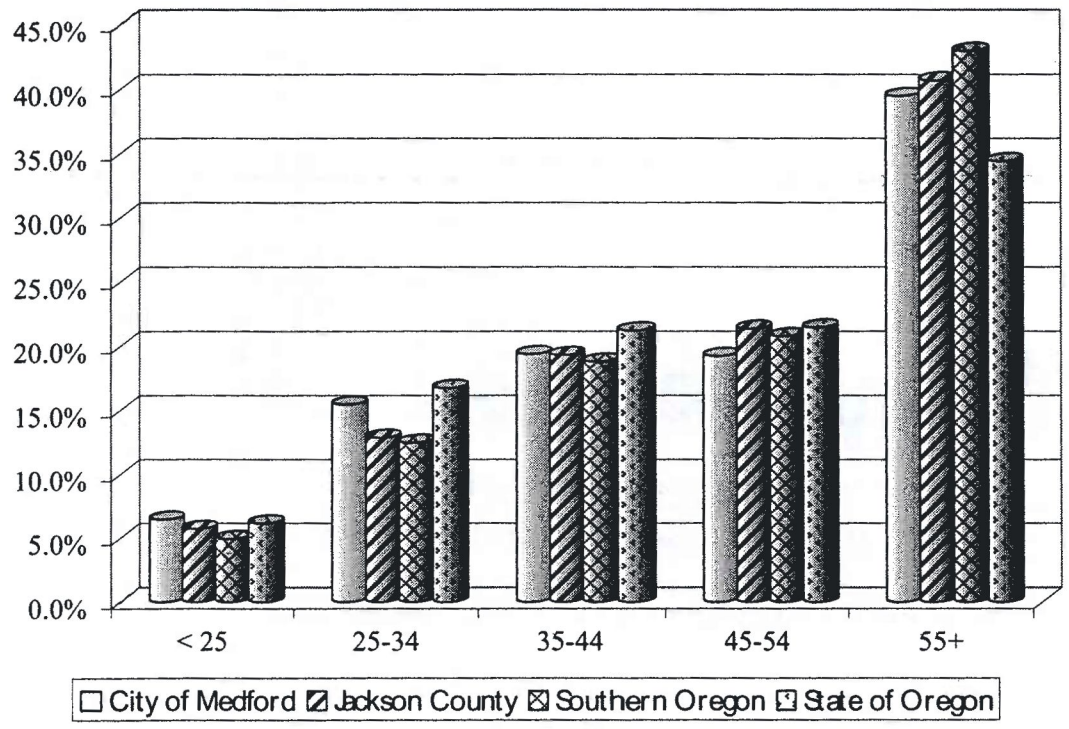
Source: U.S. Census Bureau.

The recent trend to increasing household size also is consistent with Medford's generally younger age profile. Increased household size also can be expected to generate economic opportunities – for household purchases and potentially more workers per household.

Age of Householder. Another way of looking at age is by *householder*. The householder is the person that typically makes the decision of where to live.

Outside the City of Medford, the Southern Oregon region is significantly over represented in senior households, with 43% of householders age 55 and older versus 34% statewide. In comparison, Medford appears to be well represented across all age groups, but also has a large senior population.

Figure 7. Age of Householder (2000)

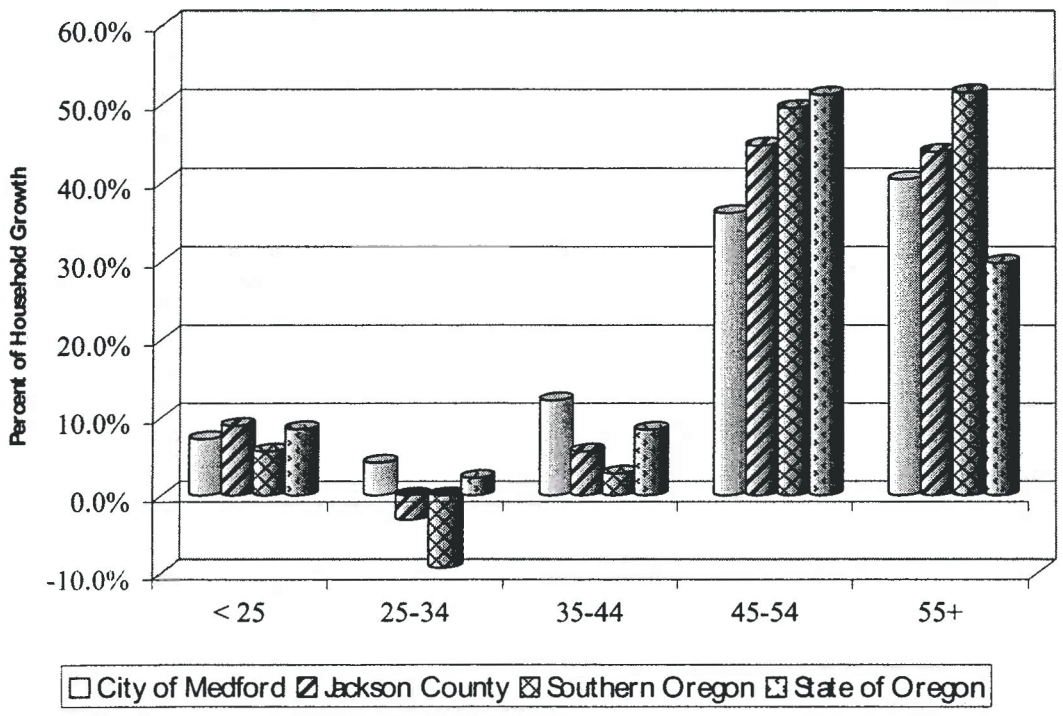


Source: U.S. Census Bureau.

Householders are particularly well represented in the 25-34 young adult age category – by comparison with Jackson County and the entire Southern Oregon region. As with household size, a younger population represents added labor force – contributing to local job needs and economic development opportunities.

Householder Growth. Residential growth in Medford has occurred across all household age groups. As the Southern Oregon region appears to be losing younger households, Medford continues to attract households below the age of 45. In particular, over the last decade Southern Oregon lost nearly 2,500 householders age 25-34, and Medford gained 270.

Figure 8. Household Growth by Age of Householder (1990-2000)



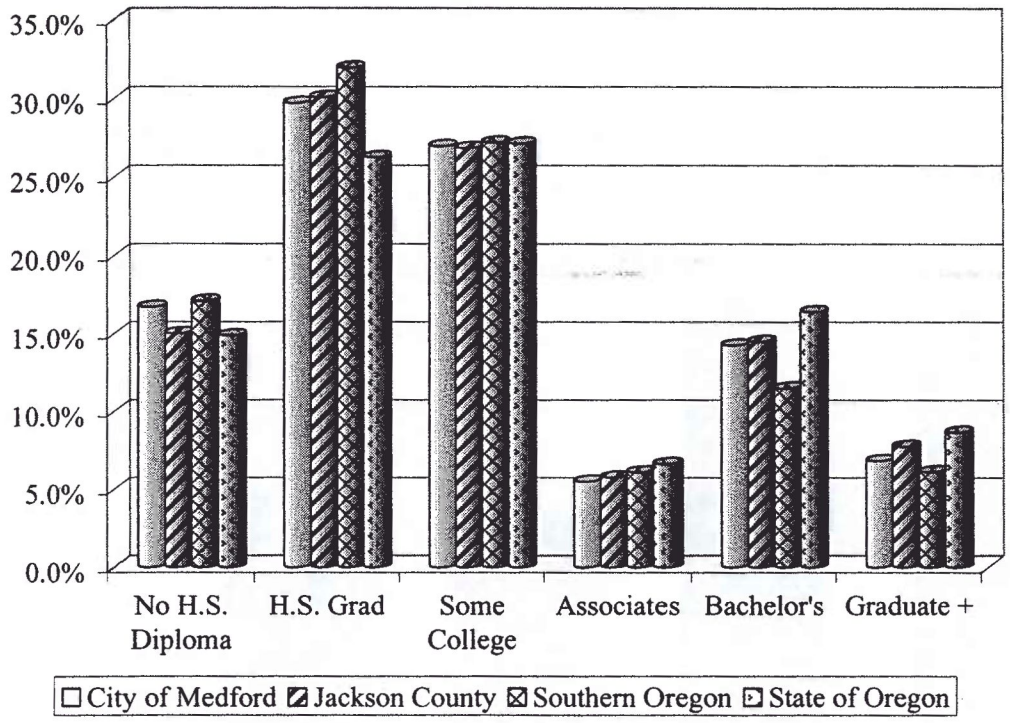
Source: U.S. Census Bureau.

Medford's growth of younger households runs counter to experience elsewhere regionally and statewide. However, the predominant share of household growth has been in the 45 and over categories – both locally and regionally. This growth represents *baby boomers* in the 45-54 age bracket with a mix of early retirees and seniors age 55 and over.

Medford's attractiveness to younger households can be beneficial for retailers – as 35-44 year olds are in an age period of proportionately high household purchases. This also is an age group with relatively high labor force participation.

Educational Attainment. A larger proportion of Southern Oregon residents (age 25 and older) have only a high school diploma, 32% region-wide versus 26% statewide. However, Medford and Jackson County are well represented within the higher education levels, with at least 55% having some college education compared to 59% statewide.

Figure 9. Education Attainment of Residents Age 25 and Older (2000)



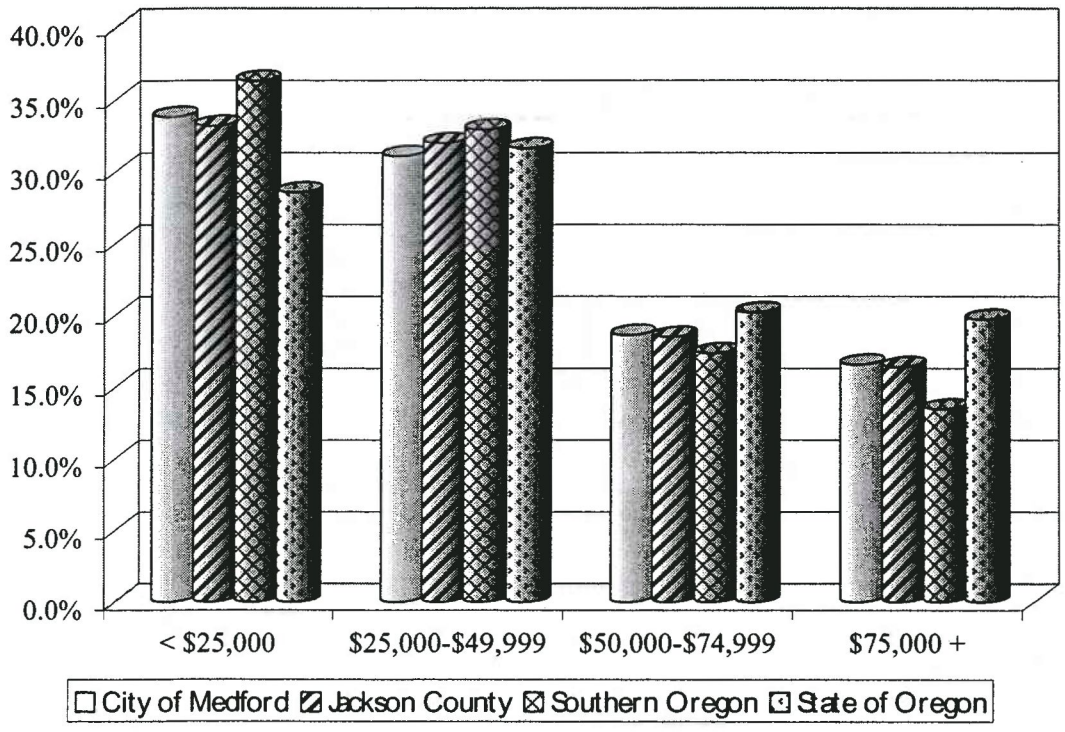
Source: U.S. Census Bureau.

Educational attainment of Medford and Jackson County residents compares particularly favorably with the rest of the Southern Oregon region. This represents an economic development asset – for marketing to new companies looking to locate in Medford and existing companies seeking to expand locally.

Household Income. Households in Medford and the Southern Oregon region tend to have lower incomes than residents statewide. Median income in Medford is $36,500 compared to $40,900 statewide. Also, 65%-70% of households living in Medford/Southern Oregon have annual incomes below $50,000 versus 60% statewide.

The lower incomes in Southern Oregon are primarily due to the presence of a significant senior population that lives on fixed incomes. Other factors include shrinkage of relatively high wage forest products employment, with shifts to service sector jobs and lower wage rates. This issue is discussed further in the competitive position section.

Figure 10. Household Income Distribution (2000)



Source: U.S. Census Bureau.

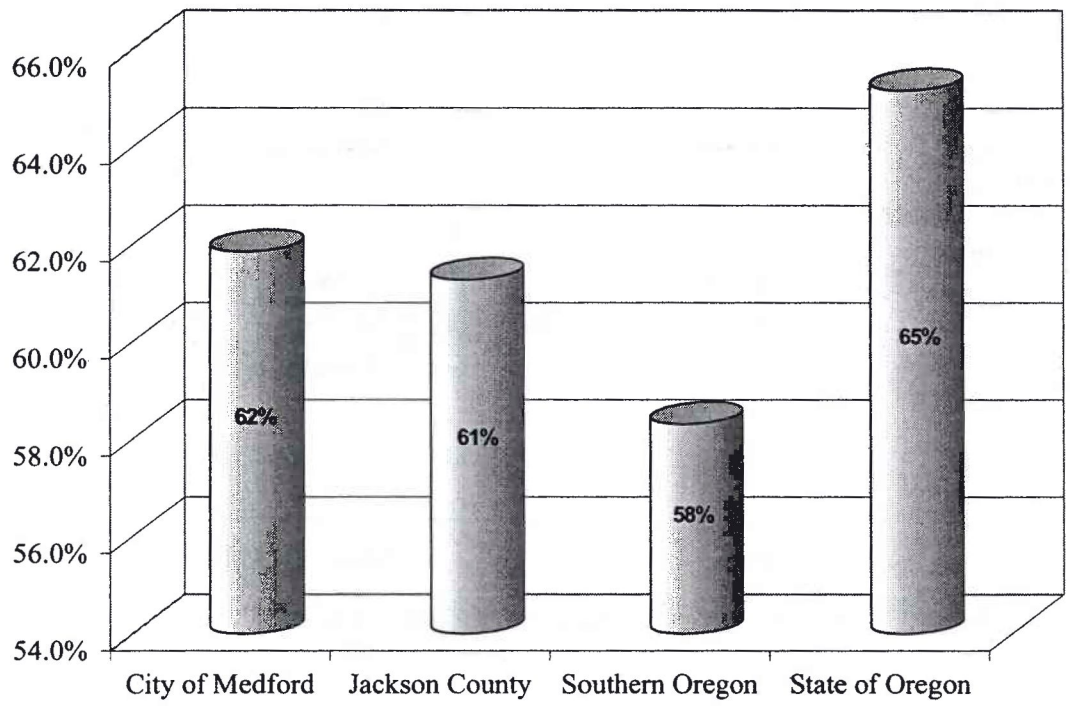
Medford compares more favorably to the entire Southern Oregon region – with higher proportions of households earning $50,000 and above. This coordination of strong incomes with a younger demographic will continue to *drive* retail and service business opportunity in Medford.

LABOR FORCE

Topics of note are labor force participation and unemployment.

Participation Rate. Labor force participation rates are slightly lower locally and regionally than statewide. In Medford, 62% of residents age 16 and older (30,200) are in the labor force. By comparison, only 58% (or 193,000) participate region-wide versus 65% throughout the state of Oregon.

Figure 11. Labor Force Participation Rates (2000)



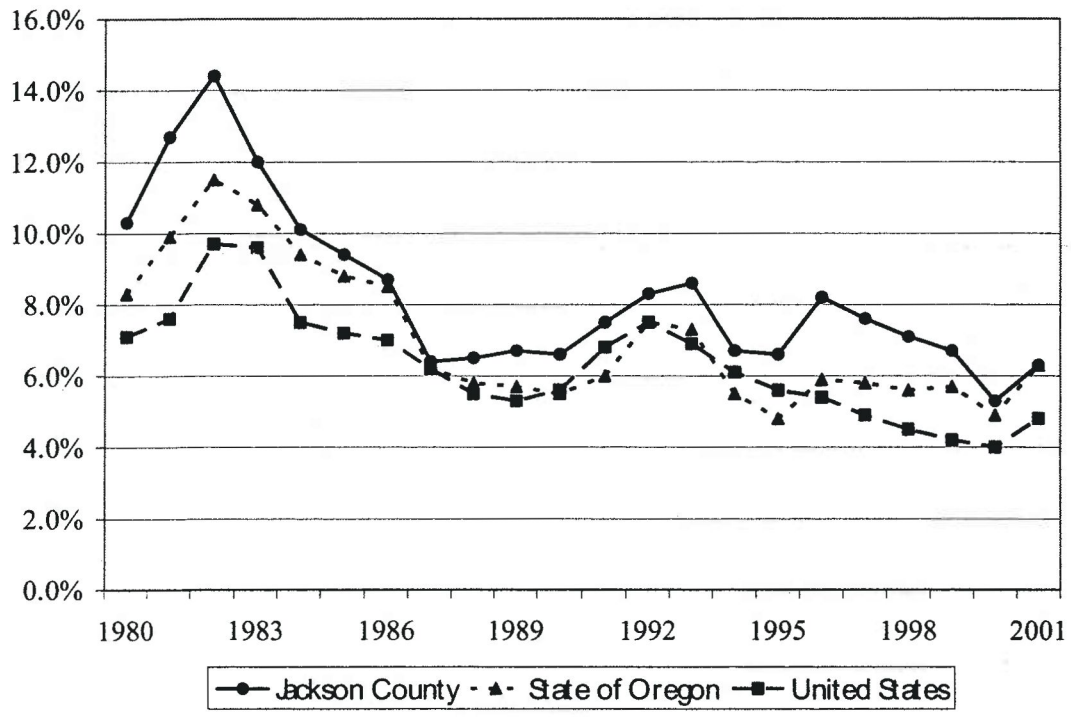
Note: Employment figures include workers covered and not-covered by unemployment insurance as well as self-employed. Adjustments were made to Medford using Jackson County data. Medford estimate for the city limits only.

Source: U.S. Census Bureau.

Lower participation rates reflect the presence of a large retired senior population. Another factor is unemployment which typically exceeds comparable statewide and national figures. However, a younger demographic in Medford could contribute to greater labor force participation rates in the years ahead.

Unemployment Rates. As of 2001, just over 6% of Jackson County's labor force is unemployed, up from 5% in 2000. Jackson County's unemployment rate had been declining since 1996, before the emergence of a recent national recession. However, unemployment rates are substantially lower than the 14% rate experienced during the last major recession in the early 1980s.

Figure 12. Average Annual Unemployment Rates (1980-2001)



Source: Oregon Employment Department.

Of particular note is the observation that the gap between unemployment locally and statewide has been virtually erased. As of 2000, the unemployment rate for Jackson County was virtually identically with the rate statewide.

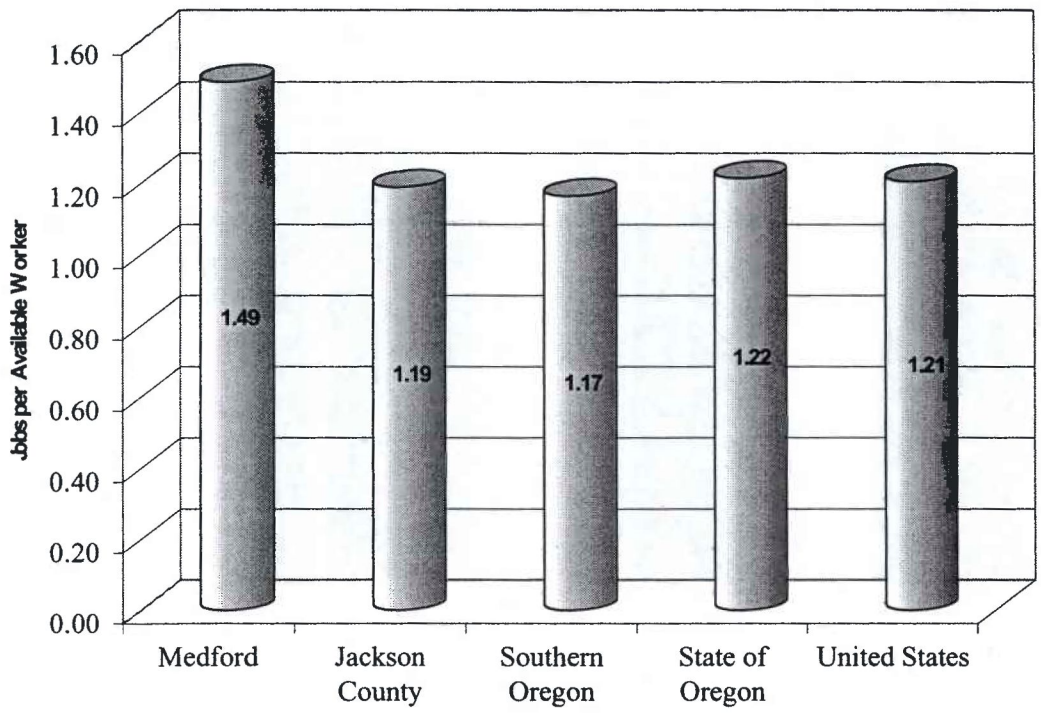
JOBS BALANCE

Communities statewide and across the nation are giving greater attention to improving their jobs balance to ensure adequate job opportunities are available for local residents and labor force. Two alternative measures are used to identify how well a community is performing relative to the region, state, or nation:

- **Jobs per Available Worker** – The number of jobs provided by local employers compared to the available supply of workers (local labor force). Measures how well a community provides jobs to local residents seeking work.
- **Jobs-Housing** – Ratio of local job opportunities per housing unit. Can also be used to assess job creation relative to residential growth.

Jobs per Available Worker. As previously noted, Medford serves as the Southern Oregon region's major employment hub. Medford employers provide nearly 1.5 jobs per resident actively participating in the local labor force, substantially higher than regional, state, and national rates.[3] The entire Southern Oregon region appears to be in-balance with state and national averages, further evidence that Medford serves as a regional jobs center.

Figure 13. Jobs per Available Worker (2000)

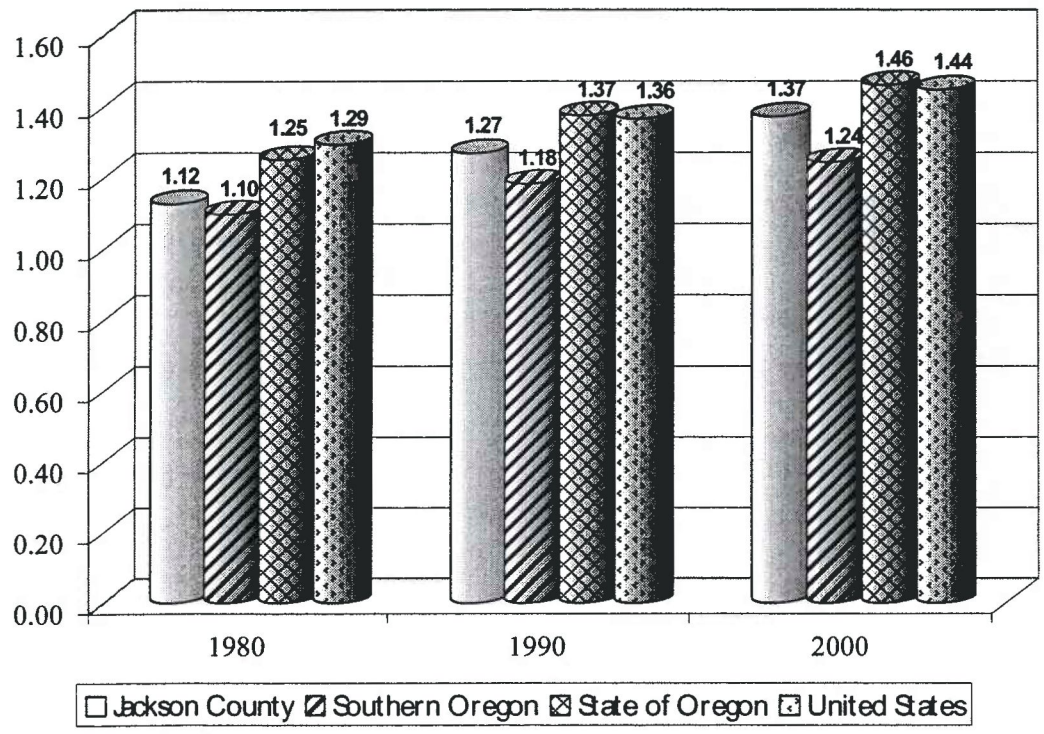


Source: U.S. Census Bureau and U.S. Bureau of Economic Analysis.

In effect, Medford is a *net importer* of labor force – from elsewhere in Jackson County and the Southern Oregon region. An important question for the community's future relates to the extent to which Medford retains or further strengthens this role – both as an industrial and commercial regional center.

Jobs-Housing. Nationally, the ratio of jobs to housing balance has been increasing over the last 20 years. In 1980, the U.S. jobs-housing ratio was 1.29 increasing to 1.44 by 2000. The main reason for the improved jobs-housing ratio has been increasing labor force participation including more double income households. *Note:* Medford's job-housing balance in 2000 was 1.49.

Figure 14. Jobs-Housing Balance (1980-2000)



Source: U.S. Census Bureau and U.S. Bureau of Economic Analysis.

Region-wide, job growth has outpaced housing development. This is evident when examining the region's jobs-housing balance, as the number of jobs per housing unit increased consistently from 1980-2000. In 1980, the region's jobs-housing ratio was 1.10 jobs per housing unit increasing to 1.24 by year 2000. This also signals that the region is becoming more *job rich.* However, Medford's jobs-housing balance remains somewhat low as a result to a large retired senior population.

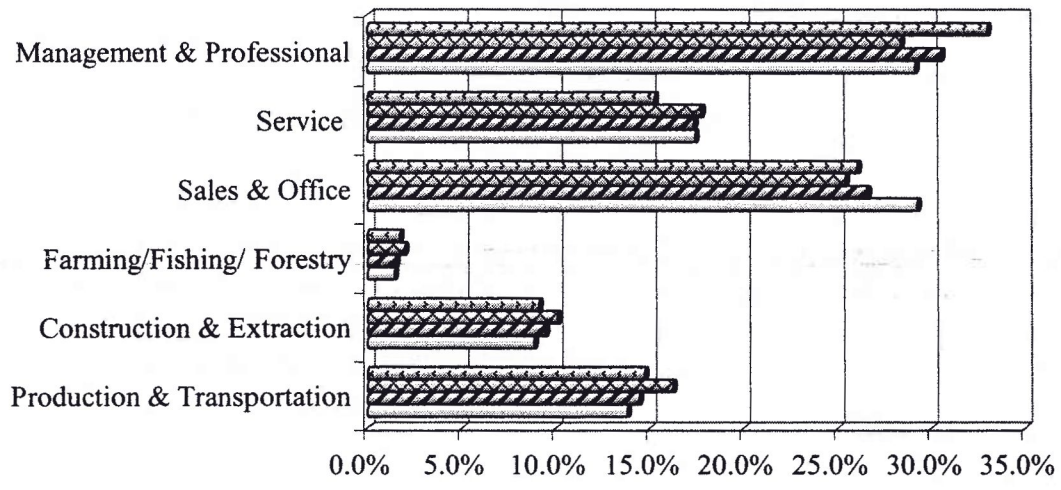
Occupation Mix

The term *occupation mix* denotes the diversity of employment, by type of occupation in which a worker is employed. This discussion focuses on resident occupations and occupation balance.

Resident Occupations. The occupations of Medford residents are essentially driven by local employment opportunities. A high proportion (47%) of residents are employed in service, sales, and office occupations as compared to statewide (41%). In contrast, Medford has a slightly lower representation (29%) in management and professional occupations (versus 33% statewide).

The residential occupation mix region-wide has been geared more toward blue-collar jobs. Over one-fourth (26%) of Southern Oregon residents are employed in construction, extraction, production, and transportation occupations. In contrast, only 23% of Medford and 24% of statewide residents are employed in these same occupations.

Figure 15. Residential Occupation Mix (2000)



Source: U.S. Census Bureau.

The labor force that resides in Medford is particularly strongly represented in sales and office and service occupations compared to the rest of the county, state or region.

Occupation Balance. The Southern Oregon economy appears to present a number of occupational mismatches. The workforce appears to supply a higher proportion of management and professional workers than area employers require; meaning the region exports these professions to other communities. The limited local employment opportunities for these occupations also contribute to the region's under representation as compared to statewide.

Figure 16. Occupational Profile by Place of Work and Residence (2000)

Occupation	Southern Oregon* Workplace	Resident
Management & Professional	23.3%	28.4%
Service	17.4%	17.8%
Sales & Office	26.5%	25.3%
Farming/Fishing/Forestry	4.5%	2.1%
Blue-Collar	28.3%	26.3%
All Occupations	100.0%	100.0%

*Note: The geographic definition of Southern Oregon is expanded to include Lake County due to data limitations.

Source: U.S. Census Bureau and Oregon Employment Department.

While the Southern Oregon region over supplies management and professional workers, local employers have a greater demand for farming/fishing/forestry and blue-collar jobs; this often forces area employers to import workers from outside the region to fill these positions. This significant demand has led to the region's over representation in these occupations.

Competitive Position

How do demographic labor force, jobs balance and occupation characteristics affect a community's economic market potentials? The answer is that the worker profile does influence local and regional competitiveness for business. However, other factors – ranging from labor productivity to export orientation of local business – also come into play.

Economic development opportunities that may be available for Medford will result in part from the area's overall competitiveness in attracting industries relative to other regions nationwide. This evaluation examines the region's current competitiveness as well as how it has changed since 1990 across a broader number of important economic factors. The analysis first examines Jackson County, as the most comprehensive detailed data available is at the county level and Jackson County accounts for nearly one-half of all economic activity in Southern Oregon. The study then examines Medford's competitiveness.

Regional Competitive Methodology. This assessment identifies the industries for which Jackson County has a *competitive advantage* with the greatest potential for success in attracting (or retaining) added business investment and employment. The end result of this analysis may be a determination of the industries that will most likely prosper and be best suited for the region with particular application to Medford.

Information provided in this section comes from Minnesota IMPLAN Group's proprietary IMPLAN database and model.[4] Information for 2000 is the most recent available, and is used to analyze current conditions. In some cases, 1990 data is also incorporated to identify the underlying structural changes and economic trends occurring since 1990.

A key measuring tool – or benchmark – used to analyze a local industry cluster's performance as compared to the nation is termed a *location quotient* (LQ). The LQ measures how competitive

firms in Jackson County are to other firms operating in the same industry nationally. The LQ is computed as a ratio between the county and the nation.

An LQ of more than 1.00 indicates that the county out performs the nation. For industries where the LQ is less than 1.00, the county underperforms the U.S. For example, if the output per worker for the lumber & wood products industry is $148,600 in Jackson County and $126,700 nationwide, the LQ would be 1.17 (or $148,600÷$126,700). An LQ below 1.00 means the industry could be at a competitive disadvantage and an LQ above 1.00 means the industry could have a competitive advantage.

Jackson County Employment Concentration. As of 2000, Jackson County contained over 104,800 jobs. Nearly one-third of all jobs are service-related, with retail providing another 21% and manufacturing 10%. The job base has increased by 43% since 1990.

While the manufacturing base has been expanding in Jackson County, national manufacturing jobs have declined. Between 1990 and 2000, the County's manufacturing employment increased by 10% versus a -3% figure nationwide.

Figure 17. Concentration of Jackson County's Employment Base

	Jackson County		Average Wage		United States		Location Quotient	
Employment Sector	2000 Jobs	% Chg. 1990-00	2000	% Chg. 1990-00	2000 Jobs	% Chg. 1990-00	2000	Chg. 1990-00
Agriculture	4,832	+1.8%	$15,500	- 26.7%	4,922,796	+16.0%	1.58	- 0.51
Mining	271	+207.8%	$37,700	+6.3%	753,302	- 14.2%	0.58	+0.39
Construction	7,495	+50.8%	$37,800	+24.4%	11,372,084	+23.0%	1.06	+0.06
Manufacturing	10,536	+9.6%	$40,500	- 3.3%	19,059,229	- 3.2%	0.89	- 0.02
20 Food products	468	+22.1%	$32,000	- 13.2%	1,729,830	+2.9%	0.43	+0.01
21 Tobacco	0	+0.0%	$0	+0.0%	35,700	- 30.7%	0.00	+0.00
22 Textile mill products	0	+0.0%	$0	+0.0%	541,985	- 23.1%	0.00	+0.00
23 Apparel & textiles	69	- 2.4%	$16,500	- 0.6%	686,854	- 36.8%	0.16	+0.04
24 Lumber & wood	4,814	- 17.3%	$42,900	- 5.3%	928,933	+9.1%	8.33	- 4.45
25 Furniture & fixtures	236	+85.7%	$32,400	+13.4%	594,525	+12.7%	0.64	+0.19
26 Paper products	0	- 100.0%	$0	+0.0%	657,947	- 5.6%	0.00	- 0.31
27 Printing & publishing	953	+16.8%	$31,200	- 6.3%	1,655,504	- 3.6%	0.93	+0.04
28 Chemical products	142	- 46.4%	$53,800	+11.1%	1,046,136	- 3.9%	0.22	- 0.24
29 Petroleum products	0	- 100.0%	$0	+0.0%	122,496	- 18.5%	0.00	- 0.76
30 Rubber & plastics	85	+88.9%	$28,000	- 23.6%	1,016,983	+13.8%	0.13	+0.04
31 Leather products	2	+0.0%	$8,400	+0.0%	73,400	- 47.3%	0.04	+0.04
32 Stone, glass & concrete	545	+73.6%	$40,300	+62.4%	604,773	- 3.3%	1.45	+0.51
33 Primary metals	1	+0.0%	$20,800	+0.0%	702,399	- 6.5%	0.00	+0.00
34 Fabricated metal prod.	472	+33.3%	$31,000	- 30.2%	1,589,920	+10.6%	0.48	+0.02
35 Industrial machinery	343	+53.9%	$38,600	- 5.3%	2,138,467	- 0.1%	0.26	+0.06
36 Electronic equipment	894	+79.6%	$32,400	- 0.7%	1,740,235	+2.8%	0.83	+0.28
37 Transport. equipment	264	+5.2%	$41,800	+16.4%	1,861,751	- 7.2%	0.23	- 0.01
38 Instruments	911	+1301.5%	$66,500	+81.5%	843,064	- 16.0%	1.74	+1.62
39 Misc. manufacturing	336	+67.3%	$19,000	- 32.8%	488,327	+9.0%	1.11	+0.27
TCU	4,502	+26.8%	$38,100	- 24.0%	7,683,042	+26.5%	0.94	- 0.15
40 Railroads	42	- 37.6%	$16,800	- 79.7%	205,950	- 25.0%	0.33	- 0.13
41 Transit	297	+26.5%	$17,200	- 27.9%	627,615	+51.9%	0.76	- 0.30
42 Trucking & warehousing	2,133	+24.0%	$37,600	- 21.4%	2,517,711	+25.5%	1.36	- 0.24
44 Water transportation	2	- 50.0%	$18,900	- 70.6%	197,248	+4.8%	0.02	- 0.03
45 Air transportation	313	+86.2%	$37,000	- 1.9%	1,282,109	+77.6%	0.39	- 0.04
46 Pipelines	0	+0.0%	$0	+0.0%	12,570	- 31.6%	0.00	+0.00
47 Transportation services	545	+68.1%	$39,800	- 6.3%	580,913	+35.1%	1.51	+0.10
48 Communication	901	+26.2%	$36,800	- 38.7%	1,566,414	+28.0%	0.92	- 0.16
49 Electric, gas & sanitation	268	- 15.4%	$72,100	+5.7%	692,512	- 13.0%	0.62	- 0.12
Wholesale	2,927	+10.3%	$37,400	- 13.4%	7,575,798	+14.5%	0.62	- 0.13
Retail Trade	22,509	+39.0%	$18,800	- 7.2%	27,315,670	+20.4%	1.32	- 0.01
FIRE	6,469	+48.3%	$29,000	+8.6%	12,430,981	+30.6%	0.84	- 0.02
60 Banking	887	- 13.8%	$35,500	- 4.9%	2,119,158	- 6.7%	0.67	- 0.17
61 Credit Agencies	1,142	+485.8%	$20,100	- 69.7%	2,517,608	+203.5%	0.73	+0.29
62 Security & Commodity	630	+128.2%	$86,000	+5.4%	956,426	+85.4%	1.06	+0.06
63 Insurance Carriers	284	- 31.5%	$39,600	+15.2%	1,585,048	+4.5%	0.29	- 0.22
64 Insurance Agents & Brokers	690	+34.5%	$27,800	- 18.7%	1,404,557	+27.8%	0.79	- 0.08
65 Real Estate	2,836	+46.5%	$17,200	+203.6%	3,848,184	+17.2%	1.18	+0.08
Services	33,389	+82.5%	$25,500	- 19.4%	53,840,937	+42.7%	1.00	+0.09
70 Lodging	1,255	+18.8%	$16,800	- 0.6%	2,107,845	+17.0%	0.96	- 0.14
73 Business Services	4,833	+139.5%	$22,500	- 0.7%	12,259,468	+77.0%	0.63	+0.09
80 Health Care	10,273	+84.5%	$42,300	- 20.6%	11,840,363	+30.7%	1.39	+0.25
81 Legal Services	447	+10.3%	$51,800	- 18.7%	1,601,699	+19.3%	0.45	- 0.12
87 Professional Services	2,768	+248.2%	$21,500	- 31.4%	6,303,247	+42.9%	0.71	+0.37
All Other Services	13,813	+63.5%	$14,800	- 25.4%	19,728,315	+39.1%	1.13	+0.01
Government	11,915	+32.6%	$39,700	+69.8%	23,536,863	+14.8%	0.81	- 0.01
All Industries	104,845	+42.7%	$28,700	- 3.3%	168,490,702	+22.8%		

Note: LQ means Location Quotient. All figures are preliminary and subject to change. IMPLAN estimates Jackson County to have 1,111 more jobs than BEA's estimate. However, estimates are within 1% and therefore are of no major concern.

Source: E.D. Hovee & Company using Minnesota IMPLAN Group's proprietary IMPLAN database.

Relative to the U.S., it appears that Jackson County has a relatively low level of manufacturing activity (with an employment LQ of 0.89). However, this is not true for all manufacturing sectors, as the county has a high activity level (or current competitive advantage) in lumber & wood products; stone, glass, & concrete; instruments; and miscellaneous manufacturing.

The highest level of activity, by far, occurs within the lumber & wood products. However, the level of concentrated activity has decreased significantly since 1990. Jackson County's competitiveness has grown the fastest in instruments. Other manufacturing sectors for which Jackson County has experienced an *increased competitive share* of national employment include furniture/fixtures, industrial machinery, electronic equipment and miscellaneous manufacturing. Related industrial strength has been shown in transportation services.

On the commercial retail and service side, substantial competitive gains have been experienced with credit agencies, real estate, business services, health care and professional services. This growth points to increased diversification and sophistication of the Medford area economy.

The *fastest-growing* industry in Jackson County is instruments, which has gone from 65 jobs in 1990 to 911 in 2000. Other rapidly-growing industries have included credit agencies, professional services, mining, business services, and security & commodity.

While manufacturing employment has not increased as rapidly as the non-manufacturing job base, manufacturing jobs pay an average of $40,500 per year. This is more than 40% above the *average wage* for all employment sectors ($28,700). Specific sectors reporting significantly high average wages include security & commodity ($86,000); electric, gas & sanitation ($72,100); instruments ($66,500); and chemical products ($53,800).

There are a limited set of sectors that *score well* according to all of the following criteria:

- Average wage above the average for all employment sectors
- Wage increases exceeding the average for all sectors
- Industry concentration higher than the U.S. average (i.e. LQ greater than 1.00)
- Increased industry concentration (or LQ) in the 1990s

The four sectors that have met all of these criteria are construction; stone, glass & concrete; instrument manufacturing; and security & commodity services. Six sectors met three of the four criteria, including mining, furniture & fixtures, electronic equipment, transportation services, real estate, and health care.

Jackson County Industry Productivity & Value-Added. Countywide, industrial workers are three-quarters as productive as the rest of the nation (measured as value of output produced per worker). In 2000, the average worker in Jackson County produced output valued at $76,300, 25% below comparable national rates.

Figure 18. Average Productivity by Sector for Jackson County (versus U.S.)

Employment Sector	2000 Output/ Worker	Location Quotient 2000	Location Quotient Chg. 1990-00	% of Output Value-Added 2000 JC	% of Output Value-Added 2000 US	% of Output Value-Added Chg. 1990-00 JC	% of Output Value-Added Chg. 1990-00 US
Agriculture	$33,100	0.58	+0.04	69.9%	41.7%	+19.2%	+7.5%
Mining	$99,900	0.30	+0.09	63.0%	48.6%	- 2.2%	- 20.7%
Construction	$115,300	0.98	+0.13	37.0%	39.1%	+4.2%	+0.8%
Manufacturing	$159,300	0.70	- 0.05	35.0%	35.5%	+0.3%	- 3.9%
20 Food products	$251,300	0.88	- 0.13	23.5%	27.2%	+3.1%	+0.2%
21 Tobacco	$0	0.00	+0.00	0.0%	45.2%	+0.0%	- 15.3%
22 Textile mill products	$0	0.00	+0.00	0.0%	33.2%	+0.0%	+4.0%
23 Apparel & textiles	$76,700	0.66	- 0.29	28.4%	29.3%	- 2.5%	- 11.6%
24 Lumber & wood	$148,600	1.17	- 0.07	40.0%	37.3%	+4.9%	+2.8%
25 Furniture & fixtures	$102,700	0.83	+0.14	37.9%	36.0%	- 10.4%	- 9.2%
26 Paper products	$0	0.00	- 1.36	0.0%	33.2%	- 32.2%	- 3.4%
27 Printing & publishing	$112,000	0.82	- 0.05	36.5%	46.2%	- 6.7%	- 3.6%
28 Chemical products	$269,700	0.65	- 0.01	37.3%	43.0%	+18.7%	+4.6%
29 Petroleum products	$0	0.00	- 0.25	0.0%	14.9%	- 40.3%	- 8.9%
30 Rubber & plastics	$160,300	0.91	+0.07	24.7%	33.3%	- 25.0%	- 19.1%
31 Leather products	$31,500	0.26	+0.00	46.3%	43.7%	+0.0%	+5.9%
32 Stone, glass & concrete	$141,800	0.88	+0.07	39.9%	44.3%	+7.8%	- 2.5%
33 Primary metals	$79,100	0.31	+0.00	31.6%	28.6%	+0.0%	+0.1%
34 Fabricated metal prod.	$115,700	0.72	- 0.02	37.8%	43.3%	- 5.9%	- 0.7%
35 Industrial machinery	$118,200	0.58	- 0.07	36.8%	37.0%	- 9.2%	- 11.7%
36 Electronic equipment	$182,600	0.74	+0.12	24.4%	41.7%	- 17.9%	- 0.2%
37 Transport. equipment	$191,700	0.62	+0.13	31.2%	31.6%	- 19.1%	- 9.0%
38 Instruments	$271,800	1.33	+0.63	30.3%	37.1%	- 14.7%	- 19.6%
39 Misc manufacturing	$69,600	0.61	- 0.29	41.0%	51.4%	+5.6%	+10.1%
TCU	$129,700	0.70	- 0.10	50.4%	55.1%	- 11.6%	- 5.7%
40 Railroads	$102,200	0.51	- 0.52	22.4%	53.5%	- 49.7%	- 14.0%
41 Transit	$36,700	0.80	- 0.05	58.3%	63.0%	- 14.3%	- 4.7%
42 Trucking & warehousing	$113,700	1.03	- 0.06	44.8%	43.8%	- 21.5%	- 18.0%
44 Water transportation	$188,800	0.79	- 0.28	15.0%	30.4%	- 26.9%	- 1.9%
45 Air transportation	$93,300	0.81	+0.06	56.7%	61.3%	+6.6%	+4.9%
46 Pipelines	$0	0.00	+0.00	0.0%	77.6%	+0.0%	+7.2%
47 Transportation services	$62,000	0.84	- 0.07	74.3%	73.5%	+6.3%	+13.2%
48 Communication	$163,800	0.54	- 0.22	44.1%	55.8%	- 24.0%	- 20.1%
49 Electric, gas & sanitation	$428,400	0.85	- 0.13	62.3%	60.6%	+12.0%	+11.5%
Wholesale	$90,100	0.71	- 0.10	68.5%	69.2%	- 10.6%	- 6.2%
Retail Trade	$40,500	0.91	+0.12	73.8%	72.9%	- 1.6%	+1.4%
FIRE	$177,500	0.82	- 0.01	68.1%	69.1%	- 7.9%	- 4.2%
60 Banking	$184,100	0.73	- 0.08	66.2%	66.2%	- 2.3%	- 0.2%
61 Credit Agencies	$37,800	0.71	- 0.96	54.0%	64.0%	+31.8%	+45.3%
62 Security & Commodity	$184,400	0.73	+0.04	40.8%	56.6%	- 35.6%	- 9.5%
63 Insurance Carriers	$119,600	0.72	- 0.12	57.6%	62.2%	+19.6%	+20.1%
64 Insurance Agents & Brokers	$44,500	0.74	+0.04	78.7%	78.7%	- 1.9%	+2.7%
65 Real Estate	$268,300	0.72	+0.02	73.6%	73.4%	- 9.1%	- 8.8%
Services	$53,900	0.86	+0.03	55.0%	63.7%	- 9.6%	+2.1%
70 Lodging	$44,800	0.70	+0.03	58.3%	63.1%	- 9.2%	- 6.4%
73 Business Services	$49,300	0.73	+0.10	55.1%	69.2%	- 25.6%	- 4.5%
80 Health Care	$72,400	1.02	+0.02	65.0%	66.0%	- 4.7%	+7.3%
81 Legal Services	$70,500	0.66	- 0.05	77.9%	77.9%	- 5.9%	+1.0%
87 Professional Services	$42,700	0.53	- 0.15	54.5%	59.6%	- 11.2%	- 3.3%
All Other Services	$44,400	0.96	+0.13	41.3%	56.4%	- 11.1%	+3.6%
Government	$47,500	0.85	+0.28	92.6%	89.4%	+9.2%	- 1.2%
All Industries	$76,300	0.75	+0.02	56.0%	57.1%	- 0.5%	- 0.5%

Note: All figures are preliminary and subject to change.

Source: E.D. Hovee & Company using Minnesota IMPLAN Group's proprietary IMPLAN database and model.

Jackson County sectors exhibiting relatively high rates of productivity compared to the U.S. include lumber & wood, instruments, trucking & warehousing, and health care. Productivity in instruments, relative to the nation, has increased dramatically in recent years.

As compared to the nation, Jackson County businesses (taken together) produce a level of value-added output slightly below the nation. Out of the 46 employment sectors identified, only 12 out-performed the U.S. Over the last decade, Jackson County's level of value-added output has remained the same relative to the nation.

Jackson County Export Orientation, Procurement & Multipliers. To be deemed *export-oriented,* it is often determined that an industry should export at least 50% of its output to purchasers outside the region. Only 15 of Jackson County's employment sectors export at least 50% of their output to communities outside the County.

Taken together, Jackson County businesses only export 33% of their output, with 15 sectors showing very low proportions (less than 20%) of their output being sold or delivered outside the county. The main reason the group as a whole does not meet the 50% benchmark is that Jackson County employers are mostly locally focused, as Jackson County accounts for nearly 50% of Southern Oregon's residential and economic activity.

Industries exporting more than 90% of their output outside Jackson County include mining; rubber & plastics; stone, glass & concrete; primary metals; transportation equipment; and fabricated metal products. Another nine industries showing a relatively high amount of export orientation include agriculture, food products, chemical products, industrial machinery, miscellaneous manufacturing, air transportation, transportation services, and insurance.

Industries making significant *local purchases* are: construction; lumber & wood; trucking & warehousing; electric, gas & sanitation; retail trade; lodging; health care; "all other services"; and government.

One-third of all industrial sectors have a *jobs multiplier* greater than 2.0; in other words, supporting more than one job elsewhere in the Jackson County economy for every worker they directly employ. In fact, two sectors support two or more indirect and induced jobs for every direct job. These sectors include food products and instrument manufacturing.

Figure 19. Export Orientation, Local Procurement, and Economic Impact by Sector

Employment Sector	Output Exported 2000	Output Exported Chg. 1990-00	2000 Local Procure.	Economic Multipliers (2000) Output	Income	Jobs
Agriculture	69.5%	+25.3%	53.8%	1.56	1.45	1.33
Mining	90.5%	+89.3%	4.1%	1.46	1.44	1.62
Construction	16.9%	+10.9%	100.0%	1.68	1.76	2.13
Manufacturing	65.8%	+16.5%	53.6%	1.66	1.90	2.32
20 Food products	86.4%	+81.0%	6.1%	1.61	2.85	4.27
21 Tobacco	0.0%	+0.0%	0.0%	0.00	0.00	0.00
22 Textile mill products	0.0%	+0.0%	0.0%	0.00	0.00	0.00
23 Apparel & textiles	11.2%	+7.8%	6.4%	1.48	1.82	1.52
24 Lumber & wood	73.6%	+8.5%	82.7%	1.77	1.92	2.32
25 Furniture & fixtures	2.5%	+0.4%	63.9%	1.61	1.70	1.81
26 Paper products	0.0%	-49.1%	0.0%	0.00	0.00	0.00
27 Printing & publishing	47.6%	+45.2%	36.5%	1.54	1.71	1.83
28 Chemical products	76.5%	- 26.6%	7.5%	1.42	1.78	2.54
29 Petroleum products	0.0%	- 1.3%	0.0%	0.00	0.00	0.00
30 Rubber & plastics	100.0%	+99.9%	0.7%	1.47	1.97	1.98
31 Leather products	25.8%	+0.0%	0.9%	1.35	1.49	1.15
32 Stone, glass & concrete	92.4%	+88.4%	7.8%	1.56	1.71	2.02
33 Primary metals	100.0%	+0.0%	1.0%	1.47	1.65	1.49
34 Fabricated metal prod.	95.0%	+78.2%	3.5%	1.44	1.60	1.69
35 Industrial machinery	62.4%	+27.6%	19.7%	1.53	1.58	1.81
36 Electronic equipment	25.6%	-17.6%	47.1%	1.63	2.11	2.28
37 Transport. equipment	98.8%	+88.5%	1.9%	1.42	1.67	2.02
38 Instruments	48.1%	+12.1%	59.8%	1.64	1.88	3.15
39 Misc manufacturing	85.6%	+69.4%	8.5%	1.47	1.64	1.46
TCU	23.7%	-9.0%	76.4%	1.66	1.80	2.11
40 Railroads	17.4%	- 0.7%	27.3%	1.64	2.40	1.85
41 Transit	0.2%	-5.7%	73.8%	1.58	1.46	1.31
42 Trucking & warehousing	32.0%	-12.6%	98.5%	1.83	1.92	2.21
44 Water transportation	37.7%	+22.1%	15.1%	1.56	3.33	2.68
45 Air transportation	62.3%	+22.6%	27.4%	1.50	1.51	1.70
46 Pipelines	0.0%	+0.0%	0.0%	0.00	0.00	0.00
47 Transportation services	52.0%	- 7.3%	66.1%	1.66	1.39	1.61
48 Communication	15.9%	- 34.0%	53.2%	1.68	1.97	2.45
49 Electric, gas & sanitation	0.4%	+0.3%	77.6%	1.32	1.68	2.68
Wholesale	8.5%	- 6.0%	55.7%	1.54	1.49	1.72
Retail Trade	28.1%	+4.4%	92.8%	1.52	1.40	1.30
FIRE	23.9%	+0.3%	65.3%	1.44	2.01	2.04
60 Banking	4.7%	- 22.2%	57.1%	1.47	1.96	2.15
61 Credit Agencies	4.0%	- 22.6%	69.3%	1.84	1.64	1.42
62 Security & Commodity	40.0%	+0.2%	59.7%	1.93	1.79	2.96
63 Insurance Carriers	1.0%	+0.3%	23.3%	1.61	1.84	2.25
64 Insurance Agents & Brokers	78.4%	+17.5%	57.4%	1.61	1.37	1.41
65 Real Estate	25.5%	+3.8%	69.9%	1.33	2.73	2.17
Services	27.7%	+5.4%	80.8%	1.70	1.54	1.54
70 Lodging	3.2%	- 26.3%	79.3%	1.65	1.64	1.41
73 Business Services	0.9%	+0.3%	66.4%	1.69	1.56	1.50
80 Health Care	36.8%	+13.0%	91.3%	1.67	1.42	1.69
81 Legal Services	1.9%	+1.3%	34.6%	1.69	1.35	1.74
87 Professional Services	1.8%	- 1.7%	50.6%	1.76	1.58	1.51
All Other Services	35.7%	+7.1%	82.0%	1.75	1.77	1.46
Government	7.1%	- 25.1%	95.2%	1.60	1.26	1.42
All Industries	32.7%	+1.9%	75.4%	1.61	1.59	1.65

Note: All figures are preliminary and subject to change.

Source: E.D. Hovee & Company using Minnesota IMPLAN Group's proprietary IMPLAN database and model.

Competitive Advantage Framework. How does one pull all this economic data together to make a meaningful assessment of most likely targets for future economic development and diversification of the Medford area economy? One approach is through a *competitive advantage* framework that considers both the current and changing competitive position of Medford and Jackson County's business sectors.

The framework for evaluating potential competitive advantages is predicated on the assessment of the *current and changing competitive position* of various industry clusters in the county as compared to the nation. As indicated by the chart which follows, four distinctive *quadrants* of competitiveness can be identified:

- *Strong and growing* sectors represent industries that have an existing competitive presence in the study area, exceeding the national average. For these sectors, the study area's competitive position not only is above average, but has increased in recent years (from 1990-2000).
- In contrast, *weak and declining* industries are those that currently have below average representation; the study area's competitive position for these sectors diminished even further between 1990 and 2000.
- A *mature* industry is one that currently maintains a strong and competitive position, but whose competitive position has decreased since 1990.
- Finally, *emerging* sectors are those that historically have maintained a below average competitive position but have achieved gains in competitive share since 1990.

Figure 20. Jackson County's Competitive Advantage

Change in Competitive Position (LQ)	Current Competitive Position (LQ): Weak (< 100%)	Current Competitive Position (LQ): Strong (> 100%)
Growing (+)	**Emerging:** **Mining (0.58)** Food Products (0.43) Apparel & Textiles (0.16) Furniture & Fixtures (0.64) Printing & Publishing (0.93) Rubber & Plastics (0.13) Leather Products (0.04) Primary Metals (0.00) Fabricated Metal Products (0.48) Industrial Machinery (0.26) Electronic Equipment (0.83) Credit Agencies (0.73) Business Services (0.63) Professional Services (0.71)	**Strong & Growing:** **Construction (1.06)** Stone, Glass & Concrete (1.45) Instruments (1.74) Miscellaneous Manufacturing (1.11) Transportation Services (1.51) Security & Commodity (1.06) Real Estate (1.18) Health Care (1.39) All Other Services (1.13)
Declining (-)	**Weak & Declining:** Tobacco (0.00) Textile Mill Products (0.00) Paper Products (0.00) Chemical Products (0.22) Petroleum Products (0.00) Transport Equipment (0.23) Railroads (0.33) Transit (0.76) Water Transportation (0.02) Air Transportation (0.39) Pipelines (0.00) Communication (0.92) Electric, Gas & Sanitation (0.62) **Wholesale (0.62)** Banking (0.67) Insurance Carriers (0.29) Insurance Agents & Brokers (0.79) Lodging (0.96) Legal Services (0.45) **Government (0.81)**	**Mature:** **Agriculture (1.58)** Lumber & Wood (8.33) Trucking & Warehousing (1.36) **Retail Trade (1.32)**

Note: **Boldface** print items represent sectors with above average productivity. Percentages in parentheses indicate employment location quotient (LQ) or competitive position relative to the nation.

Source: E.D. Hovee & Company, using IMPLAN input-output data sets, January 2003.

In reviewing the matrix classifications, the natural inclination might be to assume only "strong and growing" industries represent best industrial development opportunities. However, a more diversified *portfolio* approach should be considered. This would involve tailoring strategic decisions around:

- Limited effort – in terms of general marketing and response to inquiries – for *weak and declining* sectors.
- Repositioning of the *mature* sectors – with emphasis on innovation, value-added diversification, improved work force skills and environmental stewardship.
- Targeted business recruitment, workforce training and infrastructure investment – for selected *emerging* industries.
- Strategic business development and infrastructure support – targeted to specific industry-driven needs of *strong and growing* sectors.

Competitive Cluster Criteria. To identify the industries that the region has the greatest advantage in competing for versus other areas around the U.S., a series of screening criteria have been applied to the industry sectors identified. Five sets of screening criteria have been developed:

1. Current and changing *competitive position* of the industry – relative to the nation (as illustrated by the previous target industry matrix). The recommended target should *either* have a strong competitive position currently or demonstrate improvement in its competitive standing in recent years (since 1990).

2. *Worker productivity* and change in productivity – as quantifiable indicators of workforce suitability. To be recommended as a target industry, existing local firms should *either* demonstrate high productivity comparable to other firms nationally *or* a rate of productivity increase more rapid than has been experienced by this industry sector nationwide.

3. *Percent of Output Value-Added* – with more than 50% indicating a majority of an industry's output value being created within the local economy.

4. *Employment multiplier and/or forecast employment growth* – with the multiplier indicating the *ripple effect* that the sector provides as a stimulus to other supporting employment activity in the community. To be recommended as a target industry, the sector should demonstrate a relatively high employment multiplier.

5. *Wage levels* including changes over time – relative to other industries in the local area. A target threshold of preference is given for jobs *either* paying at least the local average annual wage of $28,700 *or* with positive wage growth from 1990-2000.

In the matrix chart that follows, industries are assigned a 1 for each criterion they meet. A zero is assigned for every criterion not met.

Figure 21. Screening Competitive Advantage Industries for Jackson County

Employment Sector	Employment LQ 2000	Employment LQ 1990-00	Productivity LQ 2000	Productivity LQ 1990-00	% Value-Added	Jobs Mult.	Average Wage 2000	Average Wage 1990-00	LQ Emp.	LQ Prod.	% Value-Added	Jobs Mult.	Avg. Wage	Total
Agriculture	1.58	- 0.51	0.58	+0.04	69.9%	1.33	$15,500	- 26.7%	1	1	1	0	0	3
Mining	0.58	+0.39	0.30	+0.09	63.0%	1.62	$37,700	+6.3%	1	1	1	0	1	4
Construction	1.06	+0.06	0.98	+0.13	37.0%	2.13	$37,800	+24.4%	1	1	0	1	1	4
Manufacturing	0.89	- 0.02	0.70	- 0.05	35.0%	2.32	$40,500	- 3.3%	0	0	0	1	1	2
20 Food products	0.43	+0.01	0.88	- 0.13	23.5%	4.27	$32,000	- 13.2%	1	0	0	1	1	3
21 Tobacco	0.00	+0.00	0.00	+0.00	0.0%	0.00	$0	+0.0%	0	0	0	0	0	0
22 Textile mill products	0.00	+0.00	0.00	+0.00	0.0%	0.00	$0	+0.0%	0	0	0	0	0	0
23 Apparel & textiles	0.16	+0.04	0.66	- 0.29	28.4%	1.52	$16,500	- 0.6%	1	0	0	0	0	1
24 **Lumber & wood**	8.33	- 4.45	1.17	- 0.07	40.0%	2.32	$42,900	- 5.3%	1	1	0	1	1	4
25 Furniture & fixtures	0.64	+0.19	0.83	+0.14	37.9%	1.81	$32,400	+13.4%	1	1	0	0	1	3
26 Paper products	0.00	- 0.31	0.00	- 1.36	0.0%	0.00	$0	+0.0%	0	0	0	0	0	0
27 Printing & publishing	0.93	+0.04	0.82	- 0.05	36.5%	1.83	$31,200	- 6.3%	1	0	0	0	1	2
28 Chemical products	0.22	- 0.24	0.65	- 0.01	37.3%	2.54	$53,800	+11.1%	0	0	0	1	1	2
29 Petroleum products	0.00	- 0.76	0.00	- 0.25	0.0%	0.00	$0	+0.0%	0	0	0	0	0	0
30 Rubber & plastics	0.13	+0.04	0.91	+0.07	24.7%	1.98	$28,000	- 23.6%	1	1	0	0	0	2
31 Leather products	0.04	+0.04	0.26	+0.00	46.3%	1.15	$8,400	+0.0%	1	0	0	0	0	1
32 **Stone, glass & concrete**	1.45	+0.51	0.88	+0.07	39.9%	2.02	$40,300	+62.4%	1	1	0	1	1	4
33 Primary metals	0.00	+0.00	0.31	+0.00	31.6%	1.49	$20,800	+0.0%	1	0	0	0	0	1
34 Fabricated metal prod.	0.48	+0.02	0.72	- 0.02	37.8%	1.69	$31,000	- 30.2%	1	0	0	0	1	2
35 Industrial machinery	0.26	+0.06	0.58	- 0.07	36.8%	1.81	$38,600	- 5.3%	1	0	0	0	1	2
36 **Electronic equipment**	0.83	+0.28	0.74	+0.12	24.4%	2.28	$32,400	- 0.7%	1	1	0	1	1	4
37 Transport. equipment	0.23	- 0.01	0.62	+0.13	31.2%	2.02	$41,800	+16.4%	0	1	0	1	1	3
38 **Instruments**	1.74	+1.62	1.33	+0.63	30.3%	3.15	$66,500	+81.5%	1	1	0	1	1	4
39 Misc manufacturing	1.11	+0.27	0.61	- 0.29	41.0%	1.46	$19,000	- 32.8%	1	0	0	0	0	1
TCU	0.94	- 0.15	0.70	- 0.10	50.4%	2.11	$38,100	- 24.0%	0	0	1	1	1	3
40 Railroads	0.33	- 0.13	0.51	- 0.52	22.4%	1.85	$16,800	- 79.7%	0	0	0	0	0	0
41 Transit	0.76	- 0.30	0.80	- 0.05	58.3%	1.31	$17,200	- 27.9%	0	0	1	0	0	1
42 **Trucking & warehousing**	1.36	- 0.24	1.03	- 0.06	44.8%	2.21	$37,600	- 21.4%	1	1	0	1	1	4
44 Water transportation	0.02	- 0.03	0.79	- 0.28	15.0%	2.68	$18,900	- 70.6%	0	0	0	1	0	1
45 Air transportation	0.39	- 0.04	0.81	+0.06	56.7%	1.70	$37,000	- 1.9%	0	1	1	0	1	3

Employment Sector	Employment LQ 2000	Employment LQ 1990-00	Productivity LQ 2000	Productivity LQ 1990-00	% Value-Added	Jobs Mult.	Average Wage 2000	Average Wage 1990-00	LQ Emp.	LQ Prod.	% Value-Added	Jobs Mult.	Avg. Wage	Total
46 Pipelines	0.00	+0.00	0.00	+0.00	0.0%	0.00	$0	+0.0%	0	0	0	0	0	0
47 Transportation services	1.51	+0.10	0.84	- 0.07	74.3%	1.61	$39,800	- 6.3%	1	0	1	0	1	3
48 Communication	0.92	- 0.16	0.54	- 0.22	44.1%	2.45	$36,800	- 38.7%	0	0	0	1	1	2
49 Electric, gas & sanitation	0.62	- 0.12	0.85	- 0.13	62.3%	2.68	$72,100	+5.7%	0	0	1	1	1	3
Wholesale	0.62	- 0.13	0.71	- 0.10	68.5%	1.72	$37,400	- 13.4%	0	0	1	0	1	2
Retail Trade	1.32	- 0.01	0.91	+0.12	73.8%	1.30	$18,800	- 7.2%	1	1	1	0	0	3
FIRE	0.84	- 0.02	0.82	- 0.01	68.1%	2.04	$29,000	+8.6%	0	0	1	1	1	3
60 Banking	0.67	- 0.17	0.73	- 0.08	66.2%	2.15	$35,500	- 4.9%	0	0	1	1	1	3
61 Credit Agencies	0.73	+0.29	0.71	- 0.96	54.0%	1.42	$20,100	- 69.7%	1	0	1	0	0	2
62 **Security & Commodity**	1.06	+0.06	0.73	+0.04	40.8%	2.96	$86,000	+5.4%	1	1	0	1	1	4
63 Insurance Carriers	0.29	- 0.22	0.72	- 0.12	57.6%	2.25	$39,600	+15.2%	0	0	1	1	1	3
64 Insurance Agents & Brokers	0.79	- 0.08	0.74	+0.04	78.7%	1.41	$27,800	- 18.7%	0	1	1	0	0	2
65 **Real Estate**	1.18	+0.08	0.72	+0.02	73.6%	2.17	$17,200	+203.6%	1	1	1	1	1	5
Services	1.00	+0.09	0.86	+0.03	55.0%	1.54	$25,500	- 19.4%	1	1	1	0	0	3
70 Lodging	0.96	- 0.14	0.70	+0.03	58.3%	1.41	$16,800	- 0.6%	0	1	1	0	0	2
73 Business Services	0.63	+0.09	0.73	+0.10	55.1%	1.50	$22,500	- 0.7%	1	1	1	0	0	3
80 **Health Care**	1.39	+0.25	1.02	+0.02	65.0%	1.69	$42,300	- 20.6%	1	1	1	0	1	4
81 Legal Services	0.45	- 0.12	0.66	- 0.05	77.9%	1.74	$51,800	- 18.7%	0	0	1	0	1	2
87 Professional Services	0.71	+0.37	0.53	- 0.15	54.5%	1.51	$21,500	- 31.4%	1	0	1	0	0	2
All Other Services	1.13	+0.01	0.96	+0.13	41.3%	1.46	$14,800	- 25.4%	1	1	0	0	0	2
Government	0.81	- 0.01	0.85	+0.28	92.6%	1.42	$39,700	+69.8%	0	1	1	0	1	3
All Industries	1.00	+0.00	0.75	+0.02	56.0%	1.65	$28,700	- 3.3%						

Note: LQ denotes location quotient or competitive position relative to the entire nation. An LQ of over 100% exceeds the national average. Items which meet threshold criteria are noted with **boldface** type. In the five columns at the far right, 1 indicates the criterion is met. Otherwise 0 is shown. The last column indicates the number of threshold criteria met. Sectors meeting four or five of the threshold criteria are indicated in **boldface**.

Source: E.D. Hovee & Company using IMPLAN, Oregon Employment Department, and U.S. Bureau of Labor Statistics data sets.

Only the real estate sector meets all five criteria. However, another nine industries meet four of the five criteria. Taken together, one-fifth of the industrial sectors portray Jackson County as being strongly competitive. Industries meeting *four or more* criteria include:

Mining	Instruments
Construction	Trucking & Warehousing
Lumber & Wood	Security & Commodity
Stone, Glass & Concrete	Real Estate
Electronic Equipment	Health Care

Medford's Competitive Position. The analysis level can be focused even more tightly from Jackson County to Medford specifically. Firms located within Medford's UGA currently employ almost 37,900 workers. Services is the largest sector providing 12,980 jobs, with health care workers accounting for 40% of all service-related jobs. The retail sector contributes another 11,140 jobs and government adds another 3,430.

The manufacturing sector has less than 2,800 employees, but has grown by 12.5% since 1995. This job growth has occurred at a time when manufacturing jobs both countywide and nationally were in decline (-7.2% and -0.6% respectively).

Between 1995 and 2000, Medford's job base expanded by 15% (or 990 jobs per year). Three individual sectors more than doubled their workforce. Instrument-related employment grew the fastest at 306%, followed by transit (264%) and air transportation (163%).

Due to the fact that Medford is the region's commercial hub, Medford has a competitive advantage in an alternative set of employment sectors. Only three of the ten sectors for which Jackson County has a strong competitive position are also highly competitive for Medford (i.e. lumber & wood, instruments, and health care). In terms of national competitiveness, Medford also appears to have a strong position in printing & publishing; transit; transportation services; communication; electric, gas & sanitation; retail trade; and banking. Medford's strong position in transit, communication, electric/gas/sanitation, retail, and banking is a result of its role in servicing a larger regional population base.

Medford has a strong competitive position in eight additional sectors internal to the Southern Oregon economy (or relative to the rest of Jackson County). The eight sectors include food products, transportation equipment, air transportation, wholesale trade, insurance carriers, insurance agents/brokers, business services, and legal services. While not as competitive to other regions across the U.S., Medford should be in a strong position to capitalize on any opportunities that could arise within these sectors countywide.

Figure 22. Medford Employment Trends & Competitive Advantage Industries

	Medford UGA		Medford-JC		Medford-US	
Employment Sector	2000 Jobs	% Chg. 1995-00	LQ 2000	Chg. 1995-00	LQ 2000	Chg. 1995-00
Agriculture	1,016	+33.5%	0.58	+0.11	0.92	+0.15
Mining	D	D	D	D	D	D
Construction	1,306	+38.9%	0.48	+0.05	0.51	+0.05
Manufacturing	2,782	+12.5%	0.73	+0.11	0.65	+0.06
20 Food products	200	-15.6%	1.18	+0.03	0.51	-0.12
21 Tobacco	0	+0.0%	0.00	+0.00	0.00	+0.00
22 Textile mill products	D	D	D	D	D	D
23 Apparel & textiles	D	D	D	D	D	D
24 Lumber & wood	836	-2.6%	0.48	+0.08	4.00	-0.38
25 Furniture & fixtures	81	+58.8%	0.95	+0.06	0.61	+0.19
26 Paper products	0	+0.0%	0.00	+0.00	0.00	+0.00
27 Printing & publishing	604	-11.2%	1.75	+0.13	1.62	-0.19
28 Chemical products	D	D	D	D	D	D
29 Petroleum products	0	+0.0%	0.00	+0.00	0.00	+0.00
30 Rubber & plastics	D	D	D	D	D	D
31 Leather products	0	+0.0%	0.00	+0.00	0.00	+0.00
32 Stone, glass & concrete	53	+26.2%	0.27	-0.13	0.39	+0.06
33 Primary metals	0	+0.0%	0.00	+0.00	0.00	+0.00
34 Fabricated metal prod.	84	+50.0%	0.49	+0.17	0.23	+0.06
35 Industrial machinery	109	-6.8%	0.88	-0.10	0.23	-0.03
36 Electronic equipment	144	+25.2%	0.45	+0.01	0.37	+0.05
37 Transport. equipment	151	+22.8%	1.58	-0.09	0.36	+0.05
38 Instruments	451	+306.3%	1.37	-0.31	2.38	+1.78
39 Misc manufacturing	37	-7.5%	0.30	-2.38	0.34	-0.04
TCU	1,945	+32.0%	1.20	+0.03	1.13	+0.11
40 Railroads	0	+0.0%	0.00	+0.00	0.00	+0.00
41 Transit	240	+263.6%	2.23	+1.49	1.70	+1.11
42 Trucking & warehousing	356	-15.4%	0.46	-0.26	0.63	-0.18
44 Water transportation	0	+0.0%	0.00	+0.00	0.00	+0.00
45 Air transportation	155	+162.7%	1.37	+0.34	0.54	+0.19
46 Pipelines	0	+0.0%	0.00	+0.00	0.00	+0.00
47 Transportation services	265	+48.9%	1.35	-0.21	2.03	+0.53
48 Communication	761	+55.0%	2.34	+0.63	2.16	+0.35
49 Electric, gas & sanitation	168	-35.1%	1.73	-0.47	1.08	-0.50
Wholesale	1,631	-9.7%	1.54	+0.37	0.96	-0.22
Retail Trade	11,143	+12.5%	1.37	-0.03	1.81	+0.03
FIRE	1,661	+18.0%	0.71	-0.08	0.59	-0.03
60 Banking	492	+17.7%	1.53	+0.34	1.03	+0.10
61 Credit Agencies	187	+24.7%	0.45	-0.16	0.33	-0.10
62 Security & Commodity	129	-22.8%	0.57	-0.70	0.60	-0.53
63 Insurance Carriers	198	+57.1%	1.93	+0.96	0.56	+0.17
64 Insurance Agents & Brokers	250	+28.9%	1.00	+0.31	0.79	+0.17
65 Real Estate	405	+14.7%	0.40	-0.16	0.47	-0.04
Services	12,979	+17.8%	1.08	-0.12	1.07	-0.07
70 Lodging	400	-20.6%	0.88	-0.13	0.84	-0.38
73 Business Services	2,577	+37.1%	1.48	+0.38	0.93	+0.00
80 Health Care	5,224	+10.3%	1.41	-0.41	1.96	-0.01
81 Legal Services	256	+8.9%	1.58	+0.31	0.71	-0.04
87 Professional Services	502	+37.5%	0.50	+0.00	0.35	+0.04
All Other Services	4,020	+21.8%	0.81	-0.14	0.91	-0.07
Government	3,430	+8.3%	0.80	+0.05	0.65	+0.02
All Industries	37,893	+15.0%				

Note: D indicates industries that could not be disclosed due to the sector having fewer than 3 employers.

Source: E.D. Hovee & Company using data provided by Oregon Employment Department.

Based on this analysis, Medford's employment opportunities can be divided into three tiers.

- Sectors within Tier 1 represent industries for which Medford is in the best position to realize opportunities due to its current and growing competitive advantage relative to other areas nationwide.
- Tier 2 industries represent employment sectors that Medford has a current but eroding competitive position or sectors for which Jackson County may be competitive but represent more of a challenge to Medford.
- Tier 3 comprises sectors for which Medford is competitive relative to Jackson County but not outside the Southern Oregon region.

Figure 23. Medford Target Industry Opportunities by Tier

Tier 1 - Best Position	Tier 2 - Strong but Challenging	Tier 3 - Locally Competitive
Instruments	Mining	Food Products
Transit	Construction	Transportation Equipment
Transportation Services	Lumber & Wood	Air Transportation
Communications	Printing & Publishing	Wholesale Trade
Retail Trade	Stone, Glass & Concrete	Insurance Carriers
Banking	Electronic Equipment	Insurance Agents & Brokers
	Trucking & Warehousing	Business Services
	Electric, Gas & Sanitation	Legal Services
	Security & Commodity	
	Real Estate	
	Health Care	

Source: E.D. Hovee & Company.

Of the Tier 1 sectors, instruments and transportation services represent the primary industrial opportunities – with other opportunities of communications, retail trade and banking most likely to occur with commercial development.

The range of industrial opportunity is substantially broader at the Tier 2 and 3 levels. However, these represent sectors for which more local effort and initiative may be required to market and attract the opportunities available. Both Tier 2 and 3 industries will be particularly affected by policies and strategies Medford employs to maintain a competitive industrial and commercial land base.

III. EMPLOYMENT LAND CHARACTERISTICS

To this point the *Medford Economic Market Analysis* has addressed broader demographic, economic and competitive questions that could affect future business and job prospects. This analysis now turns to a more focused assessment of industrial and commercial lands. This review of *employment land characteristics* covers an assessment of the existing land inventory versus projected future needs.

BACKGROUND

An industrial and commercial land inventory analysis was completed utilizing the City of Medford's GIS files, Oregon Employment Department employment data, commercial and industrial building trends from the Medford Planning Department, and office development data from private consultant Bruce Ostley – for analysis being conducted on behalf of the Medford Urban Renewal Agency (MURA). Results of this analysis inform local policy makers how employment lands are being utilized and the market forces that will influence future development. Specific information examined includes the rate at which land is developing, job densities, type of jobs locating on employment lands, and the amount and location of remaining vacant commercial and industrial land.

The City of Medford Planning Department completed an industrial land analysis in August 2001. The report provided similar results to the evaluation contained in this section and corroborates many of the findings contained herein.[5]

METHODOLOGY

Updated GIS files have been obtained from the City of Medford's Planning Department. Shape files covered:

- City Limits
- Urban Growth Boundary (UGB)
- General Land Use Plan (GLUP) Designations
- Roads/Streets
- Zoning
- Tax Lots (entire UGB)
- Environmental Constraints

The tax lot file has been further augmented to include zoning, GLUP (or Comp Plan) designations, vacant/developed status, and site size classifications by property record. Properties are classified by zoning district and GLUP designation according to the center of the property. For example, if the center of a parcel falls within a light industrial zone, it is classified light industrial as the majority of the property lies within that designation. In effect, this method makes no attempt to split or allocated properties that fall within multiple designations.

Private properties are designated vacant through a two step process. The first step classifies a property vacant if its improvement value is zero. The list is further refined by reviewing the

assessor's property description. Properties are classified developed if they are not designated as vacant, publicly owned, exempt, unbuildable, a transportation facility, or with property value.

Each property is then assigned one of seven site size classifications:

- < 0.5 acres – sites less than 0.5 acres
- 0.5-1.0 acres – sites 0.5 to 0.99 acres
- 1.0-2.0 acres – sites 1.0 to 1.99 acres
- 2.0-5.0 acres – sites 2.0 to 4.99 acres
- 5.0-10.0 acres – sites 5.0 to 9.99 acres
- 10.0-15.0 acres – sites 10.0 to 14.99 acres
- 15+ acres – sites 15 acres or larger

Building square footage data was obtained from the Medford Planning Department's 1998 Report on Economic Development and subsequent estimates covering years 1998 through 2002, with data specific to office space being developed by private consultant Bruce Ostley.

Employment data was obtained through a confidentiality agreement between the City of Medford, E.D. Hovee & Company and Oregon Employment Department. The database contained monthly average employment estimates by employer and location for years 1995 and 2000. The Medford Planning Department geo-coded the database using an in-house address file. Each employer was then assigned a corresponding GLUP designation and firm size classification:

- 0-19 employees
- 20-49 employees
- 50-99 employees
- 100-149 employees
- 150+ employees

Detailed results are contained in a series of exhibits (tables and maps) attached to the end of this report in Appendix A.

COMP PLAN VS. ZONING

A first step in the industrial/commercial lands analysis involved a review of consistency between Comprehensive Plan (GLUP) designations and current zoning. Of the 3,425 acres designated by the Comp Plan as industrial land within Medford's UGB, 74% is currently zoned industrial – only 21 acres is zoned commercial. Of the remaining 860 acres, 720 acres is located outside the city limits and designated for future industrial use.

Figure 24. Total Acreage by Comp Plan & Zoning Designations

	Comp Plan (GLUP)			
Zoning	Ind'l	Com'l	Other	All Areas
Industrial	2,544.66	57.73	49.63	2,652.02
Commercial	20.77	1,273.84	70.77	1,365,38
Other	859.66	646.72	10,068.22	11,574.60
All Ares	3,425.09	1,978.29	10,188.62	15,592.00

Note: Estimates are preliminary and subject to change.

Source: E.D. Hovee & Company using City of Medford GIS files.

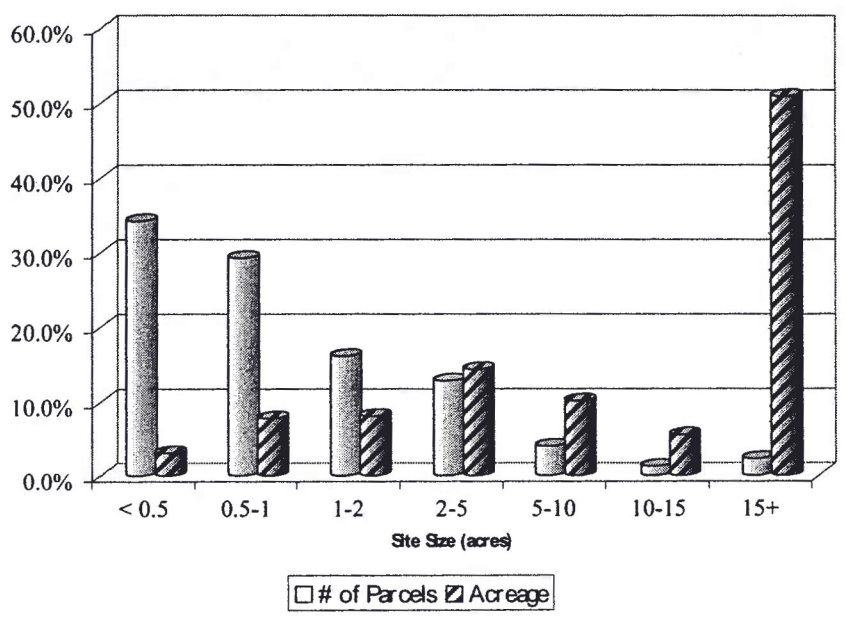
Review of commercial Comp Plan lands also indicates that 64% (or 1,274 acres) are zoned commercial. Less than 60 acres are zoned industrial. Of the 647 acres denoted as "other," 386 acres are located outside the UGB and designated for future commercial use, 186 acres are designated Exclusive Forest Use (EFU), and the remaining 74 acres are zoned residential.

INDUSTRIAL LAND

Characteristics of Medford's industrial land inventory profiled through this analysis include property size, land development, parcel size, absorption, zone changes, employment, and vacant properties

Property Size. While 80% of all industrial properties (according to Comp Plan designation) are under 2.0 acres, they account for less than one-fifth of all industrial acreage. Less than 4% of industrial properties are 10 acres or larger; however, they contain over 56% of Medford's industrial land inventory.

Figure 25. Industrial Comp Plan Properties by Parcel Size

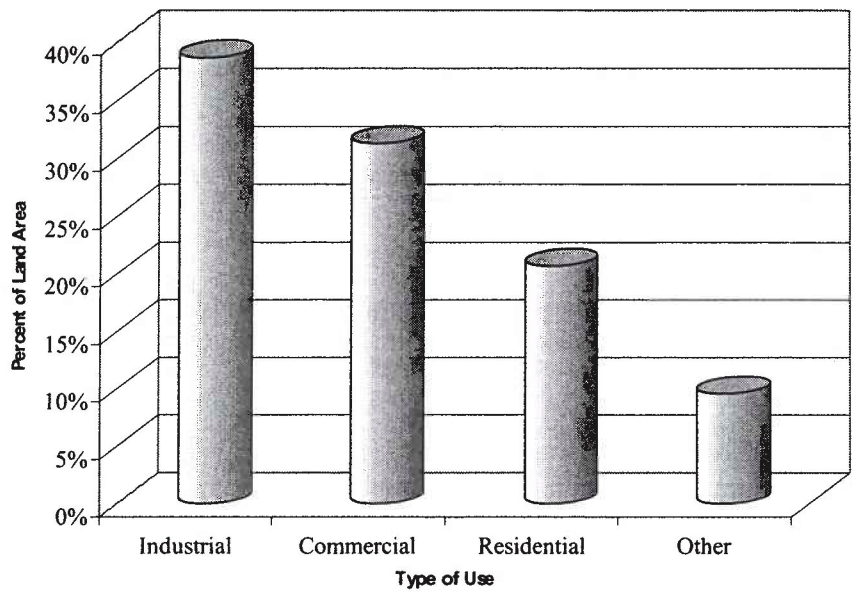


Source: E.D. Hovee & Company using City of Medford GIS files.

Land Development. Nearly 780 industrial parcels are developed in Medford, comprising 1,690 acres. Over half the developed industrial properties are designated General Industrial (GI) under Medford's General Land Use Plan (GLUP); however, these parcels only account for 38% of all developed industrial land.

In fact, only 39% of industrial land is currently being used for industrial purposes. Commercial uses account for 31% of developed industrial land and residential uses account for another 21%.

Figure 26. Developed Industrial Land by Use

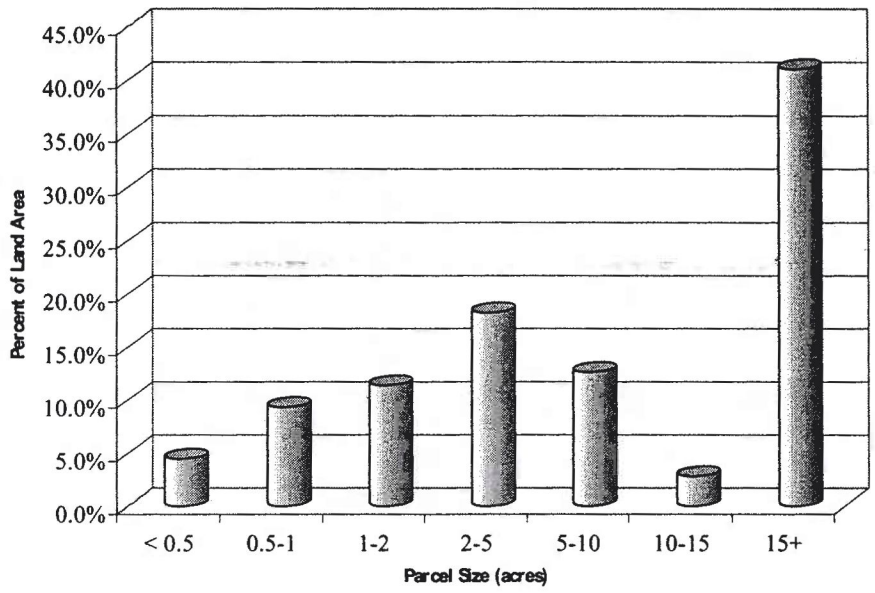


Note: Estimates are preliminary and subject to change.
Source: E.D. Hovee & Company using City of Medford GIS files.

The greatest amount of erosion to commercial use occurs within General Industrial (GI) and Airport (A) zones, where 48% and 44% of the developed acreage respectively is used for commercial purposes. Residential uses primarily occur within the Heavy Industrial (HI) areas, with four parcels comprising 158 acres representing 45% of all industrial land currently being used as residential – these may be prime candidates for future redevelopment.[6]

Parcel Size. Large parcels comprise a significant portion of Medford's developed industrial land. Parcels greater than 15 acres account for 41% (or 694 acres) of the 1,690 acres of developed industrial land. Properties 2-5 acres comprise another 18% followed by 5-10 acre parcels (13%) and 1-2 acre (11%) parcels.

Figure 27. Developed Industrial Land by Parcel Size

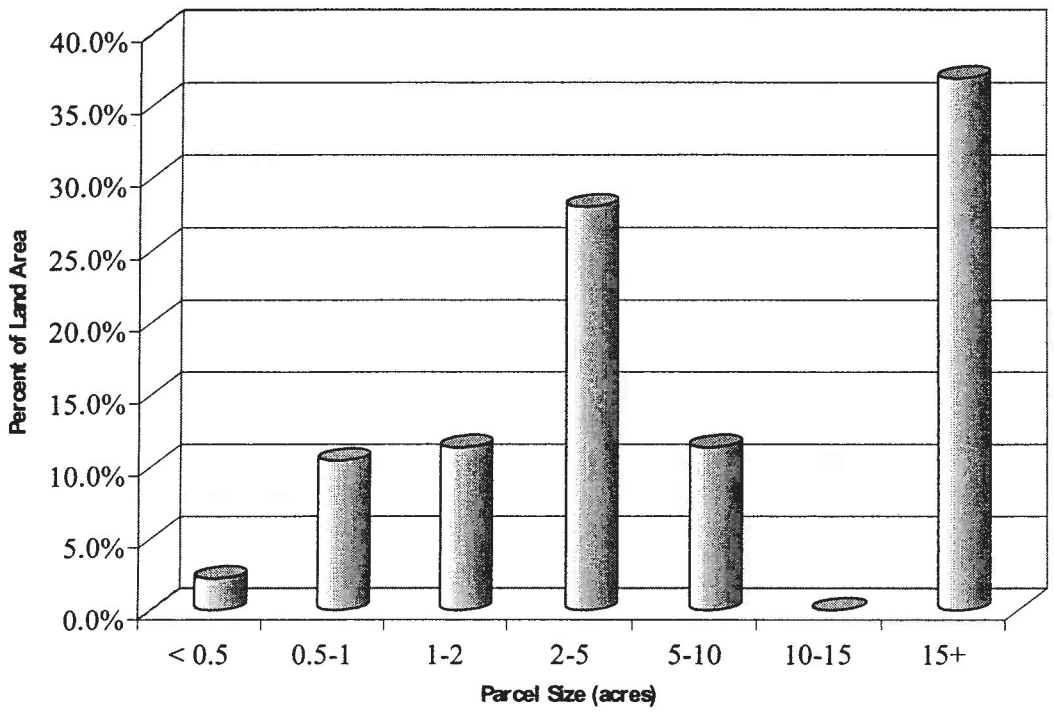


Note: Estimates are preliminary and subject to change.
Source: E.D. Hovee & Company using City of Medford GIS files.

Absorption. An estimated 293 acres of industrial land has been developed over the last 10 years, for an annual absorption rate of 29.3 acres. Over 50% (or 156 acres) was for industrial use. Fifty-five acres was developed for airport hangars and 82 acres for a variety of commercial uses (one-fourth is office-oriented).[7]

General Industrial properties account for 42% of the industrial developed land within the last 10 years. Airport properties comprise another 37% and Heavy Industrial represents 21%.

Figure 28. Developed Industrial Land by Parcel Size (1993-2002)



Note: Estimates are preliminary and subject to change.
Source: E.D. Hovee & Company using City of Medford GIS files.

Large 15+ acre parcels comprise 37% of all industrial land developed over the last 10 years – half developed at the airport for hangers. Parcels of 1-5 acres in size account for 39% and properties under one acre in size represent another 13%.

Zone Changes. The City of Medford Planning Department has examined industrial zone change applications as part of their 2001 Industrial Land Analysis. From 1994 through April of 2001, 27 industrial-related zone change applications were processed involving 332 acres. Twenty-two applications were approved resulting in an industrial zoning designation. Twenty of the applications were for a light industrial (I-L) designation comprising 255.6 acres and two for general industrial (I-G) involving 21.6 acres. Taken together, these changes produced a net loss of 238 acres of I-G zoned land – with significant redesignation from I-G to I-L categories.

The nature of the zone change applications indicated a market preference toward less intensive land uses available under the I-L zoning district. The applications were dispersed throughout the community, focused along major transportation routes with high visibility and good access. Staff's hypothesis is that the majority of development occurring on the zone changed sites is for limited retail, office, and services – uses already present on nearby sites.

Employment on Industrial Lands. One in five jobs within Medford is located on industrially designated lands. Manufacturing is the largest employment sector, accounting for 25% of all industrial land jobs. Thirty-seven percent of all jobs located on industrial lands represent commercial-related (i.e. retail, FIRE, and service sectors) rather than industrial uses. Forty-four percent of the commercial-related jobs on industrial properties are business service employers (e.g. software, advertising, etc.).

Seventy-one percent of Medford's manufacturing jobs are located on industrial lands. Over one-half of transportation, communication, and utilities (50%) and wholesale (55%) jobs are also located on industrial lands. Despite recent commercialization of industrial properties, only 11% of all commercial jobs are located on industrial land.

Nearly 1,900 jobs were created on industrial properties between 1995 and 2000. Job growth on industrial parcels accounted for 38% of Medford's total job growth. In other words, industrial lands are accommodating a higher share of Medford's job growth in the last decade than previously. Leading *job gainers* on industrially designated lands include retail trade (+484), followed by services (+408 with business services +324), manufacturing (+347 with instruments +328), and transportation, communication, and utilities (+327 – transit +200).

Figure 29. Employment Characteristics of Industrial Lands (1995-2000)

	# of Jobs		Job		% of
				%	All
Employment Sector	1995	2000	Growth	Chg.	Jobs
Agriculture	428	485	+57	+13.3%	48%
Mining	D	D	D	D	D
Construction	374	527	+153	+40.9%	40%
Manufacturing	1,628	1,975	+347	+21.3%	71%
TCU	642	969	+327	+50.9%	50%
Wholesale	819	891	+72	+8.8%	55%
Retail Trade	621	1,105	+484	+77.9%	10%
FIRE	59	112	+53	+89.8%	7%
Services	1,305	1,713	+408	+31.3%	13%
Government	164	152	-12	-7.3%	4%
All Industries	6,040	7,929	+1,889	+31.3%	21%
– Developed Land (Acres)	1,065	1,653	+588	+55.2%	
– Jobs per Acre	5.7	4.8		-15.4%	

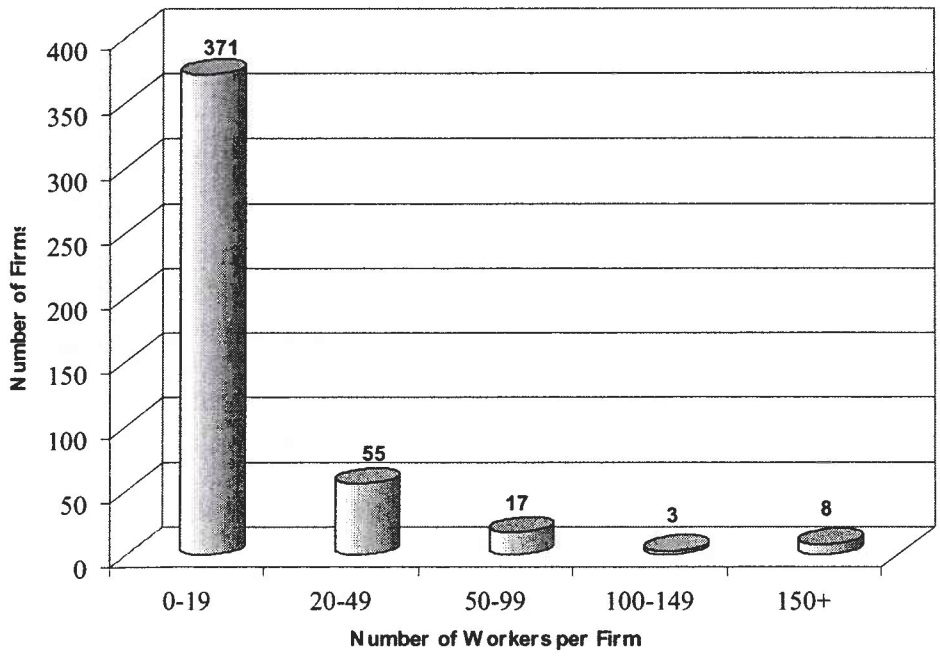
Note: TCU stands for transportation, communications, and utilities. FIRE denotes finance, insurance, and real estate. D indicates data that could not be disclosed due to confidentiality agreements.

Source: E.D. Hovee & Company using City of Medford GIS files and Oregon Employment Department data.

Job densities on industrial lands have decreased by nearly one job per acre over the last five years. In 2000, industrial lands produced an average of 4.8 jobs per acre, down from 5.7 in 1995. The decrease in job densities could be attributed, in part, to underutilization of recently developed sites and development of major big box retailers. Related factors that could affect lower employment density include a changing mix of employment uses and traffic level of service (LOS) standards requiring *trip caps* for some developments.

Firms located on industrial lands tend to be small employers. Of the 454 companies located on industrial properties, 371 (or 82%) have less than 20 workers. In fact only 11 companies have 100 or more employees.

Figure 30. Size of Employers Located on Industrial Lands (2000)



Source: E.D. Hovee & Company using City of Medford GIS files and Oregon Employment Department data.

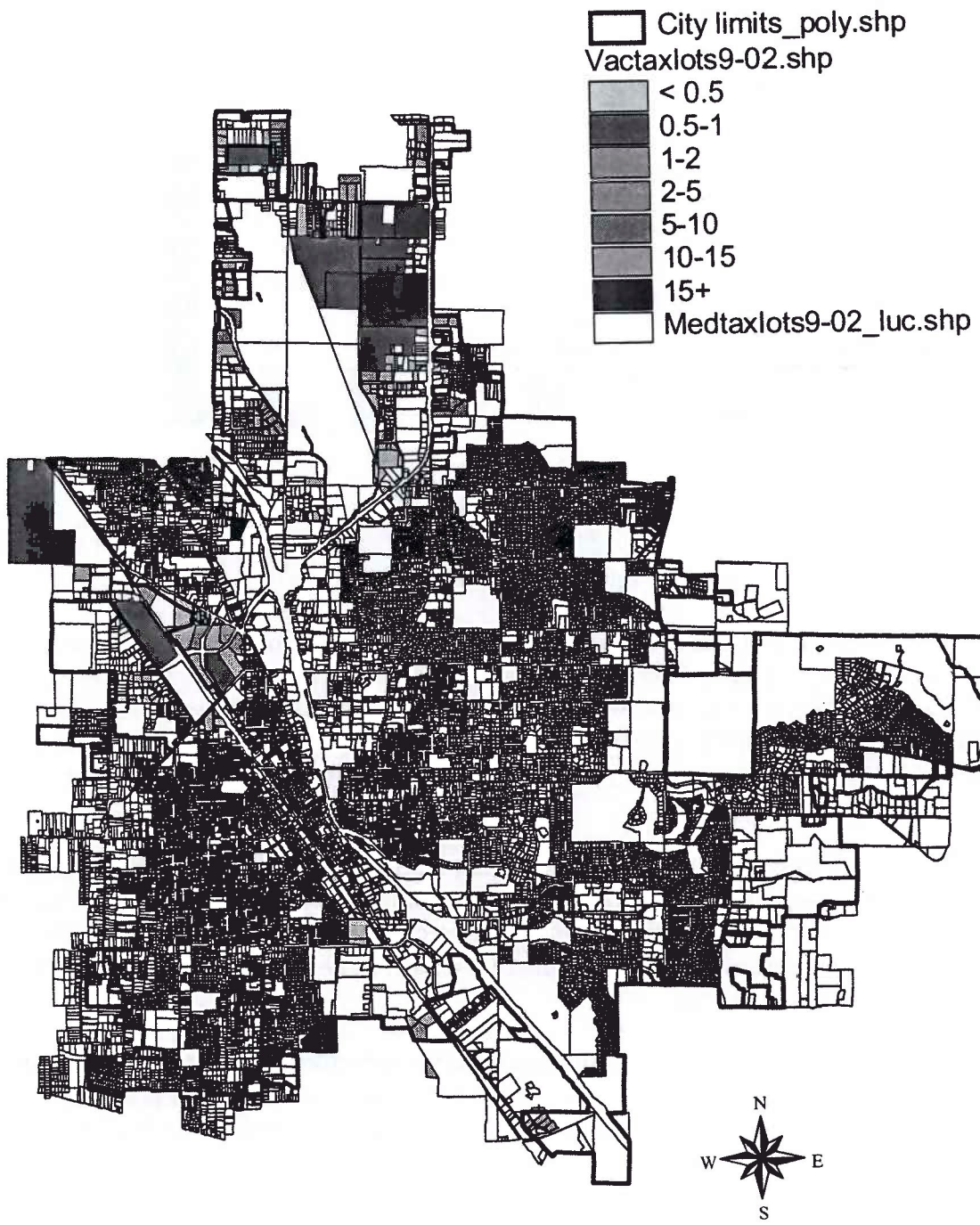
Vacant Industrial Properties. The profile of developed lands provides a glimpse of what is on the ground today. Vacant lands offer the potential of what could be built in the future.

Thirty-six percent (or 1,230 acres) of Medford's industrially designated acreage is vacant. Sites 10 acres or larger contain 785 acres, or 64% of the vacant industrial land inventory. Vacant properties are generally located at the airport or just west of the city limits (in the UGB) along Rogue Valley/Highway 99.

One-third of the vacant industrial land is zoned light industrial. Another 22% is zoned general industrial and less than 10% is designated heavy industrial. Nearly one-fourth of Medford's vacant industrial land is located outside the current City limits. Currently, the zoning code allows commercial use of land designated for light industrial purposes.

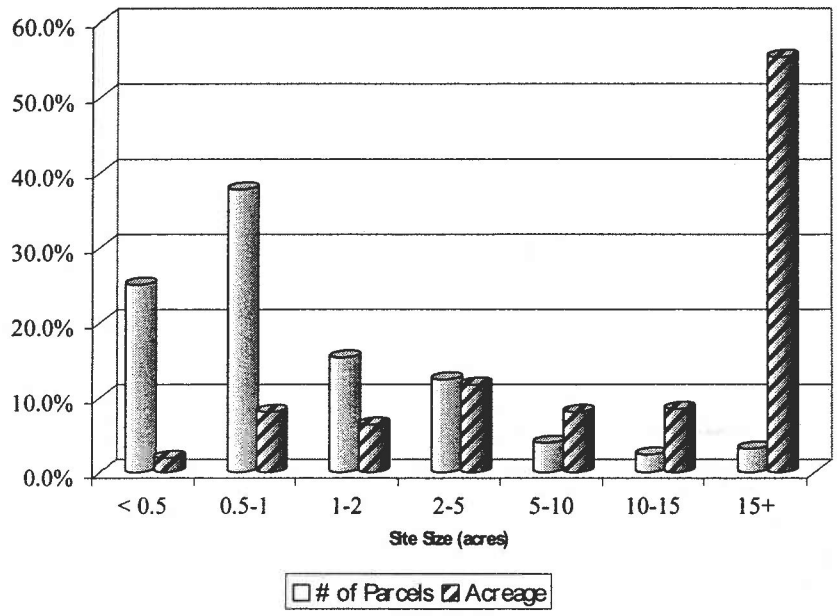
As the map on the following page indicates, the bulk of the existing vacant industrial inventory is located on the north side of Medford. Major sites are situated both east of the I-5 freeway (near the airport) and west (in conjunction with recently reconfigured highway access).

Figure 31. Comp Plan Designated Industrial Sites by Size (Vacant Sites)



Source: E.D. Hovee & Company using City of Medford GIS files.

Figure 32. Vacant Industrial Properties by Parcel Size



Source: E.D. Hovee & Company using City of Medford GIS files.

Constrained Vacant Lands. A major challenge for Medford is to provide land that can be viewed as *shovel-ready* or ready-to-build. Sites that are shovel-ready are those with adequate transportation and utility services and with no significant environmental constraints. While data is not readily available to depict infrastructure capabilities, it has been possible to screen sites on a preliminary basis that are *partially or fully affected* by identified environmental constraints – of flood plain location or wetlands.[8]

Sixty-two percent (or 766 acres) of Medford's vacant industrial acreage is affected by identified environmental constraints (i.e. lies partially or wholly within a 100-year flood plain or has some amount of wetlands on site). Ten properties of 10 acres or larger account for just over 590 acres of the environmentally constrained vacant industrial land. Thirty-two sites sized 2-10 acres in size account for another 115 acres.

The most significant portions of the unconstrained vacant industrial inventory appear to be located near the airport (primarily north side) and in the vicinity of the Medite property. However, as noted below, *brownfield* questions have been raised regarding the Medite property.

Figure 33. Vacant Industrial Properties with Environmental Constraints by Parcel Size

	GLUP			
Site Size	A	GI	HI	Total
< 0.5	0.07	2.55	0.62	3.23
0.5-1	0.00	17.45	1.83	19.28
1-2	0.00	31.33	5.35	36.68
2-5	0.00	63.96	5.79	69.76
5-10	5.50	25.01	15.77	46.28
10-15	0.00	11.05	14.51	25.56
15+	0.00	320.32	244.94	565.26
All Ind'l Sites	5.56	471.67	288.81	766.04

Note: Sites may be fully or partially constrained. The extent to which acreage affected may be partially developable is not as readily determined from the existing GIS data. Site classifications are noted as A – agriculture, GI – general industrial, HI – heavy industrial.

Source: E.D. Hovee & Company using City of Medford GIS files.

After removal of environmentally constrained parcels, Medford is left with only 464 acres of non-environmentally constrained industrial land. Eleven of the parcels, totaling 194 acres, are sites ten acres or larger.

However, five of the sites (67.8 acres) comprise the old Medite site and another 11.3 acre site is held by Pacific Power & Light (PP&L).[9] It is unlikely that the PP&L site will develop for employment uses, as it is more likely being held for future infrastructure capacity/improvements. The Medite site has drawn market interest, but redevelopment may be slow to materialize until environmental studies have been conducted and the site can be demonstrated to be clear of further responsibility for any potential hazardous material clean-up/liability.

Figure 34. Vacant Industrial Properties with No Environmental Constraints by Parcel Size

	GLUP			
Site Size	A	GI	HI	Total
< 0.5	0.00	12.75	7.68	20.43
0.5-1	0.00	60.69	19.53	80.23
1-2	0.00	31.72	10.14	41.86
2-5	0.00	52.19	22.07	74.26
5-10	0.00	24.69	28.48	53.17
10-15	0.00	20.65	58.03	78.68
15+	0.00	0.00	115.18	115.18
All Ind'l Sites	0.00	202.69	261.11	463.80

Note: Figures still include PP&L and Medite sites.

Source: E.D. Hovee & Company using City of Medford GIS files.

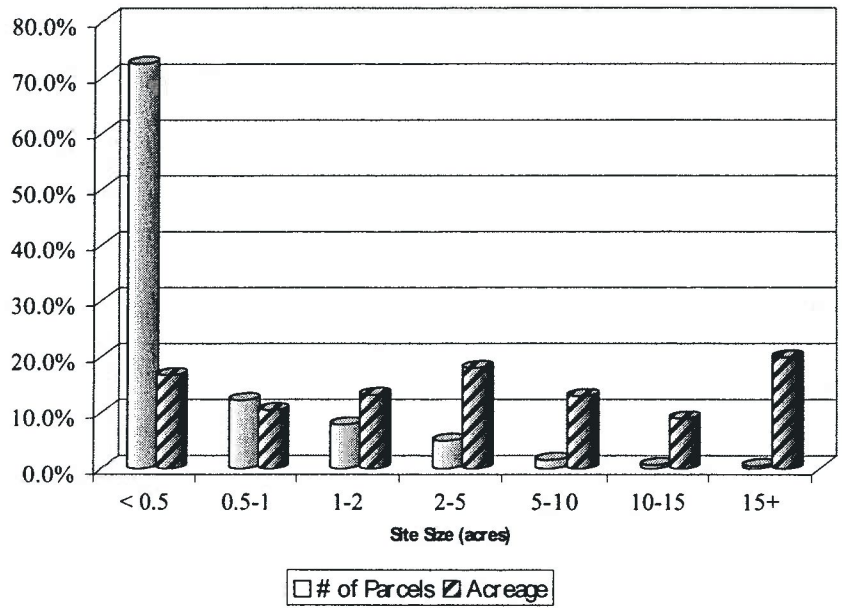
Thus, Medford is left with only 385 acres of industrial land free and clear of potential constraints – assuming that these remaining sites are served (or can be readily provided) with utilities and have good transportation access. This total is increased to 453 acres once environmental remediation questions related to the Medite property are resolved. Currently, Medford appears to have only *five* large readily developable industrial sites ranging from 10 to 35 acres in size.

Commercial Land

A similar assessment has been made of Medford's commercial land inventory – both developed and undeveloped.

Property Size. Over 2,400 properties representing nearly 1,980 acres are classified as commercial under Medford's Comp Plan. Seventy-two percent of all commercially zoned parcels are less than half an acre in size. However, only one-sixth of commercial acreage is made up of sites half an acre or smaller. Unlike industrial, commercially zoned acreage is relatively evenly distributed among the seven site size classifications.

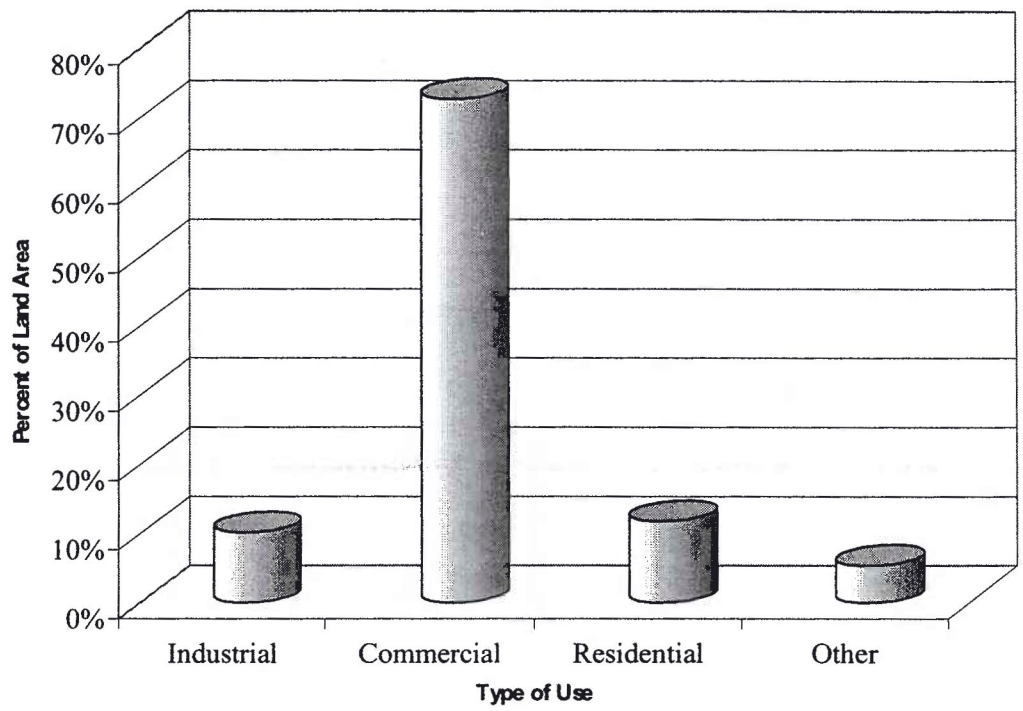
Figure 35. Commercial Comp Plan Properties by Parcel Size



Source: E.D. Hovee & Company using City of Medford GIS files.

Land Development. Over 1,900 commercial properties, comprising 1,330 acres, are developed in Medford. Sixty percent of the parcels (or 80% of developed commercial land) are designated General Commercial (GC). Nearly three-quarters of commercial land has commercial uses. Residential uses have only absorbed 12%, with industrial activity taking 10%. Erosion of commercial land primarily occurs within GC designated areas.

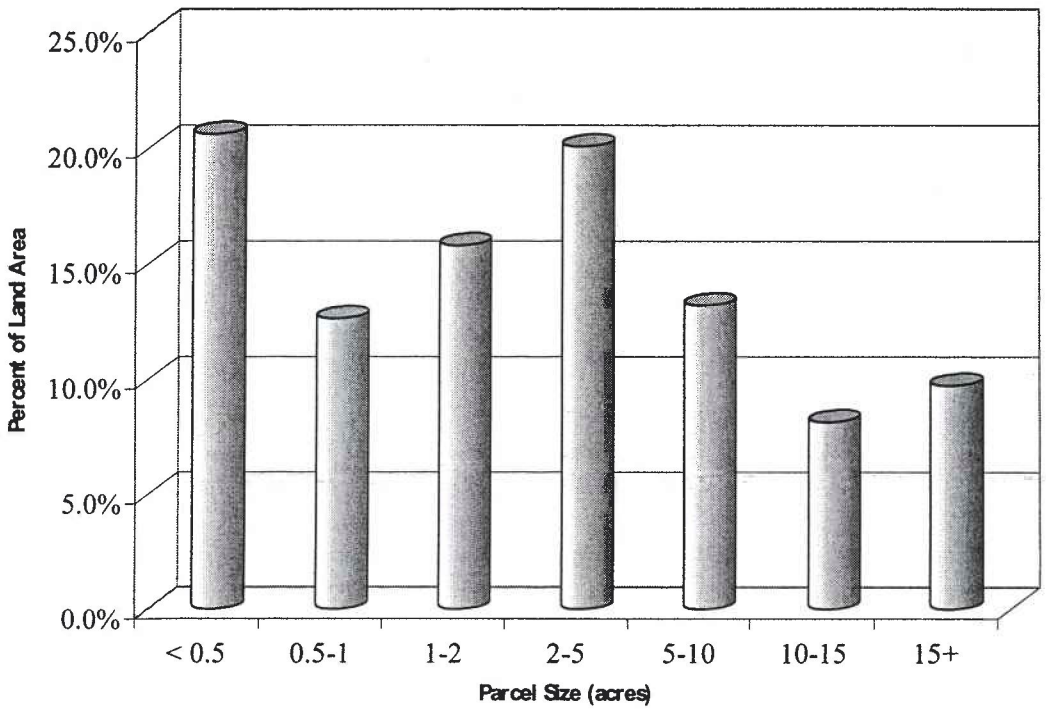
Figure 36. Developed Commercial Land by Use



Note: Estimates are preliminary and subject to change.
Source: E.D. Hovee & Company using City of Medford GIS files.

Parcel Size. Over one-fifth (21%) of developed commercial land occurs in parcels less than one-half acre in size. Properties sized 2-5 acres account for another 20% of developed commercial land followed by 1-2 acre parcels at 16%. Less than 10% of commercial acreage consists of properties over 15 acres in size.

Figure 37. Developed Commercial Land by Parcel Size

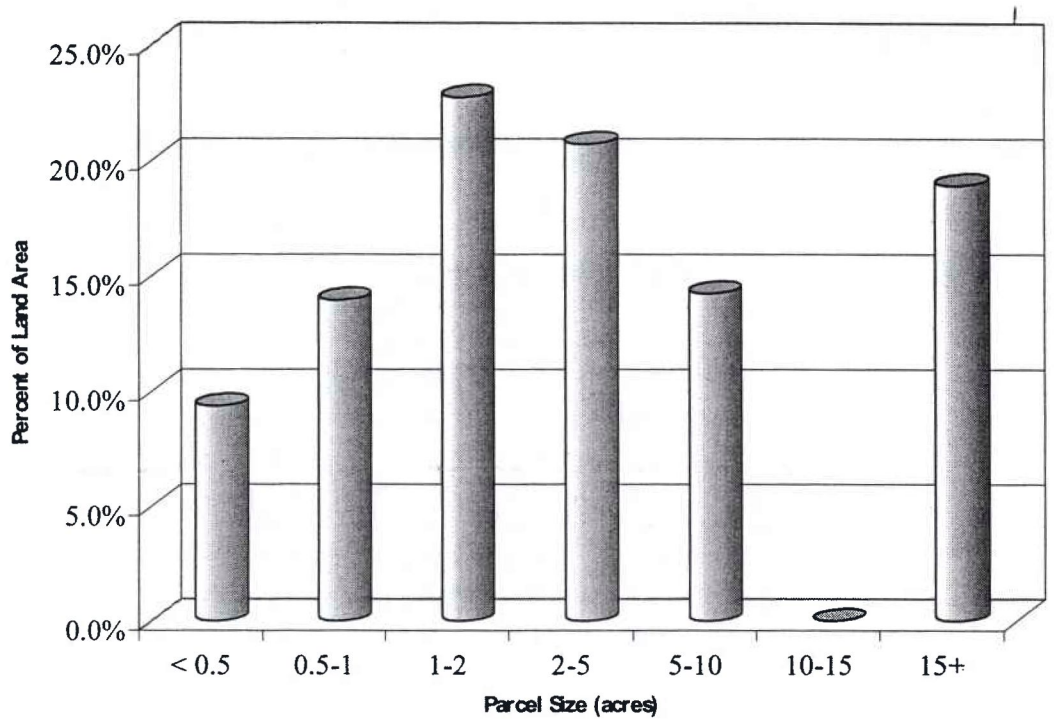


Note: Estimates are preliminary and subject to change.
Source: E.D. Hovee & Company using City of Medford GIS files.

Absorption. Almost 170 acres of commercial land was developed over the last 10 years – equating to average of 17 acres per year. Over 90% of development on commercial land was for commercial uses. Less than 3% developed as industrial and 1% as residential. Nearly 90% of recently developed commercial land has occurred within Commercial Medium (CM) designated areas, pursuant to the General Land Use Plan (GLUP).

Over the last 10 years, nearly 23% of developed commercial lands were parcels 1-2 acres in size. Parcels 2-5 acres comprise another 21% and properties greater than 15 acres capture 19%.

Figure 38. Developed Commercial Land by Parcel Size (1993-2002)



Note: Estimates are preliminary and subject to change.
Source: E.D. Hovee & Company using City of Medford GIS files.

Employment on Commercial Lands. Nearly two in three jobs within Medford are located on commercially designated lands. Retail is the largest employment sector, accounting for 39% of all jobs housed on commercial land. The service sector provides another 36%, with health care representing 54% of all service sector jobs on commercially designated sites. In total, 81% of all jobs located on commercial lands are commercial-related (i.e. retail, FIRE, and service sectors).

Seventy-six percent of Medford's commercial jobs are located on commercial lands. Fifty-five percent of government jobs are also located on commercial lands. Even though very little commercial land has been developed for non-commercial uses, 42% of all wholesale, 38% of TCU, and 28% of manufacturing jobs are located on commercial properties. This provides evidence of at least some traditional industrial-related uses developing at higher commercial densities – particularly for office-related use.

Nearly 6,060 jobs were created on commercial properties between 1995 and 2000. Job growth on commercial parcels outstripped total job growth in Medford, as employment allocated to non-commercial/industrial properties declined by 3,000 during this same time period. Services provided nearly three-fourths of the added jobs. Significant job growth in health care was the primary stimulus, accounting for the majority (57%) of the *total job growth* on commercially designated lands.

Over 4,200 jobs are located within downtown Medford (CC designated properties). Downtown accounts for 17% of all commercial-related jobs in Medford.

Government agencies are the largest employers in the downtown area offering nearly 1,900 jobs. There are 1,730 commercial-related jobs, services comprising 940 and retail with another 640. The downtown added 240 jobs over the last five years. Services and government were the primary source of downtown job growth.

Figure 39. Employment Characteristics of Commercial Lands (1995-2000)

	# of Jobs		Job		% of All
Employment Sector	1995	2000	Growth	% Chg.	Jobs
Agriculture	164	297	+133	+81.1%	29%
Mining	0	0	+0	+0.0%	0%
Construction	236	303	+67	+28.4%	23%
Manufacturing	783	778	-5	-0.6%	28%
TCU	620	741	+121	+19.5%	38%
Wholesale	890	684	-206	-23.1%	42%
Retail Trade	8,816	9,582	+766	+8.7%	86%
FIRE	796	1,375	+579	+72.7%	83%
Services	4,294	8,765	+4,471	+104.1%	68%
Government	1,766	1,896	+130	+7.4%	55%
All Industries	18,365	24,421	+6,056	+33.0%	64%
– Developed Land (Acres)	1,228	1,309	+81	+6.6%	
– Jobs per Acre	15.0	18.7		+24.7%	

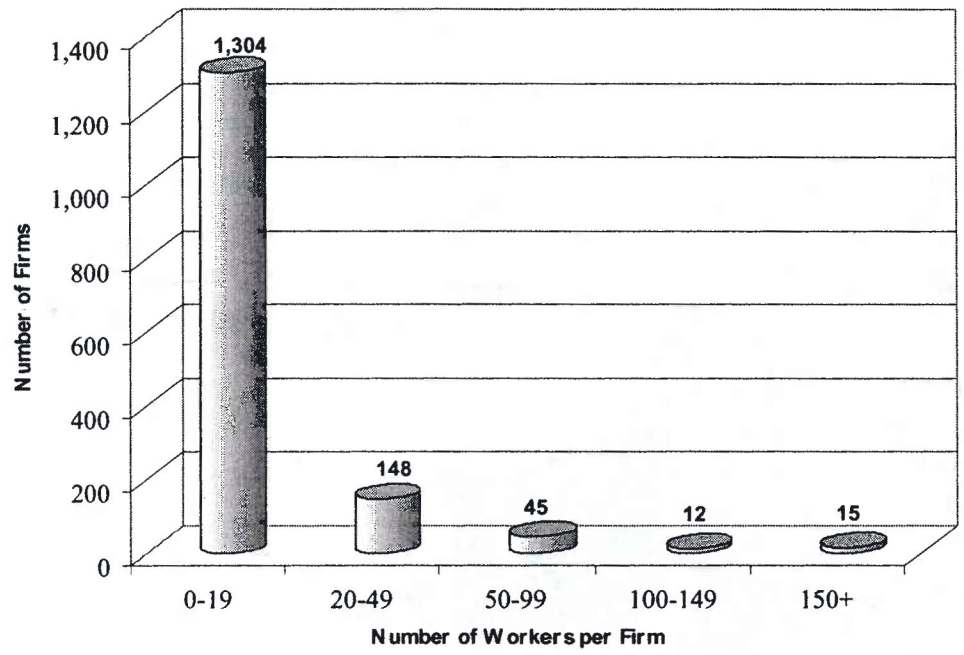
Note: TCU stands for transportation, communications, and utilities. FIRE denotes finance, insurance, and real estate. D indicates data that could not be disclosed due to confidentiality agreements.

Source: E.D. Hovee & Company using City of Medford's GIS files and Oregon Employment Department data.

Citywide job densities on commercial lands have increased by nearly four jobs per acre over the last five years. In 2000, commercial lands produced an average of 18.7 jobs per acre, up from 15.0 in 1995. The increase in job densities appears to be due to greater utilization of existing sites (i.e. job growth at already existing developed sites – health care) and stronger office development in general.

Commercial Firm Size. Firms located on commercial lands also tend to be small employers. Of the 1,524 companies located on commercial properties, 1,304 (or 86%) have less than 20 workers. However, 27 companies have 100 or more employees. The downtown area has 230 employers. Seven have 100 or more employees and 198 had fewer than 20.

Figure 40. Size of Employers Located on Commercial Lands (2000)

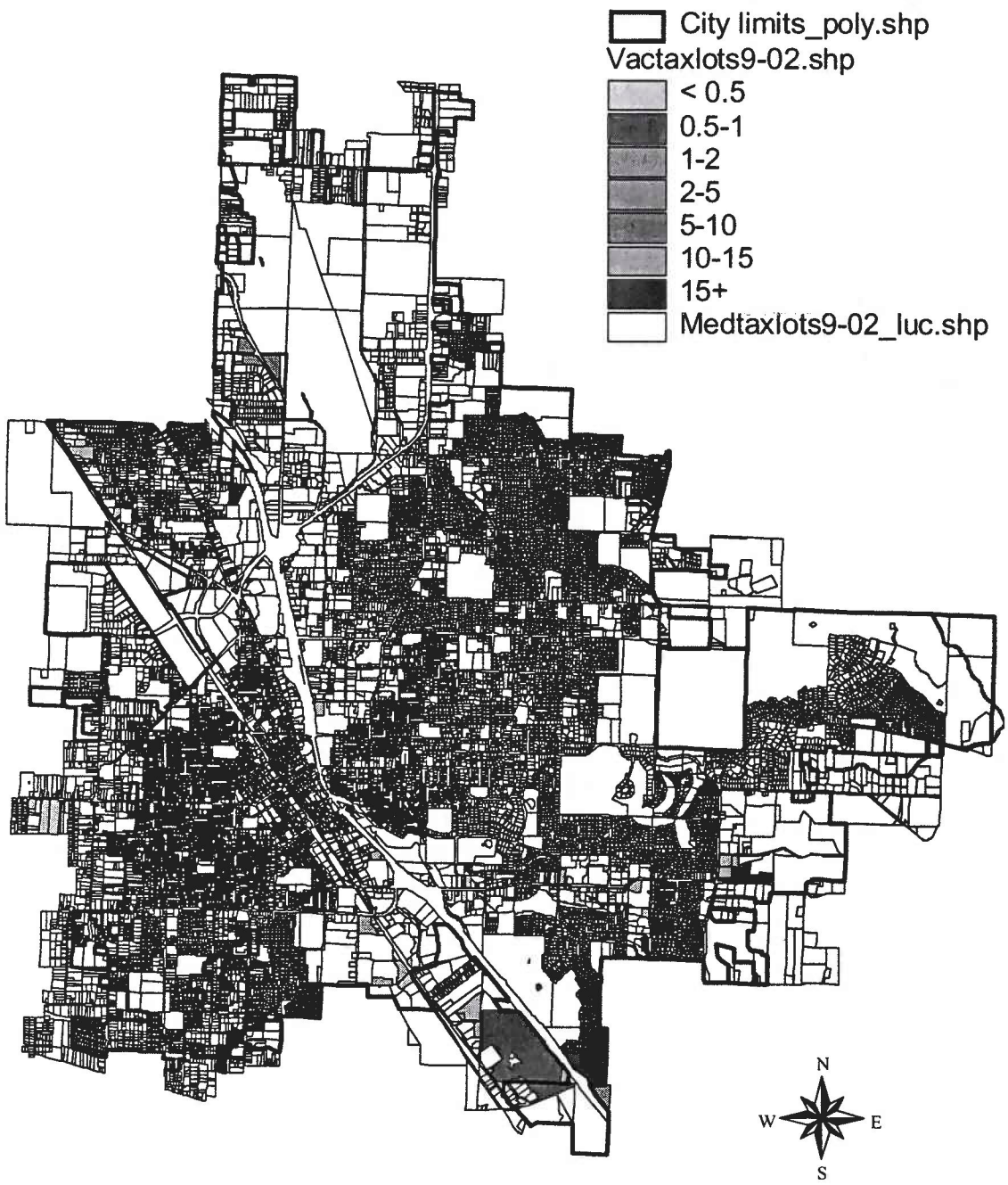


Source: E.D. Hovee & Company using City of Medford GIS files and Oregon Employment Department data.

Vacant Properties. Just over one-fifth (23%) of commercial Comp Plan acreage is vacant, with much of the vacant acreage located south of Medford's city center. Of the vacant 447.5 acres, over 50% are contained within seven sites sized 10 acres or larger. Three of the sites are located outside Medford's city limits, representing 146 acres. Another three sites comprising 81 acres are designated exclusively for forestry use (EFU). The seventh parcel (13 acres) is zoned rural residential 5 acres (RR-5).

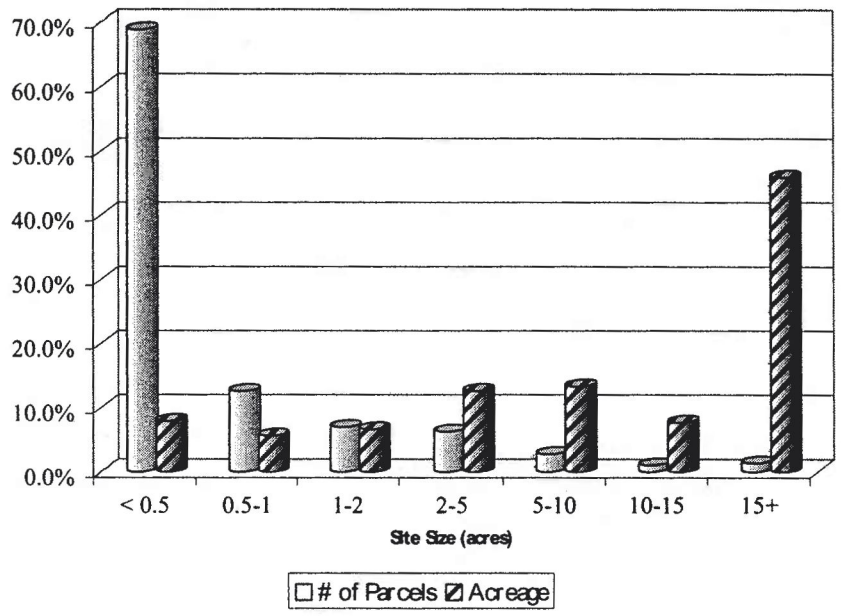
As is indicated by the map on the following page, most of the existing inventory of large vacant commercially-zoned sites is situated at the southern end of Medford. This contrasts with the industrial inventory, located primarily to the north. Lack of a geographically balanced inventory may place added commercial development pressure on industrial sites at the northern side of Medford – especially sites offering good freeway access and visibility.

Figure 41. Comp Plan Designated Commercial Sites by Size (Vacant Sites)



Source: E.D. Hovee & Company using City of Medford GIS files.

Figure 42. Vacant Commercial Comp Plan Properties by Parcel Size



Source: E.D. Hovee & Company using City of Medford GIS files.

Sixty-one percent (or 274 acres) of Medford's vacant commercial acreage has environmental constraints (i.e. lies within 100-year flood plain or has wetlands). Six sites of 10 acres or larger account for 225 acres of the environmentally constrained vacant commercial land.

Figure 43. Vacant Commercial Properties with Environmental Constraints by Parcel Size

	GLUP			
Site Size	CC	CM	SC	Total
< 0.5	0.00	3.00	0.52	3.52
0.5-1	0.00	4.76	0.94	5.70
1-2	0.00	7.26	3.71	10.97
2-5	0.00	6.79	4.06	10.85
5-10	0.00	18.26	0.00	18.26
10-15	0.00	34.66	0.00	34.66
15+	0.00	190.13	0.00	190.13
All Com'l Sites	0.00	264.86	9.23	274.09

Note: Commercial GLUP designations are CC – City Center, CM – Medford Commercial, and SC – Service Commercial.

Source: E.D. Hovee & Company using City of Medford GIS files.

After removal of environmentally constrained parcels, Medford is left with only 173 acres of non-environmentally constrained commercial land. Seven of the parcels, totaling 57 acres, are sites five acres or larger.

However, one of these sites is owned by Southern Oregon University (8.7 acres), two sites are designated as EFU (20.8 acres), and three are zoned industrial (18.6 acres).[10] It is unlikely that the Southern Oregon University site will develop as private commercial; however, it may produce added employment depending on University development interests.

Figure 44. Vacant Commercial Properties with No Environmental Constraints by Parcel Size

	GLUP			
Site Size	CC	CM	SC	Total
< 0.5	2.96	23.42	5.58	31.96
0.5-1	0.56	12.86	6.18	19.59
1-2	0.00	13.39	5.49	18.87
2-5	0.00	37.70	7.99	45.69
5-10	0.00	41.48	0.00	41.48
10-15	0.00	0.00	0.00	0.00
15+	0.00	15.82	0.00	15.82
All Com'l Sites	3.51	144.66	25.23	173.41

Note: Figures still include EFU sites.

Source: E.D. Hovee & Company using City of Medford GIS files.

The three industrial sites can currently develop as commercial; the City should review these properties in the future if it considers adoption of development restrictions on parcels zoned industrial. The two EFU sites are not likely to ever develop and, therefore, should be removed from the inventory. Elimination of the EFU sites leaves Medford with only 153 acres of commercial land free and clear of potential constraints – assuming sites are served with utilities and have good transportation access. Medford currently has no commercially designated and unconstrained sites larger than nine acres in size.

Downtown Options. To the extent that downtown Medford offers a viable competitive alternative to larger, vacant and as yet undeveloped sites elsewhere in Medford, the need for added commercial lands inventory could be reduced. Recent analysis of commercial development absorption and potentials has been conducted for the Medford Urban Renewal Agency (MURA). While beyond the direct scope of this study, an active downtown redevelopment program aimed at accommodating net new job growth could prove to be an important component of the city's overall economic development strategy.

In effect, redevelopment of smaller vacant and underutilized properties in Medford's downtown area could serve to reduce the need for added commercial *greenfield* sites – particularly for office and smaller scale retail uses. However, costs of development are often greater in a downtown area and the major impetus for new commercial uses in recent years has been to develop larger sites outside the downtown core.

BUILDING ABSORPTION

Future needs for industrial and commercial land can be assessed, in part, by a review of actual demand or *absorption* of building space in recent years. This method is then compared with an employment driven approach to forecasting future land needs.

Building square footage developed over the last 12 years is derived from two alternative sources. Medford's Planning Department completed an analysis in 1998 that identified developed industrial and commercial square footage between 1988-1997, with data since 1998 provided for this project. Subsequently, Bruce Ostley, consultant to the Medford Urban Renewal Agency (MURA), has analyzed office development trends between 1990 and 2002.

Industrial vs. Commercial. Between 1990 and 1997, just over 304,000 square feet of industrial space was developed per year. Commercial development occurred at a more brisk pace of 462,100 square feet per year. Over the last five years, industrial development has occurred at a slightly higher rate of 306,500 square feet per year; however, commercial development has slowed to an absorption rate of 325,900 annually.

Retail vs. Office. Retail accounts for 84% of commercial development. Between 1990 and 1997, retail space was being developed at an average of 413,700 square feet per year versus 48,400 per year for office. However, over the last five years, retail development has slowed significantly (233,800 square feet per year) as office development has posted significant growth of approximately 92,000 square feet per year.

Figure 45. Building Space Developed Since 1990

	Industrial	Commercial Space		
Year	Space	Retail	Office	Total
1990	337,611	262,951	28,919	291,870
1991	263,020	352,274	69,863	422,137
1992	164,324	457,338	12,159	469,497
1993	293,973	321,515	31,198	352,713
1994	384,177	649,316	35,904	685,220
1995	379,278	417,947	106,883	524,830
1996	446,566	424,332	72,853	497,185
1997	163,249	423,728	29,816	453,544
1998	296,795	325,355	75,678	401,033
1999	176,486	201,001	34,979	235,980
2000	586,093	129,320	115,128	244,448
2001	249,026	254,917	127,151	382,068
2002	224,188	258,570	107,194	365,764
Annual Averages:				
1990-1997	304,025	413,675	48,449	462,125
1998-2002	306,518	233,833	92,026	325,859
1990-2002	304,984	344,505	65,210	409,715

Note: All figures are in square feet of building area.
Source: City of Medford Planning Department and Bruce Ostley.

IV. ECONOMIC FORECAST

As of 2002, Medford has 66,090 residents – representing 35% of Jackson County's population base of 187,600.[11] As the largest urban center in Jackson County and Southern Oregon, Medford also serves as a regional employment and commercial center.

For the future, Medford is faced with not one but several possible economic scenarios. The community's economic future realized will, in part, be determined by a combination of past economic trends, Medford's current industrial and commercial land inventory, regional and local competitive advantages, and local policy decisions.

Consequently, a series of alternative job and land demand forecasts have been prepared for consideration by the City of Medford. The job target and land absorption results that Medford actually realizes depend on a realistic assessment of the community's current and prospective competitiveness and vision for its future, followed by implementation to achieve the vision.

Alternative Demand Forecasts

Before determining the type of jobs Medford wants to attract to its community, Medford must first identify the total number of jobs it anticipates planning for over the next 20+ years. Future growth projections are considered in the context of historic population and employment trends.

In the two decades from 1980-2000, Jackson County experienced more rapid growth than occurred statewide. Jackson County population increased by 37% versus a statewide increase of 30%. Similarly, Jackson County's job base increased more rapidly by 76% compared with statewide employment gains of 57%.[12]

Population growth over the next 20 years is expected to moderate but with further increases of up to 25%. Employment growth may also moderate but added job needs will still be substantial and may be accompanied by continued shifts in the mix of the local employment base.

Prior to determining a specific future rate of job growth, three alternative scenarios are recommended for consideration. A wide range of employment outcomes is possible, depending on the forecast approach selected.

- **Historic Growth Rate –** According to data collected from the U.S. Bureau of Economic Analysis (BEA), Jackson County's job base has been growing at a rate of 3.6% per year over the last three decades. Continuation on this trend would lead to the creation of 107,840 jobs, or a total employment base of 212,690 by 2020. Medford currently provides 36% of all Jackson County jobs. Given its regional role, it is reasonable to anticipate that Medford could continue to create 36% of Jackson County's employment opportunities, and therefore, add another 38,820 jobs.
- **Historic Annual Job Creation –** Over the last 30 years, Jackson County has been producing an average of 2,250 new jobs per year. The Oregon Employment Department is projecting an annual employment growth rate of 1.6% over the next 10 years, leading to the addition of 1,960 jobs per year. Given the slow economy during the early part of this decade, it is reasonable to assume that job growth for the first 10 years will come

closer to the State's forecast. However, a longer term annual average of 2,250 could still result from higher job growth in the later 10 years of the forecast period. The resulting effect for Medford would be 16,200 new jobs over the next two decades.

Figure 46. Projected Added Medford Jobs Based on Historic Trends (2000-2020)

	Historic Growth Rate	Historic Annual Job Creation
2000 IMPLAN Employment	104,845	104,845
Annual Growth Rate	3.6%	1.8%
2020 Employment	212,688	149,845
Employment Growth	107,843	45,000
Medford Share	36%	36%
Medford Added Jobs	38,823	16,200

Source: E.D. Hovee & Company using information obtained from Minnesota IMPLAN Group, U.S. Bureau of Economic Analysis (BEA), and Oregon Employment Department.

- **Regional Problem Solving Project** – Medford is participating in a long-range strategic planning project with the Rogue Valley Council of Governments and other government agencies within Jackson County. With this strategic plan, Medford is projected to receive over 47,900 new people by 2050, or 19,400 added households based on Medford's forecasted average household size of 2.47 persons per household. Planning participants have targeted an average jobs-housing ratio of 1.5, which is coincidently Medford's current average. For Medford to maintain its current jobs-housing balance, it would need to create 29,100 new jobs over the next +/-50 years, or 12,945 added jobs within the shorter time horizon of 2020.

Figure 47. Projected Added Medford Jobs Based on Regional Problem Solving Project

	2020	2050
x2 Pop Growth	21,317	47,914
Average Household Size	2.47	2.47
Added Households	8,630	19,398
Jobs-Housing	1.50	1.50
Added Jobs	12,945	29,097

Source: E.D. Hovee & Company using information obtained from Rogue Valley Council of Governments, Minnesota IMPLAN Group, U.S. Census Bureau, U.S. Bureau of Economic Analysis (BEA), and Oregon Employment Department.

Toward a Preferred Forecast. The three alternative forecast approaches indicate a range of possible outcomes – for an added 12,900, 16,200 or 38,800 jobs in Medford by 2020. Due to the current economic slowdown and longer-term aging of the population, the higher number would not appear to be a most likely forecast. Conversely, the Regional Problem Solving estimate may prove unduly conservative particularly if the City of Medford continues to attract a younger and more diverse population mix. Consequently, for purposes of this analysis, the forecast alternative

of 16,200 added jobs in Medford is recommended on a preliminary basis for industrial and commercial land needs projections.

With this approach, Medford is likely to generate another 3,500 (1,960 x 5 x 36%) jobs by 2005. However, Medford should plan *for at least 16,200 jobs* within the next 20 years. Given the timing of the Regional Problem Solving project, Medford should also consider setting aside reserves of enough employment land to accommodate 29,100 to 38,800 over the longer 50 year planning horizon.

Employment Mix. The specific employment opportunities available in the future will depend, in part, on the lands available for development. Three employment land projections illustrate alternative focuses on job creation and land utilization. Each assumes a 20-year Medford job target of 16,200.

- **Current Mix –** Assumes employment growth occurs on lands according to current employment distribution. For example, 21% of Medford's employment is located on industrial land. Under this forecast scenario, commercial lands would accommodate 10,370 jobs, with 3,400 jobs allocated to industrial properties, and 2,430 to other lands (e.g. residential, agricultural, etc.).
- **Changing Share –** This forecast alternative presumes a focus on commercial development, assuming that Medford's economy continues toward commercial-related jobs, with a tightening of land use regulations that preserve industrial land for industrial-related jobs (i.e. manufacturing, distribution, wholesale, etc.). Allocations are consistent with growth trends over the last five years.
- **Industrial Land Focus –** Job creation on industrial properties would continue to occur at an annual rate of approximately 400 jobs per year. Commercial uses would still be permitted, but restricted to smaller, highly visible properties (parcels smaller than 5 acres). This forecast would result in a 50/50 mix of added jobs between commercial and industrial lands.

Figure 48. Medford Job Growth Allocations by Land Type

	Land Type			
	Com'l	Ind'l	Other	Total
20 Year Job Growth				16,200
Current Mix:				
Allocations	64%	21%	15%	100%
Added Jobs by Land Type	10,370	3,400	2,430	16,200
Changing Share:				
Allocations	75%	25%	0%	100%
Added Jobs by Land Type	12,150	4,050	0	16,200
Industrial Land Focus:				
Allocations	50%	50%	0%	100%
Added Jobs by Land Type	8,100	8,100	0	16,200

Source: E.D. Hovee & Company using information obtained from the City of Medford and Oregon Employment Department.

Each alternative employment mix forecast translates into a corresponding set of land demand projections. Current employment densities are assumed to continue into the future. Demand for commercial land would range from 430 to 650 acres. Between 710 and 1,690 acres of industrial land could be required to meet future needs.

Figure 49. Medford Employment Land Demand Forecasts (Commercial vs. Industrial)

	Land Type		
	Com'l	Ind'l	Total
Employment Density	18.7	4.8	
Current Mix:			
Job Growth	10,370	3,400	13,770
Land Demand	555	708	1,263
Changing Share:			
Job Growth	12,150	4,050	16,200
Land Demand	650	844	1,494
Industrial Land Focus:			
Job Growth	8,100	8,100	16,200
Land Demand	433	1,688	2,121

Source: E.D. Hovee & Company using information obtained from the City of Medford and Oregon Employment Department.

Total industrial and commercial land demand is minimized at 1,263 acres with the current mix – which assumes a continued pattern of some employment growth elsewhere, rather than industrial or commercial lands. Examples could include schools, self employed and expansion of otherwise non-conforming uses.

Total 20-year land need is greatest at 2,121 acres with the industrial land focus. This assumes continued use of at least some industrial lands by commercial uses and/or much more active effort to increase industrial investment in the Medford area.

Land Demand versus Supply

Even before considering development constraints, Medford may not have enough vacant employment land to meet future market demand. Medford currently has 1,678 acres (both industrial and commercial) of vacant employment lands, but demand over the next 20 years could range from 1,263 to 2,121 acres. After removal of constrained properties, Medford is left with only 538 acres, creating a potential deficit of 725-1,583 acres.

Figure 50. Land Demand/Supply with Alternative Forecasts

Employment Lands*	Current Mix	Changing Share	Industrial Land Focus
Land Supply (acres)	538	538	538
Land Demand (acres)	1,263	1,494	2,121
Surplus (+)/Deficit (-)	-725	-956	-1,583

*Note: Includes the total of commercial and industrial lands.

Commercial. Medford currently has an extremely limited supply of commercial land. With only 153 acres of unconstrained vacant commercial property, Medford is likely to experience a 280-500 acre deficit through 2020. The lack of commercial property will increase market pressure to locate on industrial lands. However, there is only 65 acres of 1-5 acre industrially designated parcels, fulfilling 53% of commercial demand over the last decade. Unless Medford has a framework for remediation of development constraints (e.g. wetland or flood plain mitigation), land prices for vacant/unconstrained commercial land could escalate, having the effect of:

- Driving up industrial land prices as commercial demand competes with industrial
- Greater development of under utilized properties
- Pushing some commercial development outside of Medford

Industrial. Industrial land comprises 70%-75% of Medford's vacant employment property. However, 845 acres of the vacant 1,230 acres have development constraints.[13] Medford will need 708-1,688 acres to fulfill market demand over the next 20 years. With only 385 acres unconstrained, Medford could have a deficit of 320-1,300 acres.

Even with remediation of constrained properties, Medford could have a 460-acre deficit (under the industrial land focus scenario). Furthermore, the lack of large industrial sites could result in Medford continuing to lose industrial development opportunities to other communities, such as White City or to other Southern Oregon communities outside Jackson County.

V. POLICY ISSUES

Medford officials are faced with several policy decisions pertinent to securing the City's economic future. Both economic and regulatory are involved.

The policies presented in this section are derived from the economic analysis conducted in the earlier sections of this report. They represent the consultant's conclusions and therefore should not be construed as being endorsed by any other party. These policies are not comprehensive and are presented for purposes of discussing Medford's economic and policy options.

1. **Determine Medford's regional employment role.** Medford is the largest city in Southern Oregon, accounting for 15% of all residents and 24% of all jobs. Medford's current jobs-housing balance is 1.49 versus 1.24 for the entire region, 1.46 statewide, and 1.44 nationally – providing evidence that Medford serves as a regional jobs center.

   In order for Medford to continue as a regional job center, local officials should plan for an additional 16,200 jobs over the next 20 years and 30,000-38,000 over the longer 50-year *Regional Problem Solving* timeframe.

2. **Chart Medford's economic identity.** Medford is considered the region's center for commercial and health care services generating 31% of all commercial-related and 38% of health care jobs. However, Medford is not regarded as a primary provider of manufacturing/industrial activity, employing only 11% of all manufacturing workers in Southern Oregon. Furthermore, commercial development (including activity on industrial lands) is absorbing 24 acres per year, compared to 16 acres for industrial development.

   Medford has a multitude of paths that could be chosen – setting a direction for the community's economic future. First option is to "stay the course," which would translate into Medford continuing to serve the region as a commercial center. Between 64%-75% of all job creation would occur on commercial lands. A second alternative is to not only remain as the region's major commercial center, but also become more aggressive in attracting industrial investment. This translates into a 50/50 mix between jobs on commercial and industrial.

3. **Consider local socio-economics as part of a jobs development strategy.** Local and regional demographics should be considered as part of determining Medford's economic identity. Key characteristics include:

   - Latinos are a rapidly growing segment of Medford's population, accounting for 20% of citywide population growth over the last 10 years. As of 2000, Latinos comprised 9.2% of all residents in Medford.
   - Fifty-five percent of persons age 25 or older have at least some college education, versus 59% statewide.
   - Sixty-two percent of residents age 16 and older participate in the local labor force, slightly below statewide rates (65%) but higher than region-wide averages (58%).

- Southern Oregon has a higher proportion of management and professional workers than area employers require. However, regional employers exhibit greater demand for blue-collar jobs than the local labor force is able to supply.

Medford has a need for a diverse set of job opportunities. Medford should create a strategy for developing a skilled workforce to fill the deficiency in blue-collar occupations. As part of a workforce development strategy, Medford also likely will exhibit increased demand to provide access to a network of education and training resources to serve a growing minority population.

As part of its business recruitment/development efforts, Medford should seek companies that require managers and professionals to help fill the current void in employment opportunities for these occupations. Other occupational needs should not be ignored, as the aging regional population will create an increased demand for health care occupations.

4. **Focus economic development efforts where demonstrated competitive advantages are offered.** Medford has a number of business and industrial potentials for which it can competitively vie with other communities – segmented into three tiers of best, strong but challenging and locally competitive opportunities.

   These opportunities are consistent with the community's relative competitiveness for business investment. Medford also offers two additional distinct advantages that can serve to attract or expand existing industries:

   - *Relatively low cost supply of labor compared to the nation, especially larger metro markets.* Average covered employment wage in Jackson County is $28,700 versus $38,200 nation-wide. As indicated by the demographic analysis, the supply of labor locally is also favorable – with strong representation from younger adults.
   - *Inclusion of all commercial and industrial properties within its enterprise zone.* Enterprise zones exempt new investment from property tax for 3-5 years. Provided are business finance assistance, corporate tax credits, project development assistance (e.g. streamlined permitting, infrastructure support, project siting), and workforce development.

     Medford is also only one of four communities with a special *electronic commerce* overlay. This overlay provides additional tax benefits such as:

     ✓ If increasing its full-time employment, an eligible business firm can have its newly invested property exempted from local taxes for three to five years in any enterprise zone.

     ✓ This standard enterprise zone exemption is fully extended to any E-commerce business activity – situated in an E-commerce zone – even if the business would not normally be eligible. Also, the firm's personal property can qualify more easily for the exemption.

     ✓ In addition, any business qualifying for the property tax abatement in an E-commerce zone can earn a tax credit on its State of Oregon income/excise tax return.

- ✓ This credit could be a very substantial incentive for certain businesses, equaling the lesser of $2 million or 25 percent of the total investment in E-commerce operations in the zone; unused portions of this credit may be carried forward up to five years for offsetting future income/excise tax liability in Oregon.

5. **Ensure Medford has an adequate supply of employment lands.** Medford may not have enough vacant employment land to meet future market demand. Medford has 1,678 acres (both commercial and industrial) of vacant employment lands, but demand over the next 20 years could range from 1,263 to 2,121 acres. After removal of constrained properties, this market analysis indicates Medford is left with as little as 538 acres, creating a potential deficit of 725-1,583 acres.

   Undoubtedly, existing developed sites will be able to accommodate a portion of this unmet demand. However, it is not likely that 25%-50% of current developed employment lands (3,020 acres) could absorb the entire deficit. Rather, a series of strategies that remove or mitigate the constraints facing two-thirds of its vacant inventory will likely prove necessary. This may include consideration of adding new employment lands to the existing urban growth boundary.

6. **Provide a competitive supply of both commercial and industrial land.**

   Needs for commercial and industrial lands both warrant consideration.

   Commercial: Due to a constrained supply of commercial land, commercial development has absorbed both commercial and industrial land at a 2:1 ratio – two acres of commercial land for every one acre of industrial utilization. Medford has only 153 acres remaining of vacant unconstrained land, with no properties greater than 10 acres and only 65 acres in 1-5 acre parcels.

   Medford will need 430 to 650 acres to satisfy anticipated market demand over the next 20 years. If development trends experienced over the last decade continue, 53% (or 230-350 acres) of demand will be for 1-5 acre sites. With only 65 acres of unconstrained 1-5 acre parcels, Medford is only capable of satisfying 19%-28% of expected market demand.

   The lack of sites will further increase pressure for commercial to develop on industrial sites. An active downtown redevelopment program could potentially reduce but is not expected to eliminate the deficit of sites for future commercial use.

   Industrial: Industrial development has been lagging for reasons including the parcelization of large industrial sites for smaller commercial development. This has had the effect of driving up land prices as well as reducing the competitive supply of large industrial sites.

   Medford has only five unconstrained parcels (or 115 acres) that are 10 acres or larger – three sites at 15 acres or greater representing 94 acres. Over the last decade, 37% of industrial land absorption occurred on 15+ acre sites. Industrial land demand projections range from 710-1,690 acres, translating into the need for 260 to 630 acres of 15+ acres sites. With only 94

unconstrained acres in 15+ acre parcels, Medford can only satisfy 15%-36% of demand for large sites.

Medford also has a limited supply of unconstrained industrial land. Of the vacant 1,230 acres, 845 acres are constrained. This leaves only 385 acres to fulfill 710-1,690 acres of demand. This is before considering industrial land that may be committed for unmet commercial demand.

7. **Consider revising zoning designations and land use regulations consistent with an adopted economic development strategy.** With commercial development spanning both commercial and industrial land, a limited supply of unconstrained employment land and significant parcelization of vacant industrial land (56% under 5 acres in size), Medford should consider rezoning a portion of its industrial land (parcels under 5 acres) to a *business park* type of zone. This would allow commercial development to continue on a designated portion of industrial lands as well as small scale industrial activity.

   At the same time, action could be taken to limit commercial development on properties 5 acres or larger. With a very limited supply of large industrial sites, the City of Medford has a growing need to reserve remaining large sites for primarily industrial uses. Allowing complementary office as a part of the industrial development might be considered given the type of industries for which Medford is competitive, its e-commerce overlay, and industries tending to be comprised of office activities.

8. **Incorporate development standards into Medford's land use regulations.** The development review assessment currently underway by the City of Medford offers an opportunity to consider changes appropriate for commercial and industrial land regulations. Land use regulations can be assessed from the perspective of improving Medford's competitive position for desired economic development and reducing unnecessary regulatory cost or uncertainty.

   Measures that might be appropriate to consider could include designation of added unconstrained industrial/commercial lands to meet forecast demand, clearer delineation of industrial, business park and commercial uses, infrastructure targeted to prime development sites, and maintenance of fast track permitting capability.

   The City could also consider limiting the parcelization of large industrial sites by providing planning options for development to *phase in* more systematically – pursuant to master plan, planned unit development (PUD) or similar development approval process. Objectives would be to preserve large sites, where possible, for larger business and industrial users and to improve coordination of phased development for multi-use or multi-firm sites.

ENDNOTES

[1] Locational questions are addressed in a general manner in this report. More detailed discussion of industrial/commercial siting is recommended as follow-up to this market report based on additional site constraint inventory analysis and direction on policy issues discussed at the conclusion of this analysis.

[2] Information for this report has been obtained from sources generally deemed reliable; however, the accuracy of information obtained from third party sources cannot be guaranteed. The opinion and conclusions of this analysis are those of the consultant only. They should not be construed as representing the opinion of any other party prior to express approval of this report – whether in whole or part.

[3] According to data provided by the Oregon Employment Department (OED), the City had 31,976 jobs within its city limits as of Year 2000. Adjusting OED data to include corporate officers, family workers, and proprietors brings the total employment estimate to 45,059. Adjustments were made by applying the ratio of Jackson County's BEA total employment estimate to OED covered employment estimates.

[4] IMPLAN is an input-output economic model originally developed by the University of Minnesota and the USDA Forest Service. Economic data sets are updated annually for every county in the United States.

[5] Information provided by the City of Medford Planning Department including GIS files is greatly appreciated. A preliminary draft of this report was reviewed with Economic Development and Planning Department staff prior to report completion.

[6] Two of these industrial parcels with residential use are located on the south side of Medford, outside the city limits. One parcel is located on the west side near Boise Cascade, and another is on the north side near the city limits.

[7] Current uses have been classified as industrial or commercial for specific parcels based on the property description provided by the Jackson County Assessor's office for each tax lot. Commercial uses cover several categories including professional office, retail and lodging.

[8] A more complete parcel-by-parcel assessment of site acreage is recommended for consideration as follow-up to this economic market analysis. This would be useful to more precisely estimate the portions of properties with wetland or floodplain designation together with the remainder suitable for development.

[9] The PP&L site is located at 925 Grape Street, just south of the downtown core.

[10] The Southern Oregon University site is situated at the northwest corner of the city at 3600 North Pacific Highway. The two EFU sites include one on South Pacific Highway and another located on East Barnett Road. One of the industrial sites is on the south side of Medford; the other two are north side.

[11] Source is for current population estimates is the Population Research Center at Portland State University.

[12] By comparison, employment in the 4-county Southern Oregon area increased by only 50% from 1980-2000.

[13] As noted, constraints identified with currently available GIS mapping include properties affected wetland or floodplain areas. Additional research would be appropriate to identify other potential constraints related to infrastructure access – notably, roads, water and sewer.

Medford Commercial & Industrial Land Study
Goal 9 Supplement

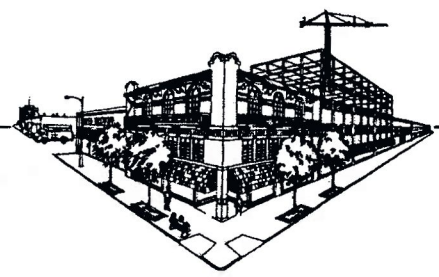
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City of Medford

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Medford Commercial & Industrial Land Study
Goal 9 Supplement

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AT-A-GLANCE SUMMARY

The *Medford Economic Analysis* completed for the City of Medford in March 2003 was intended to address the community's economic development prospects currently and over a longer 20-year planning horizon. This supplemental Goal 9 analysis builds on the initial economic analysis and is focused on a) refinements to a commercial/industrial land inventory; b) selection of an appropriate employment growth and land needs forecast; and c) identification of siting criteria that can be considered modifications to Medford's Comprehensive Plan.

What follows is an *at-a-glance* summary of findings and recommendations resulting from this analysis.

Updated Commercial & Industrial Land Inventory. In cooperation with City of Medford planning and economic development, five land use inventory iterations were conducted starting with the 2003 economic market analysis. An approach was selected that includes all identified industrial and commercial vacant lands including sites of less than one acre, adds downtown and redevelopment sites, excludes only those portions of sites that are environmentally constrained, and provides manual parcel data review to adjust environmental constraints. The *recommended inventory* identifies an estimated 350 acres of vacant and redevelopable commercial land together with almost 1,288 acres of industrial land – for a combined developable commercial/industrial land inventory of approximately 1,638 acres.

Future Economic Outcomes. Using a recommended land demand scenario predicated on a *changing share* methodology assuming some continued shift from industrial to commercial use, demand for commercial land is projected at 650 acres over a 20-year period with demand for industrial projected at 844 acres – for a combined commercial/industrial land need of 1,494 acres.

A *comparison of land demand (or need) with supply* indicates that Medford could require designation of up to 300 added acres of commercial land while at the same time being oversupplied with industrial sites in the amount of an estimated 444 acres. Taken together, there appears to be an *adequate inventory* of commercial and industrial land, although redesignation of some industrial sites to commercial may be warranted – potentially leaving a reserve of nearly 144 acres. This reserve could be offset by redesignating some commercial/industrial lands to other uses and/or swapping commercial/industrial lands with other land designations.

Siting Criteria. This report outlines criteria that could be considered for siting of future anticipated industrial and commercial uses in the City of Medford plus the as-yet unincorporated Urban Growth Boundary (UGB). As described in this report, a *matrix format* is suggested, illustrative uses by General Land Use Plan (GLUP) designation together with potentially relevant criteria pertaining to location and access, valuation and property sizing/parcelization.

Next Steps. Based on the analysis and findings of this study, the following *next steps* are recommended for discussion with the City of Medford Planning Commission and City Council:

- Adoption of the commercial/industrial inventory and land demand/needs forecast recommended with this report as a basis for Goal 9 compliance and future land use designations.
- Acceptance of recommended siting criteria as a *working guide* to redesignation of industrial and commercial GLUP and zoning classifications.
- Matching appropriate revised GLUP/zoning designations to existing uses, followed by mapping for prospective uses including new development and redevelopment.

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I. INTRODUCTION

The economic and development consulting firm E.D. Hovee & Company has been retained by the City of Medford, Oregon, to assess Medford's future economic potential, identify commercial and industrial lands available to serve Medford's long-term economic needs, and provide recommendations on siting future commercial and industrial activities. The study builds upon the *Medford Economic Market Analysis* completed in 2003.

BACKGROUND

In March 2003, E. D. Hovee & Company completed the *Medford Economic Market Analysis*. This report provided an evaluation of employment growth and the resulting need for commercial and industrial lands over the next 20 years. Also recommended was consideration of changes to comprehensive plan and zoning regulations as appropriate to implement a preferred economic development strategy.

Subsequently, the Planning Commission has identified issues for economic development and recommended courses of action by inter-office memorandum to the City Council dated February 25, 2004. Included with the Planning Commission's report were recommendations to:

- Consider designation of added commercial land – but to a "very limited extent" for the immediate future.
- Increase minimum lot sizes in the industrial zones.
- Develop additional standards to identify when commercial uses can occur in industrial zones.
- Maintain land in the Heavy Industrial zone, subject to a target industry analysis to better determine the size, type and appropriate locations needed for land in each use category.

The Medford City Council concurred with these recommendations – as a basis for proceeding with subsequent economic and planning analysis. Based on recommendations of the economic market analysis and subsequent Planning Commission and City Council reviews, the City of Medford retained E. D. Hovee & Company to prepare a more refined Goal 9/Target Industry Analysis.

The first and primary purpose of this supplemental analysis is to refine the commercial and industrial lands inventory. This inventory is then compared with projected employment growth and associated land demand consistent with Goal 9 requirements of the state of Oregon Department of Land Conservation and Development (DLCD). A secondary purpose of this supplemental analysis is to identify and describe siting or locational criteria that could be considered for future designation of commercial and industrial lands.

APPROACH

E.D. Hovee & Company has taken a *four-step* approach in assisting the City of Medford in addressing each of the Planning Commission recommendations:

- Update of earlier commercial and industrial lands inventory with the aid of City GIS files and prior inventory work.
- Presentation of three economic opportunity forecasts completed in the 2003 Medford Economic Market Analysis followed by staff/consultant recommendation of a preferred scenario that appears to best fit with Medford's long-term economic opportunities and policy objectives.
- Preliminary assessment of potential siting criteria that could be applied to future modifications to Medford's Comprehensive Plan, land use designations and associated land development code.
- Outline of summary findings and recommendations for consideration by the Medford Planning Commission and City Council.

A preliminary draft of this report was submitted for review by City of Medford Economic Development and Planning personnel in October 2004. This final report is based on that review with minor editorial revisions for clarity. Staff participation in provision of data and review of working drafts of this analysis is gratefully acknowledged.

Qualifications & Limitations

This analysis has been prepared by E. D. Hovee & Company as project consultant. A brief profile of the consultant is attached as an appendix to this report.

This supplemental analysis is based on information generally deemed to be reliable. However, accuracy of information from third party sources is not guaranteed and is subject to change without notice.

Actual conditions may well vary from estimates due to local economic conditions, local/non-local policy decisions, and exogenous market dynamics. Consequently, the general conclusions drawn from this analysis should be viewed as being of greater significance than the point reliability of specific numerical estimates.

The conclusions and opinions expressed in this report are those of the authors. They should not be construed as representing the opinion of any other party without prior express approval – whether in whole or part.

Report Organization

The remainder of this report is organized to summarize the results of the four-step approach within the following main topics:

Updated Commercial & Industrial Land Inventory
Future Economic Outcomes
Siting Criteria
Findings & Recommendations

II. UPDATED COMMERCIAL & INDUSTRIAL LAND INVENTORY

As the first major task with this supplemental analysis, E.D. Hovee & Company completed a revised commercial and industrial lands inventory for the Medford UGA. This inventory and analysis has proved to be a substantial undertaking involving coordination with City staff to obtain current GIS base data and then review assumptions appropriate for inclusion or exclusion of lands as part of a developable inventory. As is described in this section of the report, a total of five inventory iterations have been conducted starting with the 2003 economic market analysis.

This inventory update is compared with the prior inventory completed in June along with an updated table that contains Medford City Planning staff's 2003 inventory and the earlier E.D. Hovee & Company's 2002 inventory. This discussion describes methodologies that have been considered, comparative results and a recommended land inventory.

METHODOLOGIES

E.D. Hovee & Company obtained GIS files from the City of Medford's Planning Department. GIS shape files have covered data items including:

- City Limits
- Urban Growth Boundary (UGB)
- Roads/Streets
- Zoning
- Tax Lots (entire UGB)
- Environmental Constraints
- General Land Use Plan (GLUP) Designations

The tax lot file was augmented to include zoning, GLUP (or Comp Plan) designations, vacant/developed status, and site size classifications by property record. Properties are classified by zoning district and GLUP designation according to the center of the property. For example, if the center of a parcel falls within a light industrial zone, it is classified light industrial because the majority of the property lies within that designation. In effect, this method makes no attempt to split or allocate properties that fall within multiple GLUP designations.

Private properties are designated vacant through a *two-step* process. The first step classifies a property as vacant if its improvement value is zero. The list is further refined by reviewing the assessor's property description. Properties are classified as developed if they are not designated as vacant, publicly owned, exempt, or with improvement value less than one-third of land value (consistent with the City of Medford Planning Department methodology). Each property is then assigned one of seven site size classifications:

- < 0.5 acres – sites less than 0.5 acres
- 0.5-1.0 acres – sites 0.5 to 0.99 acres
- 1.0-2.0 acres – sites 1.0 to 1.99 acres
- 2.0-5.0 acres – sites 2.0 to 4.99 acres
- 5.0-10.0 acres – sites 5.0 to 9.99 acres
- 10.0-15.0 acres – sites 10.0 to 14.99 acres
- 15+ acres – sites 15.0 acres or larger

In addition to the methodology described above, some differences are noted between the 2003 E.D. Hovee & Company inventory analysis and this 2004 update, as well as with Medford Planning Department's updated 2003 study. These differences are briefly discussed below.

2003 E.D. Hovee & Company Market Study. Based on previous Medford Planning staff studies, E.D. Hovee & Company did not consider redevelopment potential of underutilized sites as part of its 2003 market study. All vacant sites including those with environmental constraints were considered with the initial inventory. *Note:* This is denoted on the following table as the EDH 03A inventory.

As a second step to the evaluation, sites with potential environmental constraints were also considered separately. At the time of the 2003 report, the Medford Planning Department had not fully delineated environmental constraint boundaries so that entire sites with some level of environmental constraints were excluded from the potentially developable inventory (shown as the EDH 03B inventory).

2003 Medford Planning Staff Study. During mid-2003, the City of Medford's Planning staff conducted an independent evaluation of Medford's commercial and industrial lands. At this time, Planning staff incorporated their newly completed environmental constraint delineations as well as inclusion of potential redevelopment sites.

The City of Medford adopted an inventory of riparian areas and wetlands in late Spring 2003. Geographic areas within the 100-year flood plain as well as the riparian and wetland areas were removed from their inventory. Planning staff also determined that parcels are underutilized (or redevelopable) if they have an improvement value that is less than one-third of the land value. Medford Planning staff excluded parcels less than one acre in size and properties located within the downtown (or CC) area. *Note:* this is shown on the table as the MPS 03 inventory.

2004 E.D. Hovee & Company Update. This inventory update utilizes the previous methodology employed in the 2003 study with two significant refinements. The 2004 update utilizes Medford Planning staff's environmental delineations to remove environmentally constrained areas within each parcel (as a proportion of the parcel rather than the entire parcel). Based upon consultation with City Planning staff, this revised inventory does rely upon additional manual inspection – which is the primary reason for the increased developable land inventory estimates.

The 2004 study also employs Medford Planning staff's underutilization methodology to identify properties with high redevelopment potential. As with the 2003 study, this evaluation considers properties of less than one acre in size as well as sites located in Downtown Medford. *Note:* This is depicted on the following table as the EDH 04 inventory.

Summary Methodology Comparison. The differences in methodology between the separate inventories conducted are visually depicted by the following table.

Figure 1. Industrial & Commercial Land Inventory Methodology Comparison

Methodolgy	Industrial & Commercial Property EDH 03A	EDH 03B	MPS 03	EDH 04
Includes vacant lands	●	●	●	●
Includes sites of less than 1 acre	●	●		●
Adds downtown sites	●	●		●
Adds redevelopment sites			●	●
Excludes entire site if portion is environmentally constrained		●		
Excludes only the portion of the site constrained			●	●
Parcel size information provided	●	●		●
Manual parcel data review to adjust environmental constraints				●

Note: EDH 03A refers to 2003 industrial land inventory with *Medford Economic Market Analysis*, before exclusion of land with environmental constraints. EDH 03B refers to the same inventory, but after deletion of parcels with environmental constraints. MPS 03 is the City of Medford Planning staff's inventory. EDH 04 is based on the current updated land inventory methodology and results are outlined by this memorandum.

Source: City of Medford Planning and E. D. Hovee & Company.

In summary, the current methodology (EDH 04) represents a composite of the best features of earlier inventories – based on new information as it has been compiled. This updated inventory procedure is intended to provide a more reliable estimate of vacant and redevelopable industrial and commercial land potentially suitable for industrial and commercial development in the City of Medford and associated Urban Growth Boundary (UGB).

COMPARATIVE RESULTS

To illustrate the effect of the manual site by site inspection, two inventories were eventually completed as part of this 2004 update. The initial inventory (denoted as EDH 04A) relied primarily on computerized information to develop estimates of vacant and underutilized commercial and industrial lands.

The second (or refined) inventory (indicated as EDH 04B) entailed a manual site by site review of each identified environmentally constrained parcel. This revision produces added developable land inventory, especially acreage within the 15+ acre category.

The revised inventory contains 350 more acres of industrial land and 90 added acres of commercial land. Eighty-five percent of the increase in industrial acreage is captured by parcels of 15 acres or greater. Parcels 15 acres or larger account for the majority (53%) of the increase in commercial land.

Figure 2. Comparative Results of the 2004 Industrial & Commercial Inventory Analysis

	Industrial		Commercial	
Parcel Size	EDH 04A	EDH 04B	EDH 04A	EDH 04B
< 0.50 acres	30.57	33.84	43.49	45.75
0.5-0.99 acres	93.45	101.82	39.81	43.50
1.0-1.99 acres	66.66	73.49	45.79	52.80
2.0-4.99 acres	134.95	157.43	54.04	64.05
5.0-9.99 acres	57.48	70.27	51.55	57.64
10.0-14.99 acres	93.19	93.19	11.02	23.49
15+ acres	462.48	757.73	15.82	62.48
All Vacant Parcels	938.78	1,287.77	261.52	349.71

Note: Inventory includes all vacant and underutilized properties with portions of parcels that are environmentally constrained removed from the inventory. "A" indicates the initial June 18th inventory and "B" denotes the refined July 22nd inventory.

Source: E.D. Hovee & Company using City of Medford Planning Department data and GIS files.

Each of the three studies (i.e., EDH 2003, Medford Planning 2003, and revised EDH 2004) produces different land supply estimates, reflective of their different methodologies. The earlier 2003 E.D. Hovee & Company economic market study identified 1,229.83 acres of vacant industrial land (including all vacant and environmentally constrained areas), compared to Medford Planning staff's 1,118.40 acres (including underutilized sites) and E.D. Hovee & Company's 2004 final updated estimate of 1,287.77 acres.

Perhaps the greatest methodological difference between Medford Planning staff's estimate and the E.D. Hovee & Company 2004 initial update was the inclusion of properties that are smaller than one acre in size and inclusion/exclusion of environmentally sensitive areas. *Note: The environmental inventory completed in 2003 assumed 50 foot buffers. Planning staff has been considering reducing the buffers to 25 feet, which could result in a further increase in the supply of industrial and commercial lands.*

The initial 2003 E.D. Hovee & Company study identified 447.50 acres of vacant commercial land (including all vacant environmentally constrained areas), compared to Medford Planning staff's 286.90 acres (including underutilized sites) and E.D. Hovee & Company's 2004 updated estimate of 349.71 acres. While Medford Planning staff's estimate and the E.D. Hovee & Company revised 2004 update are relatively similar, differences occur because the E.D. Hovee & Company inventory includes downtown together with vacant/underutilized properties smaller than one acre, and includes/excludes environmentally sensitive areas.

Figure 3. Comparative Results of Recommended Current vs. Earlier Inventories

	Industrial Property				Commercial Property			
Parcel Size	EDH 03A[1]	EDH 03B[2]	MPS 03[3]	EDH 04B[4]	EDH 03A[1]	EDH 03B[2]	MPS 03[3]	EDH 04B[4]
< 0.50 acres	23.66	20.43	NA	33.84	35.48	31.96	NA	45.75
0.5-0.99 acres	99.50	80.23	NA	101.82	25.29	19.59	NA	43.50
1.0-1.99 acres	78.54	41.86	NA	73.49	29.85	18.87	NA	52.80
2.0-4.99 acres	144.01	74.26	NA	157.43	56.54	45.69	NA	64.05
5.0-9.99 acres	99.44	53.17	NA	70.27	59.73	41.48	NA	57.64
10.0-14.99 acres	104.24	78.68	NA	93.19	34.66	0.00	NA	23.49
15+ acres	680.44	115.18	NA	757.73	205.95	15.82	NA	62.48
All Vacant Parcels	1,229.83	463.80	1,118.40	1,287.77	447.50	173.41	286.90	349.71

Notes: 1) The E.D. Hovee & Company 2003 study did not remove environmentally constrained portions of sites. Downtown commercial sites are included. Redevelopment sites were not considered. 2) This second estimate removed all environmentally constrained sites. Downtown commercial sites are included. Redevelopment sites were not considered. 3) Detailed parcel size information was not available, as GIS files specific to these results did not equate to published results. Downtown sites are omitted, but underutilized sites are included. 4) Inventory reflects the refined July 22nd estimates and includes all vacant and underutilized properties with portions of parcels that are environmentally constrained removed from the inventory.

Source: E.D. Hovee & Company using City of Medford Planning Department data and GIS files.

The approach of reducing the inventory only for the *portions of sites with environmental constraints* rather than for complete sites that may have some environmental constraint results in a larger potential inventory of developable sites. This is particularly the case for properties designated for industrial use under the GLUP. The updated inventory is also augmented by inclusion of redevelopment parcels.

RECOMMENDED INVENTORY

As indicated by the chart above, the final EDH 04B iteration is recommended as the inventory to be carried forward for Goal 9 economic needs analysis. This is the inventory that is compared with alternative projections of industrial and commercial land demand – a topic to which this report now turns.

III. FUTURE ECONOMIC OUTCOMES

E.D. Hovee & Company completed an economic forecast as part of the 2003 Economic Market Analysis. Three alternative job and land demand forecasts were presented as possible future outcomes for Medford. This section summarizes the alternatives presented in the 2003 study, discusses the applicability to more recent conditions, and examines the implications of Medford's commercial and industrial land supply.

ALTERNATIVE DEMAND FORECASTS

For the future, Medford is faced with several possible economic scenarios. The community's realized economic future will, in part, be determined by some combination of past economic trends, Medford's current industrial and commercial land inventory, regional and local competitive advantages, and local policy decisions.

Consequently, a series of alternative job and land demand forecasts were prepared for consideration by the City of Medford. The job target and land absorption outcomes that Medford actually realizes should reflect a realistic assessment of the community's current and prospective competitiveness and its vision for the future, followed by implementation of the vision.

Updated Market Conditions. The alternative economic forecasts presented in the 2003 study were predicated on market conditions through year 2000. Long-term employment growth averaged 3.6% (or 2,265) per year between 1970 and 2000.

The local economy slowed considerably between 2000 and 2002, with job growth dropping to annual growth of only 1.1% during this time period. However, this has not appreciably changed the long-term employment growth rate, which from 1970-2002 averages 3.4% annually.

Figure 4. Jackson County Historic Job Growth (1970-2002)

Year	Jackson County
Jobs:	
1970	36,133
1980	58,793
1990	76,441
2000	104,087
2002	106,355
AAGR:	
1970-80	5.0%
1980-90	2.7%
1990-00	3.1%
2000-02	1.1%
1970-00	3.6%
1970-02	3.4%

Note: AAGR denotes average annual growth rate. Jobs include full-time, part-time, and proprietors.

Source: U.S. Bureau of Economic Analysis.

Alternative Demand Forecasts. Three alternative demand scenarios were recommended for consideration by the City of Medford with the 2003 economic market study. Due to the fact that local conditions have not changed appreciably, the wide range of employment forecasts presented in 2003 all still represent possible outcomes:

- **Historic Growth Rate –** According to data collected from the U.S. Bureau of Economic Analysis (BEA), Jackson County's job base has been growing at a *rate of 3.6% per year* between 1970 and 2000. Continuation on this trend would lead to the creation of 107,840 jobs, or a total employment base of 212,690 by 2020. Medford provides 36% of all Jackson County jobs. Given its regional role, it is reasonable to anticipate that Medford could continue to create 36% of Jackson County's employment opportunities, and therefore, add *another 38,820 jobs*.
- **Historic Annual Job Creation –** Over the last 30 years, Jackson County has been producing an *average of 2,250 new jobs per year*. The Oregon Employment Department is projecting an annual employment growth rate of 1.6% over the next 10 years, leading to the addition of 1,960 jobs per year. Given the slow economy during the early part of this decade, it is reasonable to assume that job growth for the first 10 years will come closer to the State's forecast. However, a longer-term average of 2,250 per year could still result from higher job growth in the later 10 years of the forecast period. The resulting effect for Medford would be *16,200 new jobs* over the next two decades – or a long-term average annual growth rate of 1.8%.

Figure 5. Projected Added Medford Jobs Based on Historic Trends (2000-2020)

	Historic Growth Rate	Historic Annual Job Creation
2000 IMPLAN Employment	104,845	104,845
Annual Growth Rate	3.6%	1.8%
2020 Employment	212,688	149,845
Employment Growth	107,843	45,000
Medford Share	36%	36%
Medford Added Jobs	38,823	16,200

Source: E.D. Hovee & Company using information obtained from Minnesota IMPLAN Group, U.S. Bureau of Economic Analysis (BEA), and Oregon Employment Department.

- **Regional Problem Solving Project –** Medford has been participating in a long-range strategic planning project with the Rogue Valley Council of Governments and other government agencies within Jackson County. The strategic plan in 2003 projected Medford to receive over 47,900 new people by 2050, or 19,400 added households based on Medford's forecasted average household size of 2.47 persons per household. Planning participants targeted an average jobs-housing ratio of 1.5, which is coincidently Medford's current average. For Medford to maintain its current jobs-housing balance, it would need to create 29,100 new jobs over the next +/-50 years, or *12,945 added jobs* within the shorter time horizon of 2020. This equates to a much slower rate of job growth of less than 0.6% per year.

Figure 6. Projected Added Medford Jobs Based on Regional Problem Solving Project

	2020	2050
x2 Pop Growth	21,317	47,914
Average Household Size	2.47	2.47
Added Households	8,630	19,398
Jobs-Housing	1.50	1.50
Added Jobs	12,945	29,097

Source: E.D. Hovee & Company using information obtained from Rogue Valley Council of Governments, Minnesota IMPLAN Group, U.S. Census Bureau, U.S. Bureau of Economic Analysis (BEA), and Oregon Employment Department.

The three alternative forecast approaches indicate a range of possible outcomes – for an added 12,900, 16,200 or 38,800 jobs in Medford by 2020. Due to the recent economic slowdown and longer-term aging of the population, the higher number would not appear to be a most likely forecast. Conversely, the Regional Problem Solving estimate may prove unduly conservative particularly if the City of Medford continues to attract a younger and more diverse population mix. Consequently, for purposes of this Goal 9 supplemental analysis, *the forecast alternative of 16,200 added jobs in Medford is recommended* on a preliminary basis for industrial and commercial land needs projections.

Employment Mix. Selecting an appropriate jobs target constitutes the first step of the forecasting process. Allocating jobs to commercial and industrial land uses represents the second step in the job forecast process.

The specific employment opportunities available in the future will depend, in part, on the lands available for development. Three employment mix projections illustrate alternative focuses on job creation and resulting land utilization. Each assumes a 20-year Medford overall job target of an added 16,200 jobs.

- **Current Mix –** Assumes employment growth occurs on lands according to employment distributions examined in the 2003 study. For example, 21% of Medford's employment is currently located on industrial land. Under this forecast scenario, commercial lands would accommodate 10,370 jobs, with 3,400 jobs allocated to industrial properties, and 2,430 to other lands (e.g., residential, agricultural, etc.).
- **Changing Share –** This forecast alternative presumes a focus on commercial development, assuming that Medford's economy continues some transition toward a greater mix of commercial-related jobs, with a tightening of land use regulations that preserve industrial land for industrial-related jobs (i.e., manufacturing, distribution, wholesale, etc.). Allocations are consistent with growth trends observed over the last five years.
- **Industrial Land Focus –** Job creation on industrial properties would continue to occur at an annual rate of approximately 400 jobs per year. Commercial uses would still be permitted, but restricted to smaller, highly visible properties (parcels smaller than 5 acres). This forecast would result in a 50/50 mix of added jobs between commercial and industrial lands.

Figure 7. Medford Job Growth Allocations by Land Type

	Land Type			
	Com'l	Ind'l	Other	Total
20 Year Job Growth				16,200
Current Mix:				
Allocations	64%	21%	15%	100%
Added Jobs by Land Type	10,370	3,400	2,430	16,200
Changing Share:				
Allocations	75%	25%	0%	100%
Added Jobs by Land Type	12,150	4,050	0	16,200
Industrial Land Focus:				
Allocations	50%	50%	0%	100%
Added Jobs by Land Type	8,100	8,100	0	16,200

Source: E.D. Hovee & Company using information obtained from the City of Medford and Oregon Employment Department.

Each alternative employment mix forecast can be translated into a corresponding set of land demand projections. Current employment densities specific to commercial and industrial lands are assumed to continue into the future.

With these employment mix scenarios, projected 20-year demand (or need) for commercial land could range from 430 to 650 acres. Between 710 and 1,690 acres of industrial land could be required to meet future needs.

Specifically noted is that approximately 15% of the job allocation with the current mix scenario is to lands designated for uses other than industrial and commercial development – reflecting current development patterns. With this scenario, 13,770 jobs (or 85% of the employment forecast) would be allocated to industrial and commercial use. With the other two scenarios, 100% of projected employment growth is allocated to industrial and commercial lands.

Figure 8. Medford Employment Land Demand Forecasts (Commercial vs. Industrial)

	Land Type		
	Com'l	Ind'l	Total
Employment Density (Jobs per Acre)	18.7	4.8	
Current Mix:			
Job Growth (2000-2020)	10,370	3,400	13,770
Land Demand (Acres)	555	708	1,263
Changing Share:			
Job Growth (2000-2020)	12,150	4,050	16,200
Land Demand (Acres)	650	844	1,494
Industrial Land Focus:			
Job Growth (2000-2020)	8,100	8,100	16,200
Land Demand (Acres)	433	1,688	2,121

Source: E.D. Hovee & Company using information obtained from the City of Medford and Oregon Employment Department. Land needs are *based on use* rather than the designation of the land on which the employment actually occurs. To the extent that, for example, commercial use is encouraged or actually occurs on industrial land, the resulting zoning allocations between commercial/industrial could be shifted accordingly.

Total industrial and commercial land demand is minimized at 1,263 acres with the current mix – which assumes a continued pattern of some employment growth elsewhere, rather than industrial or commercial lands. Examples include schools, self-employed and expansion of otherwise non-conforming uses.

Total 20-year land need would be greatest at 2,121 acres with the industrial land focus. This assumes continued use of at least some industrial lands by commercial uses and/or much more active effort to increase industrial investment in the Medford area.

LAND DEMAND VS. SUPPLY

Medford may not have enough vacant commercial and industrial land to meet future market demand. Medford currently has 1,640 acres (both industrial and commercial) of vacant employment lands, but demand over the next 20 years could range from 1,263 to 2,121 acres. Consequently, Medford could experience a potential deficit of 481 acres to a surplus of as much as 377 acres.

Commercial. Medford currently has an extremely limited supply of commercial land. With only 350 acres of unconstrained vacant commercial property, Medford is likely to experience an 80-300 acre deficit through 2020. The lack of commercial property will increase market pressure to locate on industrial lands.

There is currently 210 acres of industrial land that is comprised of parcels less than 2.0 acres in size; and another 157.43 acres ranging 2.0-4.99 acres in size. Medford could rezone a portion of these smaller sites for commercial uses to alleviate market demands in existing commercial

areas. There is enough surplus vacant industrial land with the current mix and changing share scenarios to absorb the commercial deficit. However, if the city chooses to pursue an industrial land focus strategy, Medford will have to consider other means to balance commercial demands with available lands (e.g., more focused development in commercial nodes, much greater utilization of downtown sites, etc.).

Industrial. Industrial land comprises almost 80% of Medford's vacant employment property. Depending on the economic development focus, Medford could have between a 400-acre deficit to a 580-acre surplus of industrial land. Surpluses occurring with the current mix and changing share scenarios could be applied to alleviate potential market pressures on commercial lands.

Figure 9. Land Demand/Supply with Alternative Forecasts

Employment Lands*	Current Mix	Changing Share	Industrial Land Focus
Commercial Lands:			
Land Supply (acres)	349.71	349.71	349.71
Land Demand (acres)	555.00	650.00	433.00
Surplus (+)/Deficit (-)	- 205.29	- 300.29	- 83.29
Industrial Lands:			
Land Supply (acres)	1,287.77	1,287.77	1,287.77
Land Demand (acres)	708.00	844.00	1,688.00
Surplus (+)/Deficit (-)	579.77	443.77	- 400.23

*Note: Includes the total of commercial and industrial lands. Land supply numbers are for unconstrained acreage per E.D. Hovee & Company July 22, 2004 memorandum.

Source: E.D. Hovee & Company.

Comparison with Other Forecasts. The results of this forecast process can be compared with two other forecasting processes that the City has used in recent years – the land absorption analysis method utilized by the Planning Department and the recent (June 2003) Medford Office Market Study conducted for the Medford Urban Renewal Agency by Bruce M. Ostly, Real Estate Consultant.

The City of Medford's Planning Department has examined recent land absorption for commercially and industrially zoned lands. Planning Department officials estimate Medford needing 422 acres (or 21.11 acres per year) of commercial and 442 acres (or 22.11 acres per year) of industrially designated land to meet market demands over the next 20 years.

The City's projection for commercial property comes closest to the E.D. Hovee & Company industrial land focus alternative, illustrating the need for additional commercial land to be designated (with any forecast scenario). However, a key difference in allocation methodology is that the City's absorption data is organized by the zoning designation on which a development is located, while the E.D. Hovee forecast allocation is by the use of the new development. The E.D. Hovee alternatives include all commercial uses, while the City allocation is based on the type(s) of development actually occurring on commercially zoned land.

For industrial land, the E.D. Hovee & Company employment mix scenarios all exceed the City estimates of 20-year need for industrially designated land. In effect, the E. D. Hovee alternatives all reflect the potential for Medford to be positioned to capture industrial employment growth proportional to its current share of countywide industrial employment. A larger industrial land inventory also may prove helpful to maintain a price competitive supply of sites.

The Ostly report is focused primarily on land needs for commercial office space, particularly in the downtown Medford area. The Ostly analysis projects Jackson County employment growth to occur at a rate of 2.2% per year over the next ten years. This rate is twice the rate of growth that has occurred within the last two years and is half a percentage point greater than the job growth rate associated with the recommended forecast alternative in this study. However, Ostly projects downtown office demand over the next ten years to only require two city blocks, well within the downtown area inventory of sites identified with this study.

Recommended Land Demand Scenario. As noted, an overall jobs forecast scenario based on approximately 1.8% annual job growth over the next 20 years is recommended as an appropriate and reasonably attainable employment growth target. Of equal importance (and perhaps of greater policy significance to the City) is the selection of an appropriate commercial/industrial job mix that reflects both realistic market expectations together with City planning and policy objectives.

Three alternatives have been identified and resulting land demand implications evaluated with the 2003 economic market analysis and this updated report – current mix, changing share, and industrial land focus. Undoubtedly other alternatives or hybrid scenarios could also be considered.

Recommended for further consideration by the City of Medford is a scenario that approximates the *changing share* alternative. Reasons for this recommendation include:

- Consistency with recent market trends in Medford, as well as statewide and nationally.
- General consistency with the approach suggested by the preliminary draft review of *Siting Criteria for Commercial & Industrial Lands (*dated June 18, 2004).
- Need to add less commercial and industrial land than would be indicated by the industrial land focus alternative.
- Accounting for all employment uses to occur on industrial and commercial land – with no need to accommodate a portion of future employment growth on residential or other land.
- Opportunity with this approach to provide more flexibility in land use and economic development to capture most likely sources of job growth in the future.

Despite these potential advantages, selection of a changing share method poses a clear set of issues and challenges for Medford. Perhaps most significant would be the need to obtain added commercially designated land – likely involving redesignation of some industrial lands. Of particular importance would be the need to select sites for future commercial use that are most likely to be at locations with outstanding access and valued by the market. At the same time, mechanisms to preserve the remaining industrial inventory from further commercial encroachment would be warranted.

IV. SITING CRITERIA

The second major purpose of this supplemental commercial and industrial lands study has been to identify and characterize a set of siting criteria that can be applied to making modifications to the City of Medford's Comprehensive Plan, land use designations and associated land development code.

Criteria are outlined in a manner allowing for an assessment of the types of land best suited for commercial versus industrial activity. Properties identified for future development as a result of the lands inventory analysis versus demand forecast can then be evaluated against each of the criteria to ascertain most appropriate land use. In effect, this assessment is intended to lead toward preliminary recommendations as to best locations for varying types of industrial and commercial activity in Medford.

INDUSTRIAL LANDS REVIEW

Topics covered include a description of current General Land Use Plan (GLUP) and implementing zoning designations for industrial lands, followed by a review of market and policy questions resulting from the prior market analysis, Planning Commission discussion, and this update evaluation.

Current Designations: There are two industrial land use designations available with Medford's General Land Use Plan (GLUP):

- *Heavy Industrial (HI)* – for uses associated with a large amount of noise, vibration, air pollution or other nuisance. Implementing zoning occurs through both Heavy Industrial (I-H) and General Industrial (I-G) districts.
- *General Industrial (GI)* – for all other industrial use. Zoning that is applied on a site-by-site basis is determined as either:
  - ✓ Light Industrial (I-L) – intended for office uses and light manufacturing and deemed suitable for areas near residential and commercial properties.
  - ✓ General Industrial (I-G) – for industrial uses involving a degree of noise, vibration, air pollution, radiation, glare, fire and/or explosive hazards, and therefore suitable for areas near Heavy Commercial and Heavy Industrial zoning.

The area of the Rogue Valley International Airport is designated under GLUP as Airport (A), with some implementation of Light Industrial (I-L) as well as Airport Approach (A-A) zoning. Some land outside the City limits but within the Urban Growth Boundary (UGB) is targeted for future industrial use but currently designated as Agriculture – with the intent of eventual transition to an industrial designation.

Industrial Designation Market & Policy Questions: On an initial basis, the Planning Commission memorandum of February 25, 2004 concluded that there appears to be an adequate (30+ year) supply of vacant industrial land within the City and Urban Growth Boundary (UGB). The updated inventory and economic forecast presented earlier indicates a more uncertain result

– with the potential of having a less than adequate 20-year supply depending on the land forecast methodology selected and the extent to which sites affected by environmental constraints prove to be unsuitable for development.

Both the Planning Commission and 2003 Medford Economic Market Analysis also have identified commercial use of industrial lands as a significant policy issue. With 35% of commercial development in Medford occurring on industrial lands, the effect of this commercial use encroachment is to reduce land available for industrial uses and to increase land pricing as commercial uses typically will pay more for property than industrial uses.

Market issues specific to the heavy and light industrial GLUP designations together with policy recommendations for consideration are outlined as follows:

- *Heavy Industrial (HI)* – is identified by the Planning Commission as providing more than an adequate supply of land, with the added expectation that the City will not attract significant new heavy industrial uses in the future. Also noted is that modern industrial development and regulatory practices have substantially diminished the *externality* (or nuisance) effects of what traditionally has been considered as heavy industrial activity.

  Recommended for consideration is the transition of HI to a reconfigured General Industrial designation for GLUP that would encompass the full range of potential industrial activity. This broad list of allowed uses would be subject to performance standards to address or minimize readily apparent nuisance issues extending beyond the property line or to adjoining non-industrial areas.

- *General Industrial (GI)* – currently covers a broad range of uses from light and general manufacturing to office development. Resolution of conflicts between widely varying uses with differing site needs and abilities to pay for land is identified with this analysis as a potentially important priority for land use updates.

  Recommended for consideration is an approach that would redesignate what is currently shown as light industrial land (GI) into one of two new or reconfigured GLUP categories:

  - ✓ A reconfigured General Industrial land designation – including existing HI uses plus the former GI uses at locations associated with lesser land values that are least competitive for commercial office, service and retail uses. This revamped GI classification might be accompanied by commercial use restrictions and minimum parcel size limitations – or measures to discourage premature parcelization in advance of end user demand.

  - ✓ A new Business Park (BP) type of designation – for existing GI sites that are more highly valued and which currently or prospectively are most likely to be developed for uses extending beyond traditional industrial activities, including campus office and a limited range of complementary retail uses. Master planning of BP sites should be encouraged. If new land is zoned for BP use, strong consideration should be given to identifying high amenity sites attractive to campus oriented technology, research and development and office related uses. Included for consideration might be sites on rolling terrain at the edge of the City and/or UGB.

COMMERCIAL LANDS REVIEW

As with the industrial review, this discussion starts with a description of current GLUP and associated zoning designations, followed by an outline of market and policy questions for commercial lands.

Current Designations: Medford's General Land Use Plan (GLUP) has three commercial designations plus additional implementing zoning districts:

- *Service Commercial (SC)* – permitting offices, medical facilities, other limited service oriented businesses as well as residential under certain circumstances. Implementing zoning is C-S/P (Service Commercial and Professional Office).
- *Commercial (CM)* – permitting the largest spectrum of commercial development as well as residential uses under certain circumstances. Zoning categories are:
  - ✓ Neighborhood Commercial (C-N) – for smaller sites of less than 3 acres within residential neighborhoods.
  - ✓ Community Commercial (C-C) – a general commercial designation with locations on collector and arterial roadways.
  - ✓ Regional Commercial (C-R) – with larger sites serving shoppers from the surrounding region as well as from the local community.
  - ✓ Heavy Commercial (C-H) – for heavy auto/truck and service oriented commercial development situated along highways and near industrial zones.
- *City Center (CC)* – as the designation for the regional governmental, financial and business service center complex in the downtown area. CC encompasses the areas within the *City Center Revitalization Plan* (for urban renewal) and the *Civic Center Plan.* While there is no specific zoning district, the Central Business (C-B) overlay zone which mostly includes CC zones with some HC zoning covers most of the City Center plan designated area and provides special standards recognizing the unique and historic character of the downtown.

  A new *City Center 2050 Plan* completed in March 2004 recommends the City Center as a Regional Transit Oriented District with five land use/zoning categories – Regional Transit High Density Residential, Regional Mixed Use Residential, Regional Transit Employment, Civic and Open Space.

Commercial Designation Market & Policy Questions: The Planning Commission, the 2003 economic market analysis and this analysis all conclude that commercial land is in far shorter supply than industrial land. The Planning Commission report indicates that there is only an 11.7-year supply of developable commercial land in the City (with a 13-year supply in the UGB) and, on an interim basis, recommends designating additional commercial on a limited case-by-case basis pending completion of this updated commercial/industrial lands analysis. The conclusion of a long-term (20-year) commercial land shortage is corroborated by this lands study.

Market issues specific to the commercial GLUP designations together with policy recommendations for consideration are outlined as follows:

- *Service Commercial (SC)* – was associated with a limited (less than 10 acre) inventory of vacant sites according to the 2003 economic market analysis. However, because of the role that SC land can play for rapidly growing employment activities such as offices, medical facilities and service oriented businesses, more attention to these needs may be warranted.

  One option might be to allocate SC-type land between one of two possible GLUP designations:

  - ✓ A new BP designation (outlined above) – which could be tailored to also accommodate such former SC uses as office parks and medical facilities.
  - ✓ A new Mixed Use (MU) designation – encouraging mixed use office, residential and commercial, perhaps in conjunction with refinement of the Central City (CC) GLUP designation and also with transit oriented development (TOD) as may be designated elsewhere in the City.

- *Commercial (CM)* – accounts for over 95% of the vacant commercially designated property inventory and is perhaps the most problematic of the commercial GLUP designations, indicated by the wide range of zoning designations which are covered:

  - ✓ Neighborhood Commercial (C-N) – appears to be applied sparingly in Medford at present. The 3-acre size designation is generally too small to accommodate a multi-tenant, grocery-anchored neighborhood center. Recommended for consideration would be allocation of larger sites of 5-10 acres consistent with current development practices for grocery-anchored neighborhood convenience and community centers as part of a revised C-C zone.

    With the possible exception of pre-existing uses not expected to change appreciably, some smaller C-N sites might then be transitioned to some form of a Mixed Use (MU) category which encourages residential, small scale neighborhood convenience retail and possibly office (or work/live) uses. *Note:* The C-N zone currently limits retail use sizes (to 2,500 square foot), while C-C allows substantially larger uses (up to 50,000 square feet).

  - ✓ Community Commercial (C-C) – represents a category commonly applied to commercial along major transportation corridors, often resulting in a overly wide range of uses and unsatisfactory visual aesthetics for the community. This zone could be maintained as-is. Alternatively, consideration could be given to redesignating some C-C sites to a more precise C-R, C-H or MU designation, depending on location and refocusing this category on anchored neighborhood centers including addition of larger C-N properties.

  - ✓ Regional Commercial (C-R) – represents a use category for which continued strong demand can be expected, especially for large format retail uses serving Medford and the southern Oregon region. C-R sites are appropriately master planned – with attention to design including traffic/parking management and aesthetic improvements. Configurations of building space and existing sites also can be expected to evolve over time – due to rapid changes occurring with retail development both regionally and nationally. A review process that covers design

and other potential site-specific impacts might be considered as part of C-R redesignation or authorization.

- ✓ Heavy Commercial (C-H) – serves an important role for auto and repair oriented uses, with locations along major arterials – typically situated away from the commercial core of the community. Recommendations are limited to the possible addition of some C-H inventory if the C-C zone is phased out and the long-term improvement of aesthetic standards for both new development and existing sites. Another option might be to transition some C-H sites with a strong wholesale/service industrial orientation to either a GI or BP designation.

- *City Center (CC)* – is identified as having virtually no vacant commercial sites and has experienced little new construction (with the new library a notable exception) but with substantial building rehabilitation activity. The downtown's ability to accommodate new construction represents an important land use market and policy question for the City of Medford because significant new office or retail development in downtown could lessen the need for some of this activity elsewhere in Medford.

  The recently completed *City Center 2050 Plan* recommends that 30% of the office space anticipated to be developed City-wide over the next 10 years be located in the downtown. Achieving this would represent a significant departure from recent experience, with less than 1% of new office space developed since 1990 being located downtown (based on the June 2003 *Medford Office Market Study).*

  As is indicated by our land demand projections, two alternative office futures can be envisioned: a) continuation of recent experience with minimal new office development in the downtown (shown as the baseline forecast); and b) adoption of a policy objective backed by implementation measures to actively target 30% of new office construction for downtown.

  There also is a parallel opportunity to revisit land use planning for the City Center area. One approach would be to create transit overlay zones as is recommended by the *City Center 2050 Plan.* It is possible that the 2050 plan objectives could be accomplished within the land use streamlining framework suggested by this analysis. Potential changes consistent with this framework might include measures such as:

  - ✓ Removal of the C-B (Central Business) overlay system in favor of a streamlined zoning designation more comparable to that of other commercial districts.
  - ✓ Possible transition to a Mixed Use (MU) designation, similar to what is suggested for some SC land, but perhaps associated with higher permitted densities.
  - ✓ Incorporation of incentives to encourage additional new investment – both new construction and rehabilitation, and more intensified use of underutilized properties.

INDUSTRIAL & COMMERCIAL SITING CRITERIA

The market and policy discussion outlined above provides a suggested framework within which the need for new industrial and commercial lands and possible redesignation of existing sites can be considered. The discussion now becomes more *location specific.*

Three steps could be considered as part of a location analysis: a) identification of siting criteria suitable for various industrial and commercial uses; b) matching appropriate GLUP and zone designations to existing uses; and then c) mapping where GLUP and zone designations prospectively occur for new development or significant redevelopment.

This report addresses the *first step* – by outlining recommended location criteria as part of the matrix chart on the following page. Use categories (or designations) are consistent with those suggested for consideration by this analysis. However the discussion is intended to illustrate siting criteria appropriate even if an alternative set of GLUP and zoning designations were selected.

Four overall sets of criteria are identified and briefly outlined for each of the designations:

- *Illustrative uses* – indicating the most appropriate types of industrial/commercial employment activity intended with each GLUP/zoning designation.
- *Location & access* – covering key location requirements for each designation, especially transportation access.
- *Valuation* – of land indicated on a relative basis (from low to high) for one set of uses compared with the other industrial/commercial designations considered.
- *Sizing* – based on market requirements of the use, focused on new uses and including comments as appropriate regarding parcelization.

Also provided are additional *comments*, covering other key features likely to be important for implementation of the recommended designation.

Figure 10. Industrial & Commercial Siting Criteria

Designation	Illustrative Uses	Location & Access	Valuation	Sizing	Comments
General Industrial (GI)	Manufacturing wholesale/distribution, construction, transportation, utilities, regional public facilities	Historic industrial areas plus large sites suitable for truck access and buffered from residential. Rail accessibility not required but is an asset	Low	10-50+ acres, discourage premature parcelization	Allows outdoor storage. Accompanied by performance standards to limit nuisance effects beyond the industrial area
Business Park (BP)	Industrial, office, and ancillary retail (as conditional use and/or with size limitations)	On or with access to arterials suitable for truck traffic. Near airport, commercial and/or high amenity locations	Medium/ Low	5-30+ acres, encourage master planned development	Limits outdoor storage, emphasizes quality of site plan including landscaping, possible retail limit of 10%
Commercial (CM)					
• **Heavy (C-H)**	Service-commercial especially uses with auto/truck orientation	Situated on major arterial or highway with historic heavy commercial use	Medium	For new uses, encourage parcel and access consolidation	Emphasis on improving visual and aesthetic qualities of new and existing uses over time
• **Regional (C-R)**	Multi-tenant centers and free-standing large format retailers serving local plus regional market areas	Major arterial(s) with direct freeway access	Medium/ High	10-50+ acres with master planned development	Encourages reconfiguration of older centers, emphasizes quality of site plan and addressing site-specific impacts with redesignation
• **Neighborhood & Community (C-C)**	Multi-tenant and free-standing convenience retail and services, often grocery-anchored	Major city street and intersection locations, serving 10,000+ population, located to complement neighborhood services and amenities	Medium	Ideally 5-10+ acres for new sites, potentially smaller for existing uses	Encourages pedestrian orientation. Potentially includes size limitations on commercial uses, with greater flexibility for grocery
Mixed Use (MU)					
• **City Center**	Retail, office, public/non-profit, multi-level residential	Historic downtown location with improved gateways from major arterials	High	For new uses, encourage ¼ block or larger sites	Needs incentives for density plus public/private parking
• **Village Center/ Transit Oriented Development (TOD)**	Similar to City Center but with more residential, small scale retail, office and work/live	Typically on major arterials and as buffer between residential to commercial/industrial use	Medium	4+ acres, encourage master planned development	Offers flexibility for developer proposal

V. FINDINGS & RECOMMENDATIONS

This commercial and industrial land study concludes with a summary of major findings and next steps recommended for consideration by the City of Medford.

SUMMARY OF FINDINGS

Key *findings and observations* resulting from this analysis are summarized as follows:

- In cooperation with City of Medford planning and economic development, five land use inventory iterations were conducted, starting with the 2003 economic market analysis.
- The recommended inventory identifies an estimated 350 acres of vacant and redevelopable commercial land together with almost 1,288 acres of industrial land – for a combined developable commercial/industrial land inventory approaching 1,638 acres.
- Using a recommended land demand scenario predicated on a changing share methodology with some continued shift from industrial to commercial use, demand for commercial land is projected at 650 acres over a 20-year period with demand for industrial projected at 844 acres – for combined commercial/industrial land need of 1,494 acres.
- A comparison of land demand (or need) with supply indicates that Medford could require designation of up to an added 300 acres of commercial land while at the same time being oversupplied with industrial sites in the amount of an estimated 444 acres. Taken together, there appears to be an adequate inventory of commercial and industrial land, although redesignation of some industrial sites to commercial may be warranted – potentially leaving a reserve of nearly 144 acres unless offset by redesignation of some commercial/industrial lands to other uses and/or swapping of commercial/industrial with other land designations.
- This report outlines criteria that could be considered for siting of future anticipated industrial and commercial uses in the City of Medford plus the as-yet unincorporated Urban Growth Boundary (UGB). A matrix format is suggested, describing illustrative uses by General Land Use Plan (GLUP) designation together with potentially relevant criteria pertaining to location and access, valuation and property sizing/parcelization.

NEXT STEPS

Based on the analysis and findings of this study, the following *next steps* are recommended for discussion with the City of Medford Planning Commission and City Council:

- Adoption of the commercial/industrial inventory and land demand/needs forecast recommended with this report as a basis for *Goal 9 compliance* and future land use designations.
- Acceptance of recommended siting criteria as a *working guide* to redesignation of industrial and commercial GLUP and zoning classifications.
- Matching appropriate revised GLUP/zoning designations to existing uses, followed by *mapping for prospective uses* including new development and redevelopment.

APPENDIX. CONSULTANT BACKGROUND

The 2003 economic market study and this 2004 Goal 9 supplemental analysis have been prepared for the City of Medford by the economic and development consulting firm E. D. Hovee & Company. Since 1984, the firm has conducted market and feasibility assessments together with strategic economic development plans for private, non-profit and public agency clients – primarily in the Pacific Northwest states of Oregon and Washington.

A particular focus of the firm is on industrial and commercial land assessments in compliance with state land use planning requirements for industrial and commercial lands – Goal 9 in the state of Oregon and the Growth Management Act (GMA) in the state of Washington. Examples of comparable project assignments have included:

- Industrial marketing and image assessment for the City of Roseburg and Douglas County.
- Goal 9 industrial/commercial assessments for Oregon jurisdictions including the Cities of Wilsonville, Gresham, and Forest Grove and for Hood River and Deschutes Counties.
- Key industries analysis and site marketing for the Oregon Economic and Community Development Department.
- Phase I of a greater Portland metropolitan employment lands study (GMELS) on behalf of a public-private consortium with representation from Metro, the Port of Portland, Oregon DLCD, local jurisdictions and participating private interests including the Commercial Real Estate Economic Coalition (CREEC).
- Economic development components of GMA plans for Washington State jurisdictions including Clark, Lewis and Skagit Counties and the cities of Longview and Shelton.
- Economic need and land use assessments for a range of private clients including local/regional property owners and development firms as well as major national regional firms such as Fred Meyer, Home Depot and Wal-Mart.
- Downtown and mixed use redevelopment projects on behalf of clients as diverse as the Portland Development Commission, Port of Hood River, and Cities of Eugene, Salem, Gresham, Hillsboro, Vancouver, Tacoma, SeaTac, Snoqualmie and Bellingham.

This commercial and industrial lands study has been prepared jointly by Eric Hovee, Principal and Paul L. Dennis, Associate Principal.