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Competition and Collaboration in the Central Eastside: A Study of Three Industry Groups

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Competition and Collaboration in the Central Eastside:

A Study of Three
Industry Groups



Prepared for: The Central Eastside Industrial Council

By Peter Bilton, Jenni Minner, Estee Segal, Chris Zahas

March 2000 - Master of Urban and Regional Planning Workshop - Portland State University

The Professional Planning Workshop

The Planning Workshop, in the Master of Urban and Regional Planning (MURP) program at Portland State University, provides students with professional planning experience. In teams, students develop consulting contracts with clients for planning services that address regional interests and their own personal and professional interests. The Workshop provides experience in planning for constructive social and environmental change, while considering the planner's ethical responsibility to serve the public interest. Competition and Collaboration in the Central Eastside is from the Planning Workshop class of 1999-2000.

The Central Eastside Industrial Council

The Central Eastside Industrial Council is a nonprofit business association that represents the Central Eastside Industrial District. It is made up of a Board of Directors and has eleven subcommittees that focus on specific issues and projects including: transportation, community relations/public safety, industrial development, land use, the East Bank Esplanade, and others.

Members that actively participated in this project include:

Michael Bolliger, President
Peter Fry, Consultant
Connie Hunt, Board member
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The team also sought advice from Denyse McGriff of the Portland Development Commission, and Susan Hartnett of the Portland Bureau of Planning. They both provided significant insight into the regional context and historical background of the district.

Numerous interviews were conducted as part of the team's research. The team interviewed business owners, managers, realtors, and others who took time out of their often busy schedules to assist in gathering valuable information about the district. A list of interviewees appears in Appendix G.

Finally, the team wishes to thank Portland State University faculty members - Deborah Howe, Connie Ozawa, and Ethan Seltzer - who guided and supported the team throughout the project.

Executive Summary

Since 1980 the Central Eastside Industrial Council has worked with stakeholders in the Central Eastside Industrial District to improve the local business environment, solve common problems and work toward common goals. This project uses the concept of "industry clusters" to offer the Council new insights into how related businesses function, how they interact, and what their common needs are within the Central Eastside. It links key industries of the Central Eastside to larger regional clusters, examines the assets and constraints of the district in relation to these industries, and looks at how the Council and area businesses can partner with community organizations.

Three key industry groups were selected and studied: building and construction, metals manufacturing, and creative services. Qualitative information was gathered through interviews with business owners in each of the three industry groups. Profiles were developed for each group that reveal how they collaborate, their current needs, and the locational trends of the businesses.

In order to gain a well-rounded perspective of the district, other methods of gathering information were woven into the project methodology. A focus group of eight real estate brokers was conducted to gain more information about real estate trends and about the businesses that are moving into and out of the district. Interviews with community organizations in the Central Eastside revealed a few of the many resources available within the district and explored future opportunities for collaboration.

Based on the industry profiles and other information several opportunities for the Central Eastside Industrial District are identified:

- **Foster cooperation among related businesses to meet common needs.**
Businesses within all three of the industry groups are experiencing shortages of skilled and unskilled labor. Firms within the industry groups can identify common workforce training needs and partner with community organizations to meet those needs. The Central Eastside Industrial Council can be an important link between businesses and educational institutions. The Council can also facilitate discussions among identified industry groups to explore other common needs.
- **Outreach to new industries within the district**
Several creative services businesses commented that their needs are not being met by the Council. Other businesses may not be included in the Council's current outreach efforts. Therefore, businesses that are not represented within the Council may be targeted for membership. Building a broad base of industries within the Council will ensure that the organization can recognize the many assets of the district and continue to address the common issues of Central Eastside businesses.
- **Building a district identity based on the strength of key industries.**
The findings of this report reveal a critical mass of businesses that help to create an identity for the Central Eastside. Recognition of the district as a place where, for example, both customers and building contractors can go to meet a variety of building and construction needs can help to

attract new customers and spur additional related firms to locate in the district. It can also improve the visibility of the district within the City of Portland and the region.

The concept of industry clusters has been used in this project to gather information about key industries as well as the district as a whole. The concept is used to provoke a new appreciation for the ways that firms locate together geographically and collaborate. These insights can further stimulate cooperation among the community of businesses, residents, and community organizations within the Central Eastside.

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Introduction/Problem Statement

The Central Eastside Industrial District is a key area within Portland's central city. (From here forward, the terms "the District" and "Central Eastside" are used interchangeably to refer to the Central Eastside Industrial District.) The District is a vital, central location for businesses that range from tool and die making to video production. Central Eastside businesses provide a variety of employment opportunities and contribute to the region's economy. This report examines three industry groups, offering information derived directly from speaking with Central Eastside business owners, managers and real estate brokers as well as geographic and economic analysis. The project refers to "cluster theory" and uses this particular framework for presenting information about businesses in the Central Eastside. This project represents an ongoing effort by Central Eastside businesses, residents and policymakers to understand the assets and needs of the area.

This project has been conducted in order to offer the Central Eastside Industrial Council (the Council) new ways of looking at business in the Central Eastside. Council members are already intimately familiar with the Central Eastside; most members are business owners, property owners or others that do business in the district on a daily basis. This project offers those that are already very knowledgeable about the district a fresh look at how the district functions.

Competition and Collaboration in the title of this document refers to the theory that businesses interact in both competitive and cooperative ways that enhance the vitality of the businesses. This is an integral part of cluster theory. The concept of industry clusters gives the Council an additional framework that helps respond to the need for businesses to collaborate and build networks. Cluster analysis is useful for business associations and other community organizations, planners, and all others that would like to assess the economic vitality of their community or region.

As an organization that brings together people from a wide variety of businesses, the Central Council provides a forum for key stakeholders to discuss their needs and exchange ideas. This project will help the Council build on its history of collaboration among businesses and use the cluster concept to spur new ideas of how businesses in the district can work together in the future.

While cluster analysis is generally performed at the regional scale, neighborhood businesses can be studied to see how they relate to the rest of the region as well as interact at the neighborhood scale. By noting the industries that are important to the Central Eastside and the rest of the region, the project can help the Council explore the Central Eastside within the context of the regional economy. The Council can bring together businesses at the neighborhood or industrial district scale and foster connections between region and citywide business and economic development efforts. The Council already works closely with the Portland Development Commission (PDC) and the City of Portland Bureau of Planning. There may be other opportunities that the Council can explore in connecting with regional organizations and economic development efforts. Ultimately, the competitiveness of the District is linked to the economy, business climate and quality of life of the rest of the region.

This project can also be useful to the general public. The Central Eastside, located in the central city, is a highly visible neighborhood. With amenities like the Oregon Museum of Science and Industry (OMSI), the Burnside skate park, and the Eastbank Esplanade, the Central Eastside attracts people from all over the region. The public at large can benefit from this study by learning more about how businesses function in this unique district.

The Central Eastside's existing character, with large areas of land that are zoned Industrial Sanctuary, is challenged by residential, office and retail offices that are attracted to its proximity to downtown Portland. This attraction has led to rising land values in the Central Eastside, which has spurred much discussion and debate about the District's future. This report does not attempt to resolve these complicated, long-range policy issues. Rather, it offers an analysis of how three industry groups function and are changing within the District. The report can serve as an invaluable resource for those debating future policy in the Central Eastside. If public officials and planners desire to begin a discussion about a changing future for the Central Eastside, a thorough understanding of how the District currently functions is necessary.

Central Eastside Industrial Council

This project was undertaken on behalf of the Central Eastside Industrial Council (the Council). The Council is a nonprofit membership organization of CEID stakeholders, including business owners, property owners, residents, and real estate and development professionals. It was established in 1980 as an outcome of the Central Eastside Industrial Revitalization Study. The Council's stated objectives in their 1994 Membership Directory are to:

- Help the private and public sectors obtain optimum usage of land within the integrity of zoning and comprehensive plan criteria;
- Support a close-in industrial/commercial environment serving the city; and
- Provide the metropolitan area with a vital employment center at a major regional terminus of the interstate transportation network.

The Council is comprised of a number of subcommittees that address current issues in the district such as industrial development, land use, and crime. Currently, the Council is working with the Portland Development Commission (PDC) on a Development Opportunities Strategy, a visioning process to encourage new development on three city-owned blocks between the Hawthorne and Morrison bridges.

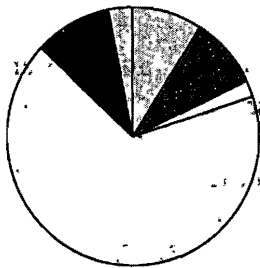
The Council is actively involved in efforts to maintain and revitalize the district as an industrial sanctuary. Its role is to support efforts that increase employment density and the overall economic viability and competitiveness of the area. Board members are interested in an analysis of three area industry groups in order to uncover new information and develop a better understanding of how the District functions. By examining and identifying industry groups, the Council can better understand the strengths, weaknesses, assets, and needs in the CEID. This information will help in developing future strategies and employment to ensure that the District remain a thriving, central city industrial area.

Regional Context

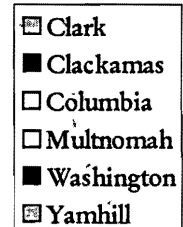
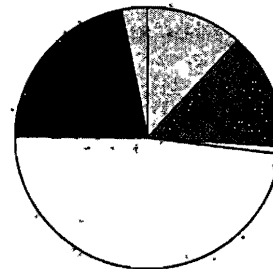
The Portland metropolitan region continues to experience considerable business and employment growth. *Regional Connections*, the technical report summarizing a study conducted by the Institute of Portland Metropolitan Studies, reports that from 1986 to 1996 the Portland metropolitan region experienced the largest increase in employment recorded since 1956 (Institute of Portland Metropolitan Studies, April 1999). Much of this growth has occurred outside of Multnomah County. The following chart shows the change in the share of employment in counties within the larger six-county Portland metropolitan area. Multnomah County's share of employment decreased dramatically compared to other counties.

Figure 1. Change in County Employment Shares - Six County Portland Metro Region
Source: Metro Regional Data, 1998.

1970 Employment (483,000 jobs)

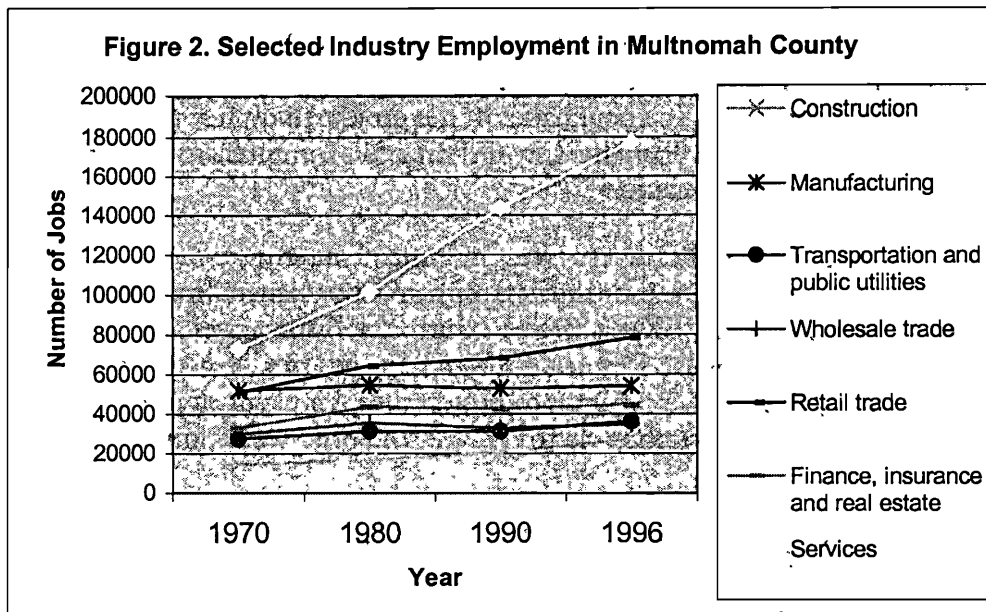


1997 Employment (1,134,000 jobs)



Employment growth in the Portland region has been increasingly dispersed geographically. The Metro Regional Data book for July 1998 reports, "The secular trend in employment growth shows that more and more jobs are located in adjacent or neighboring counties as compared to the region's central county, Multnomah (Metro, July 1998)." This phenomenon has led to the exploration of downtown revitalization strategies within the City of Portland. The industrial sanctuary policy was created as a response to the perception that businesses were moving outside of the central city and that high land costs were driving industry out of the city. Urban renewal is another tool used in the Central Eastside, to upgrade aging facilities and spur employment growth.

The following chart shows employment growth in Multnomah County by type. By far, most growth has occurred in the service sector. Compared to other sectors such as manufacturing, which has remained fairly level, the services sector employment is outpacing other sectors. This suggests that the service sector is growing fastest in terms of employment growth.



Source: REIS, Bureau of Economic Analysis, May 1998, reprinted in Metro Regional Data book

The District is linked to the rest of the regional economic and employment structure through the district's designation as a part of the Central City in the 2040 Growth Concept, a regional plan that guides the future of development in the region. Through the 2040 planning process, industrial and employment areas were designated to ensure that is adequate space in the Central City for industrial land uses, employment, and start-up businesses. The District contributes to the health of the regional economy, and to employment targets set by the 2040 planning process.

The District is an important component to the region's industrial land supply, because it provides land within the central city that is affordable to start-up businesses and includes "vintage capital;" older buildings that are still suitable for certain types of industrial uses (Fry, 1998). As a maturing industrial district it adds diversity to the supply of industrial land in the region with a building stock and infrastructure that is different from newer suburban industrial parks. The quality and quantity of industrial land in the region has been the subject of recent study, including the *Industrial Lands Supply Study* conducted by Otak, Inc. in association with Hammer Siler George Associations and Golder Associates. In light of trends mentioned above, such as the suburbanization of employment growth and increases in service sector jobs relative other types of employment, the District is important to the region's supply of land for industry and employment.

An Overview of the Central Eastside Industrial District

The Central Eastside Industrial District extends from the Willamette River waterfront to SE 12th Avenue and from I-84 to Powell Boulevard, covering 681 acres of land. It contains 1.75 miles of Willamette River shoreline. The boundaries of the project study area match the designations made in the Central City Plan, the City of Portland's Comprehensive Plan Map and the City of Portland's zoning ordinance.

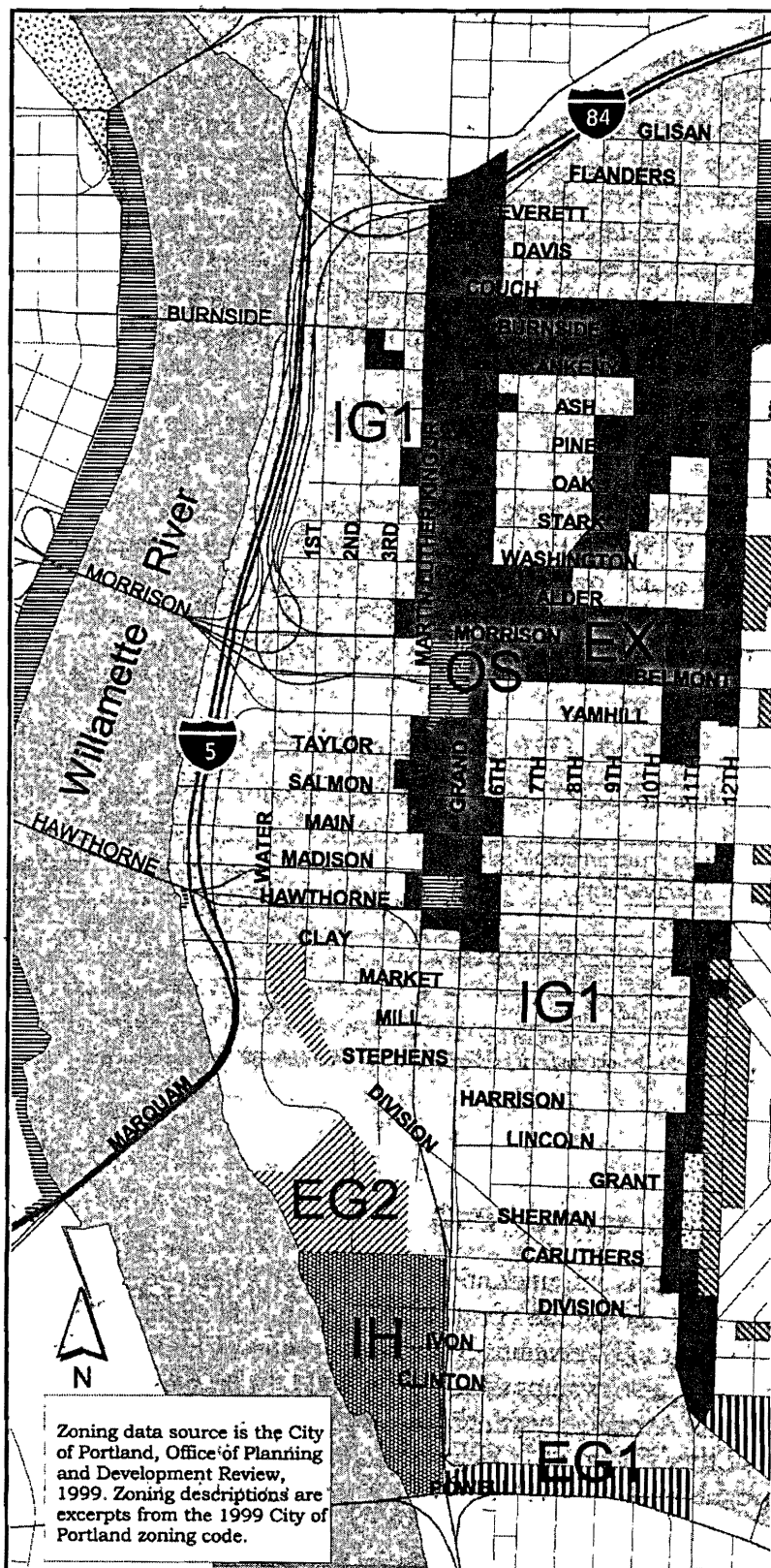
The Central Eastside is one of the most diverse areas in Portland in terms of land uses. Within the District there are multiple zoning districts, primarily the General Industrial 1 zone (IG1), the Central Employment zone (EX), as well as a historical district overlay zone. Portland's Comprehensive Plan designates much of the area an Industrial Sanctuary, which is implemented mainly through IG1 zone and aims to protect it for employment uses without conflicts over noise, appearance, and traffic, and to prevent land price escalation that could drive out employment uses.

Land uses throughout the district include light and heavy industry, retail, office, institutions and housing. Retail and housing uses are mainly located on employment corridors (Martin Luther King Jr. Boulevard, Grand Avenue, Burnside, Morrison and Belmont Avenues) designated in the Comprehensive Plan as commercial employment, but can be found throughout the district.

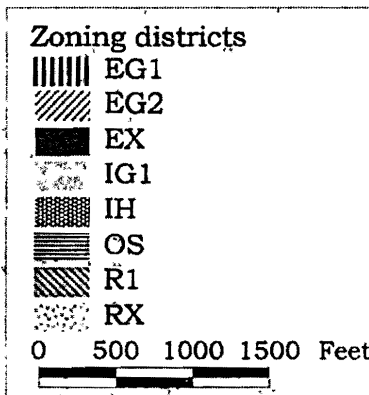
Demographics and Neighborhood Stakeholders

The Central Eastside is primarily an industrial and employment district; however according to 1990 Census data there are 1,425 people - 141 families and 815 households - that reside in the District. The majority of residents are between the ages of 25-39 years old. Median household income of residents in District block groups ranges from \$5,360 to \$14,750. There are 944 total housing units in the District, with 96% occupied by renters.

Three separate Portland neighborhoods, as defined by the Portland Office of Neighborhood Involvement, make up the District - Kerns to the north, Buckman in the middle, Hosford-Abernathy to the south. Twelfth Avenue is on the eastern edge of the District and divides land uses in each of these neighborhoods. Areas west of 12th Avenue are dominated by industrial and commercial land uses, while land east of 12th is dominated by single and multi-family housing. Each of the three neighborhoods has its own adopted neighborhood plan, however these plans primarily focus on issues facing residents and small businesses, not industry. The Council was created, in part, to better represent the needs of industry and business in each of these three neighborhoods.



Zoning in the Central Eastside



General Employment 1 (EG1) and General Employment 2 (EG2)
 These zones allow a wide range of employment opportunities without potential conflicts from interspersed residential uses. EG2 areas have larger lots and an irregular or large block pattern.

Central Employment (CX)
 This zone allows mixed-uses and is intended for areas in the center of the City that have predominantly industrial type development. The intent of the zone is to allow industrial, business, and service uses which need a central location.

General Industrial 1 (IG1)
 IG1 areas generally have smaller lots and a grid block pattern. The area is mostly developed, with sites having high building coverages and buildings that are usually close to the street. IG1 areas tend to be the City's older industrial areas.

Heavy Industrial (IH)
 This zone provides areas where all kinds of industries may locate including those not desirable in other zones due to their objectionable impacts or appearance.

Open space (OS)
 Areas that provide functions such as space for recreational activity and preservation of sensitive environmental areas.

Residential 1,000 (R1)
 Medium density residential zone that allows approximately 43 units per acre. As high as 65 units/acre with bonuses.

Central Residential (RX)
 High-density multi-dwelling zone that allows the highest density of dwelling units of the residential zones. Generally the density will be 100 or more units per acre.

In addition to the industrial and commercial focus of the CEID, there are a number of social service agencies, training institutions, and union offices that add to the diversity of the area. REACH Community Development Corporation was created in 1982 to address housing and economic development issues. Goodwill Industries and Volunteers of America have their regional headquarters in the District. Two shelters and a soup kitchen serve the needs of the low-income and homeless population nearby. In addition, there are a number of important educational and training institutions, such as Benson Polytechnic High School, Portland Community College Workforce Training Center, PGE Training Center, and Work Progress, Inc. At least six labor unions and two labor organizations have offices in the District, including the Northwest Oregon Labor Council/AFL-GIO, AFSCME, Jobs with Justice, and Bakers Union Local 114.

Employment Trends

There are approximately 1,300 businesses employing 16,000 people in the CEID. Employment information collected in 1996 by the Oregon Employment Department and Metro reveals the distribution of firms and jobs across sectors. This data was grouped by Transportation Analysis Zones, so it includes businesses outside the District boundary as far as 16th Avenue. In addition, it includes only the 742 firms covered by Oregon state unemployment insurance. The data reveals that 34% of employment in the District is in trade, with 21% in services and 20% in manufacturing.

While there is some debate over the current definition of industry and there has been a 4.8% drop in industrial employment from 1980 to 1996, industrial employment remains over half the district's employment.

Table 1. 1996 Employment in the Central Eastside*

| Employment Type | Percentage of Employment | Percentage of Firms |
|---------------------------|--------------------------|---------------------|
| Construction and Mining | 8.55% | 6.47% |
| Manufacturing | 20.48% | 12.67% |
| Trade | 34.49% | 37.60% |
| Finance, Ins, Real Estate | 4.23% | 9.03% |
| Services | 20.86% | 28.30% |
| Other Industries | 10.58% | 5.26% |

Source: Oregon Employment Division, 2000

* Includes only the firms covered by Oregon state unemployment insurance.

History: The Central Eastside from 1870 - 1970

The Central Eastside Industrial District is an important part of Portland's heritage. The District was once a part of the former city of East Portland, incorporated in 1870. Between SE Morrison and East Burnside, west of 7th Avenue, is the original center of East Portland's business. Much of the area was the site of swamps and sloughs, and the area west of Grand Avenue was filled in the 1880s. First Avenue, now the right-of-way for the Southern Pacific Railroad, was originally the site of the Oregon and California Railroad. The East Portland area became a center for industrial businesses when it was incorporated into the City of Portland in 1891.

In 1924, the City of Portland's first zoning code was established which designated the original boundaries of the industrial district. Like other cities in the 1920s, Portland adopted a zoning

code that protected residential and commercial uses from the negative externalities of heavy industrial uses, such as smoke, odor, and glare. The zoning code implemented what is called pyramid or cumulative zoning. This means that residential zones are the most restrictive and exclude all land uses other than residential. Commercial zones allow residential and commercial land uses. Industrial zoning is the most inclusive zone and housing and non-industrial businesses are allowed and remained part of the district. The pyramid structure of the zoning code was to change when more restrictive industrial zones were implemented in the 1980s (explained in the next section.)

Some of the Central Eastside's oldest existing businesses today were established in the area in the 1930s. Custom Stamping and several other metals manufacturing companies began during this time, when the area was still on the fringe of an expanding central city. National Builders Hardware, a wholesale distributor of hardware to retailers and contractors, located in the District in the 1942. Goodwill Industries located their regional headquarters in the District in 1946, incorporating retail, social service and industry all in one. These businesses were attracted to the District because of the central location, strong employment base and access to railroads and major highways.

After WWII, there was a significant nationwide shift of industry out of the central city. As industry and transportation modernized, industry began to favor more remote suburban locations over traditional locations in the central city. An expanding inter-city highway system and innovations in trucking began to compete with rail and water for inter-city freight movement. Innovations in manufacturing (the assembly line) and materials-handling technology (the forklift) caused industry to desire large single-story buildings over the multi-story buildings found in traditional industrial districts. The percentage of the population living in the central city also decreased, causing a shift in the industrial employment base.

These trends were felt in the Central Eastside where there was significant decline and decay throughout the 1950s and 60s. The economic recession of the 1970s caused concern regarding the loss of the industrial job base. Close-in industrial districts, such as the CEID, reported above-average land values and competition from commercial and office development, causing increased traffic and parking problems. These pressures spurred efforts to enhance and protect the area as an environment for industry. In the 1970s, the District was designated a Special Impact Area eligible for economic development grants through the US Economic Development Administration (City of Portland, July 1986).

History: Since 1980/Industrial Sanctuary Policy

In 1980, Portland adopted its first Comprehensive Plan, which included an Industrial Sanctuary Policy. The goal of the Industrial Sanctuary Policy is to:

“Encourage the growth of industrial activities in the city by preserving industrial land primarily for manufacturing purposes (City of Portland Bureau of Planning, 1980.)”

In 1981 revisions to the zoning code were made which implemented the Industrial Sanctuary Policy. With this, commercial activities were only allowed through special conditional use review in areas in the CEID zoned for heavy and light manufacturing. The intent was to allow only commercial uses that supported industrial activities in the area.

The Council was created in 1980 as a result of the *Industrial Revitalization Study* completed in 1978, published through a joint effort of the Office of Planning and Development, the newly forming Industrial Council representing Central Eastside businesses, several other City bureaus, and a team of consultants. The study was considered part of the implementation of the Overall Economic Development Program of 1976, and was intended to serve as a demonstration project for the revitalization of other industrial districts. The Council was formed, in part, to advocate for the creation of a direct southbound access ramp to Interstate 5 on Water Avenue. This issue galvanized local businesses in the early 80s and turned into a heated political debate. The southbound onramp has never been built and many business owners and CEIC members still advocate for it. Parking, traffic circulation, and truck access to the District are other issues the Council has brought to public debate.

In 1983, the Council worked with 1000 Friends of Oregon, a land use planning watchdog organization, to write a document further defining the role of the district. The document, entitled *Central Eastside Industrial District: Benefactor of Portland's Economy*, was instrumental in defining many of the perceived problems of the time, as well as changing the zoning to include commercial land uses along designated commercial corridors. The document emphasizes the importance of industry in the district and the need to continually support industry through zoning and other planning efforts.

In 1986, an urban renewal plan for the Central Eastside Industrial District was proposed by PDC and approved by City Council. Since that time the Council has worked closely with PDC to foster economic development in the area. The urban renewal district designation has funded the creation of an enhanced park on the Eastbank waterfront. It has also resulted in the construction of enhanced facilities for industrial firms. Another planning effort that came out of the urban renewal is *The Eastbank at Burnside: Lower East Burnside Redevelopment Plan*, completed in February of 1999. This is a visioning document for revitalization of Burnside Street, a major corridor within the Central Eastside.

The Development Opportunities Strategies (DOS) is the most recent project in conjunction with the urban renewal designation. DOS is an ongoing process to identify development opportunities for several blocks in the western portion of the district. The Council and other stakeholders have participated in DOS meetings to vision uses for currently vacant or underutilized blocks. It is hoped that this development that will enhance the district and spur new investment in the area.

Industry Cluster Concept

Industry clusters are geographic concentrations of related firms that do business with each other and share common needs in inputs, employee skills, and infrastructure. They may compete with some members of the cluster, purchase supplies or services from other members, and work together to pursue their common needs. Clusters may form around one large parent member, for example, when medical offices locate near a hospital, or they may form due to special resources or infrastructure conditions, for example, when trucking companies locate near a seaport or airport. In addition, clusters may form around a research institution such as a major university.

Michael Porter, a professor at the Harvard Business School and a prolific writer on clusters, defined this idea best in On Competition (Porter, 1998):

“Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and related institutions (for example, universities, standards agencies, and trade associations) in particular fields that compete but also cooperate.”

This study uses the concept of industry clusters as an analytical tool to examine business dynamics in the Central Eastside Industrial District. Clusters are a way of getting beyond the type of economic development planning that is confined to narrowly defined industry sectors. Instead, they focus on the relationships and interactions between businesses, their customers, suppliers, and other partners. This concept can produce a more complete picture of industry trends and can reveal new avenues for improving the competitiveness of the region and individual firms through selected cooperation. Because it allows economic development programs or private investments to be tailored to the needs of a large, diverse group of businesses, the cluster concept enables governments and private investors to have a greater impact on regional economic health.

Clusters are more than just agglomerations of similar businesses. They include suppliers, customers, and a range of related businesses and institutions. For example, a regional vegetable food cluster could include farms that grow the produce, distributors that transport and store the product, the groceries and restaurants that sell it, a local agricultural college that does research, and the regional office of a state regulatory agency. Similar businesses may locate near each other for a number of reasons, including access to specialized inputs or infrastructure, and access to a common pool of customers and suppliers. In order for a group of businesses to be identified as a cluster, its members must interact with each other and their partners to create innovations that make the group, as a whole, more competitive. These interactions can take the form of collaborations in research or workforce training, or lobbying for government investments and legislation.

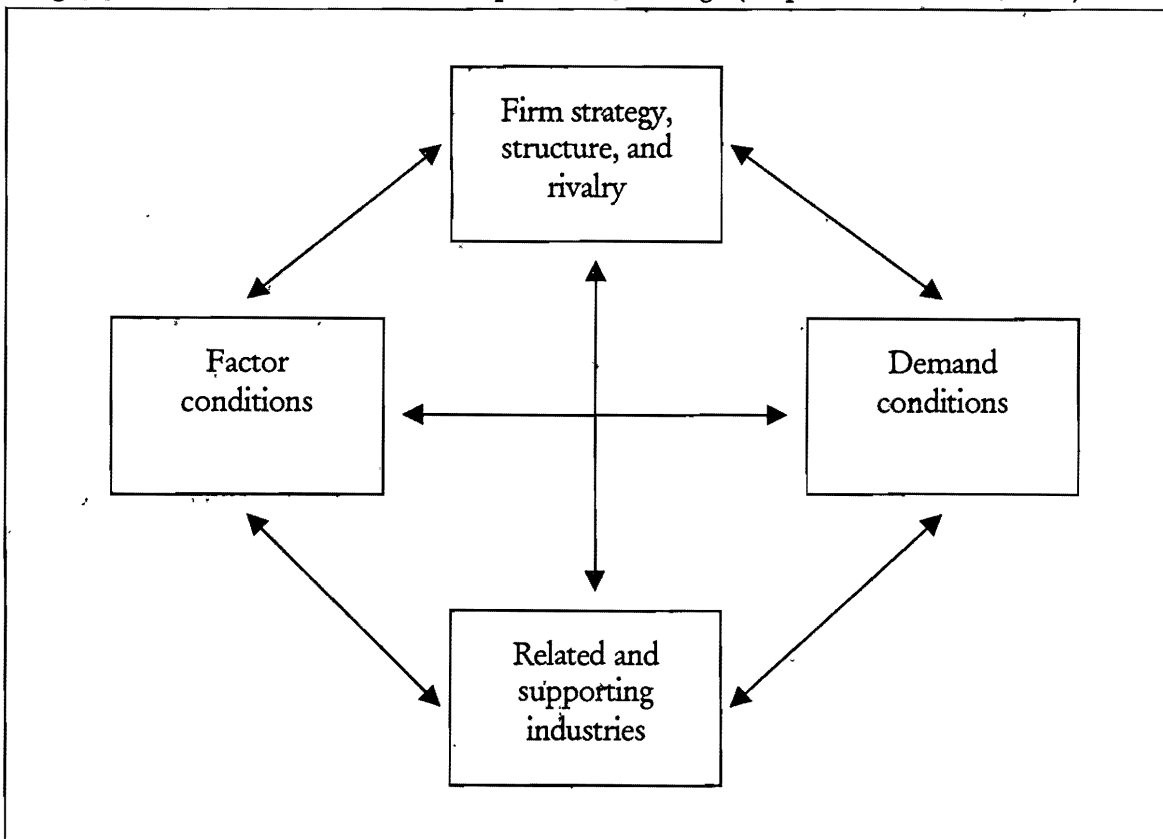
Particularly significant for this research is the fact that even informal interactions can have an impact, even though they may not be identified as significant by the participating firms. Most importantly, these informal relationships lay the groundwork for future organization and collaboration. Personal relationships, even among competitors, are a basis for organization if these firms see a common need. For example, a group of businesses in the Central Eastside

could form an ad hoc committee to work with Benson Polytechnic High School to develop a training program to suit their needs.

Cluster theory is can be divided into four interrelated elements, which Michael Porter terms the "Diamond of Advantage." These four elements are:

1. *Firm strategy, structure, and rivalry.* A local grouping of similar firms may compete more vigorously than distant firms. In addition, high visibility encourages public and private investment in the cluster.
2. *Demand conditions.* Clustering of firms can generate a group of knowledgeable customers. These demanding customers generate competitive pressures that push the firms to innovate. Subsequently, all firms in the cluster tend to be "ahead of the curve" in terms of consumer demand and industry trends.
3. *Factor Conditions.* Clustering generates numerous input efficiencies that translate into overall competitiveness. Efficiencies can be found not only in hard materials inputs but also in human resources and training, shared infrastructure, and exchange of information.
4. *Related and Supporting Industries.* Communication with local suppliers within the cluster ensures high quality inputs and quick delivery. The presence of related industries enables firms to learn about innovations in processes and materials occurring outside their sector.

Figure 3. Sources of Locational Competitive Advantage (adapted from Porter, 1998)



The cluster concept is an analytical framework in which to survey, inventory, and describe an industry group's strengths and weaknesses. It involves identifying relationships or interactions between businesses and their local partners that make them competitive or innovative. In addition, it involves identifying potential relationships that lead to better business practices. For example, feedback to suppliers could lead to better quality inputs and, therefore, a better quality end product.

Other Considerations

This study is a departure from Porter's theory in that it applies the cluster concept to businesses within a single district rather than a region. The original concept was developed as a way of organizing information about industries within a region or nation, and subsequent studies have been conducted at that scale. This study applies elements of cluster theory to a local area and evaluates the relationships and interactions between businesses in the CEID *that already participate in an identified regional cluster*. Improvements in the competitive relationships between CEID businesses will benefit both district and regional economies. Michael Porter identified this line of research in *The Competitive Advantage of the Inner City* (Porter, 1995, in Porter, 1998):

"I initially described this theory of location in *The Competitive Advantage of Nations* (Free Press, 1990), applying it to the relatively large geographic areas of nations and states. But it is just as relevant to smaller areas such as the inner city. To bring the theory to bear on the inner city, we must first identify the inner city's competitive advantages and the ways inner city businesses can forge connections with the surrounding urban and regional economies."

An additional consideration is the geographic range of economic activity. Studies which identify regional industry clusters focus on their competitiveness in relation to other regions, therefore they are heavily focused on *exporting* firms. In our study we examine the competitiveness of a district as a component of a regional cluster, including some firms that export and others that do not.

Project Methodology

In order to establish an understanding of the planning context of the Central Eastside, initial research consisted of site visits, a literature review, and expert interviews. The literature reviewed included planning documents, newspaper and magazine articles, and academic and business journals. Expert interviews were conducted with representatives of the Council, the Bureau of Planning, and PDC.

Secondary Data

Secondary data collected included employment and economic indicator information compiled in Metro's Regional Data Green Book and data from the 1990 Census at the block group level. Employment data was also obtained from the Oregon Employment Department, and analyzed by zip code and Transportation Analysis Zone. Relevant data was also gathered and compiled from previous planning documents.

Building a Database

A major component of the project was creating an up-to-date directory of businesses in the area. This was accomplished by using the Contacts Influential business directory and other business directories to update an inventory of businesses previously created by the Council. Standard Industrial Classification (SIC) numbers were added for use in identifying industry groups. Windshield surveys were used to check the accuracy of the database.

Identifying Industry Groups

Using the group's background research, several potential industry groups were proposed, and preliminary maps of these industry groups were created. This was a first step in studying potential clusters in the Central Eastside. While there may be a large number of similar or

“Clusters rarely conform to standard industrial classification systems, which fail to capture many important actors and relationships in competition.”

*- Michael Porter,
1998*

related businesses that coexist in the district, these industry groups may or may not act as a cluster. "Industry groups" are used in this document to describe groups of firms that are similar in type and produce related products. "Clusters" are groups of firms that relate to each other in ways specifically identified in Michael Porter's research. Industry groups were selected first, and later it was determined whether businesses in these industry groups act in ways that are characteristic of clusters.

Industry groups were selected based on several criteria. These criteria include both quantitative data, such as the number of firms in the Central Eastside, and qualitative data, such as the visibility and reputation of industry groups within the District. The following criteria were used to select industry groups to be studied:

- 1) The number of firms in the industry group, as selected by SIC code from a business inventory of the Central Eastside. (Since SIC codes do not capture the potential diversity within a cluster, additional firms were added if they related to the industry group. In addition, some firm fit into more than one industry group, such as a firm that fabricates metal building hardware.)
- 2) The diversity of firms within the group in terms of size and function.
- 3) The visibility and reputation of the business type in the Central Eastside.
- 4) Whether the business type is mentioned in Central Eastside planning documents.
- 5) Whether the business type is a part of a "targeted industry" for the City of Portland, as identified by the Portland Development Commission.
- 6) Whether the business type is a part of an identified cluster in *Regional Connections* (a 1999 study of industry clusters in the Portland metropolitan area).

Five industry groups were initially selected based on these criteria, and the Central Eastside Industrial Council helped select the final three industry groups to focus on. The potential industry groups identified for study were:

- Building and Construction
- Metals
- Creative Services
- Food
- Automotive Parts/Services

The Building and Construction industry group was identified as important because of the large number and diversity of related firms. This group includes firms that range from contractors to construction material wholesalers and distributors. The Building and Construction industry group is also related to the Lumber and Wood products, which is identified as a regional cluster in *Regional Connections*.

Metals Manufacturing was identified for possible further study because it is an important regional industry with a strong presence in the Central Eastside. Secondary metals is identified as a target industry in Portland's Target Industries. Metals firms are also identified as a part of the Metals/Manufacturing/Transportation cluster in *Regional Connections*. The metals industry group was also chosen because it includes businesses with a manufacturing component. The other industry groups do not have the same kinds of manufacturing activities, and the selection offered an opportunity to understand how manufacturing businesses function within the district.

Creative Services was identified for possible further study because the City of Portland and the Portland Development Commission (PDC) are targeting this cluster. The PDC has produced promotional documents entitled *Designing Portland's Future* and the *Creative Services Resource Directory*. Changes to industrial zoning within the Central Eastside Industrial District were intended to allow for more creative service type firms (see Creative Services profile). Printing and Publishing, supporting services for creative services firms, is identified as a target industry in the PDC's document *Portland's Target Industries*. Creative Services has also been identified as a latent cluster in *Regional Connections*. The large number of new firms in the Central Eastside that fit into the Creative Service industry group suggests that this may be a growing sector.

The Food Products group was selected as a potential study focus based on the historical prominence of produce in the Central Eastside, as well as the location of several specialty beverage companies such as Oregon Chai and Tazo Tea, but it was not selected for further study.

In addition, Automotive Parts/Services was identified as a significant business group in the district, however, it was excluded from the study because its service area is likely to be primarily local rather than regional.

The following industry groups were determined to be a priority by the CEIC and student team, and were selected for further study:

- Building and Construction
- Metals
- Creative Services

Once the three industry groups were selected, geographical information system software (ArcView) was used to map each industry group within the Central Eastside to provide a visual representation of business locations.

Business Interviews

A telephone survey was developed modeled closely on Porter's diamond of advantage and a 1999 study conducted out of the University of Minnesota. The survey was created to cover the four elements of Porter's diamond of competitive advantage: factor conditions, home demand, firm strategy and rivalry, and related and supporting industries. The survey was used to study how businesses within each industry group interact with each other and their environment and to create a general profile of the group. (See Appendix A for interview questions.)

Letters of introduction and a copy of a Central Eastside Industrial Council newsletter featuring the project were sent to 10 businesses within each identified industry group.

These businesses were contacted for the telephone interviews. Although results from these interviews cannot be considered scientifically significant, interviews were focused to illuminate important relationships among the relatively small number of businesses within the Central Eastside. A total of seven interviews were completed with creative services firms, six with building and construction and five with metals manufacturing firms.

Summary of Qualitative Approaches Used in the Project:

- *Interviews with 6 Building and Construction*
- *Interviews with 5 Metals Manufacturing businesses*
- *Interviews with 7 Creative Services businesses*
- *A focus group with 8 participants*
- *Interviews with 4 community organizations.*
- *Expert interviews with the Central Eastside Industrial Council, the Portland Development Commission, and the City of Portland Bureau of Planning*

Focus Group

In order to determine how real estate factors affect industrial location in the CEID, the project team conducted a focus group with commercial real estate brokers that do business in the district. As real estate experts, this group was especially qualified to comment on how various market forces influence the decisions of firms to move in and out of the CEID. They were asked questions about how they market the district and were asked to comment on real estate trends that they have noticed. Potential participants were identified from an inventory of for-lease advertisements and with the help of the Council. Participants were sent a letter of introduction, which was followed up by a telephone invitation. Eight people participated. (See Appendix A for a full list of focus group questions.)

Inventory of Community Organizations

The final piece of the project's research methodology was to use GIS to identify local organizations and institutions in the Central Eastside. These organizations include community development organizations, neighborhood organizations, unions and training institutions. Organizations that had been missed in the mapping process were added to the database.

Several community organizations were interviewed informally to identify the services that they provide in the Central Eastside and whether they collaborate with the Central Eastside Industrial Council or have any other relationships with businesses in the area. Interviews with organizations provide a base that the Central Eastside Industrial Council can build upon in order to link up businesses with community organizations in the area. Community organizations are a vital piece in terms of matching potential employees to employers as well as looking into the potential for future collaboration for other common needs and goals.

Industry Group Profiles

Building and Construction, metals, and creative services are three unique industry groups in the Central Eastside. The following profiles provide information on how each of the industry groups functions in the District and relates each industry group to cluster theory. The profiles draw on interviews with business owners to show how businesses interact with each other, suppliers and customers. The profiles also give general information about the assets and needs of the Central Eastside in relation to each industry group.

Building and Construction Profile

Building and Construction is the broadest industry group that we studied. It includes all types of construction trades, building supplies, and equipment. The majority of these firms are distributors of building supplies such as lumber or finished wood products, hardware, and electrical parts. Other common firm types in this group include distributors of construction tools, machinery and equipment, as well as contractors. Professional services associated with this group, such as architecture and engineering, were excluded from this profile.

The following SIC codes were used to identify building and construction related firms from our database of District firms:

- General building contractors (SIC 15)
- Heavy construction, except building (SIC 16)
- Special trade contractors (SIC 17)
- Building materials and garden supplies (SIC 52)

In addition, selected sub-categories of fabricated metal products (SIC 34), industrial machinery (SIC 35), wholesale durable goods (SIC 50), and wholesale nondurable goods (SIC 51) were included where they reflected a building/construction market.

"Industry groups" are firms that are similar in type and produce related products.

"Clusters" are groups of firms that relate to each other in ways identified in Michael Porter's model of clusters.



Pratt and Larson Tile is an example of building and construction firm.

Firms that produce construction-related metals products such as hardware relate to the Metals, Machinery, and Transportation Equipment cluster identified in *Regional Connections*. Firms that produce millwork, door frames, or furniture, for example, are part of the Lumber and Wood Products cluster identified in *Regional Connections*. This industry group is not only an important part of the regional economy, but its health is tied to the health of the regional economy since a thriving region demands residential and commercial construction

One-hundred and thirty-five firms were identified as part of this industry group. (See Appendix C.) Within this industry group, certain specializations stand out. Electrical supply is the most prominent concentration, but there are also concentrations in paint supply and specialty wood products.

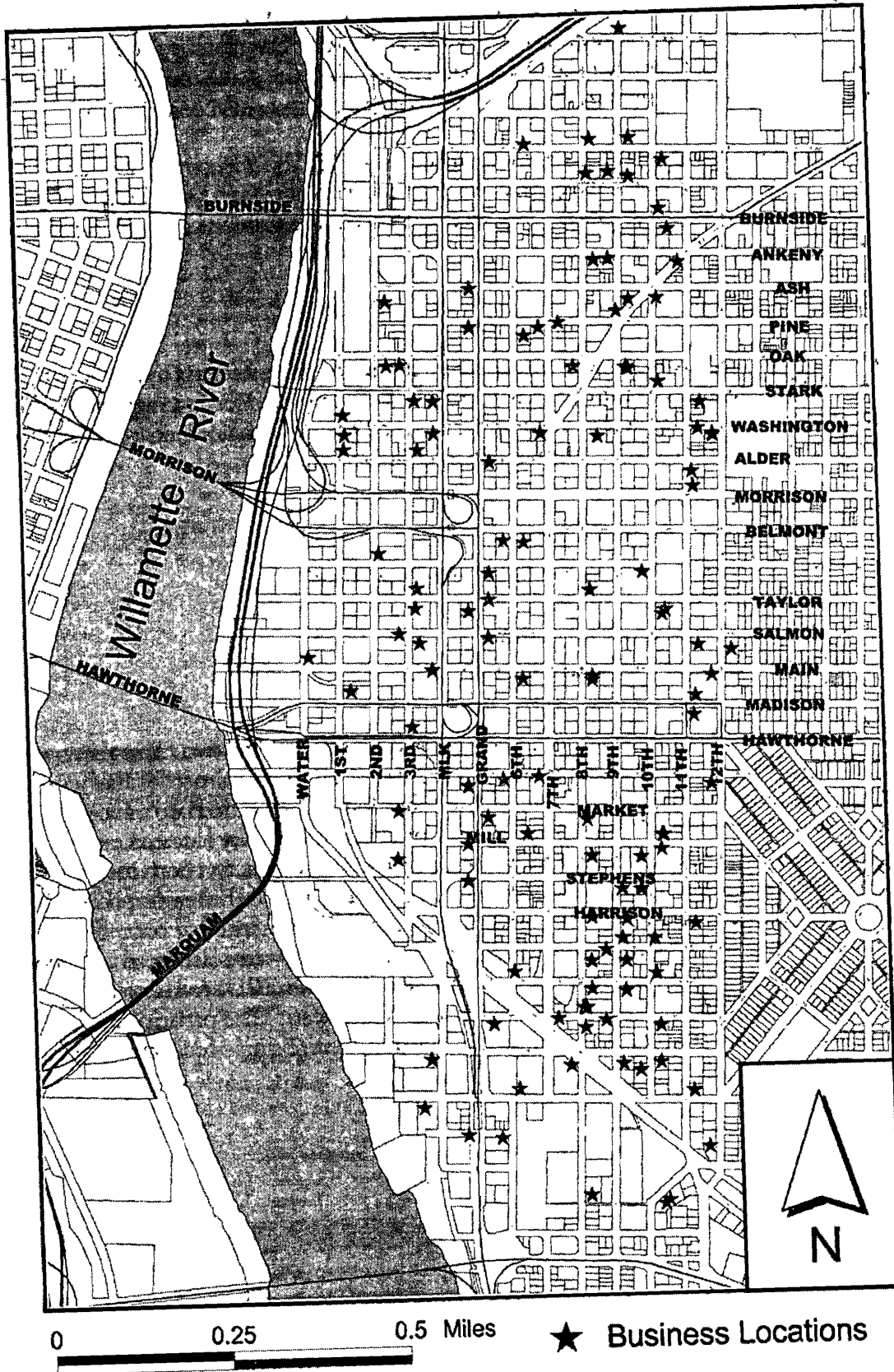
Interview Findings

The Building and Construction firms that were interviewed were selected to represent the diversity of this industry group in the Central Eastside, and in the Portland region. Of the six firms interviewed, some have direct competitors in the District, while others are unique to the Central Eastside, and even to the region. These firms include:

- a wholesale electrical distributor
- a wholesale hardware distributor
- a retail and wholesale specialty wood products company
- a general contractor
- a retail and wholesale paint company
- a retail provider of home fixtures and furniture

Four of these firms lease, while two of them own their buildings. The two firms that own their buildings also have the longest tenure – both have been in the District for half a century, though not necessarily in the same location. The other four firms started up or moved to their current location in the 1990s. When asked about the reasons they located or stayed in the Central Eastside, the respondents overwhelmingly cited accessibility, both for incoming customers and employees trips. Quick highway access to all parts of the region is clearly viewed as an important asset by these business operators. The presence of competitors, the industrial sanctuary designation, and proximity to the central city were also noted as important factors in choosing the District. Two of the firms moved to the CEID from northwest Portland, while one local firm recently expanded into Northwest. The participating firms are evenly divided between branches of a larger company and entire single-location businesses.

Building and Construction Firms in the District



Factor Conditions

All respondents agreed that it is difficult to find skilled employees in Portland's current labor market. The computerized-inventory systems in warehousing require an increasing level of skill and computer knowledge. While a few of the companies indicated they did this training in-house, they expressed difficulty in keeping quality skilled employees for the long term. Businesses that deal with retail customers also indicated that there is in-house training of employees to introduce them to new products and to enhance customer service. Examples of needed employee skills include:

- product knowledge
- ability to provide quality customer service
- basic computer use, i.e. data entry into computerized inventory systems

None of the respondents identified external training schools or programs for employees in a firm like theirs. Respondents said that most employee training is accomplished in-house and reported no need for external programs. Increasing sophistication of computerized inventory systems will require incoming employees to be comfortable with using computers, even in traditionally "low skill" jobs in warehouse environments.

Interviewees were generally satisfied with Central Eastside infrastructure. Respondents were satisfied with street and highway access, which they considered the most important component of infrastructure. Half of the respondents mentioned the lack of a southbound on-ramp to I-5, a long-time desire that is mentioned in almost every planning document about the District. One of the retail oriented businesses indicated that while they are privately supportive of a southbound on-ramp, they have chosen not to pursue the idea publicly because they don't want to contribute to the perception that the Central Eastside is primarily for distribution. Area constraints include lack of customer and employee parking and poor truck access, but the businesses are mindful of the tradeoffs involved in locating in the District. Particularly for the recent arrivals, the location advantage of the Central Eastside outweighs drawbacks in parking and shipping.

The respondents identified government investments in the "aesthetic" attributes of the area, such as storefront improvements and the Eastside Esplanade. Some questioned the value of the Eastbank Esplanade for the District in terms of whether it will improve business by bringing in customers or just create parking problems. Others noted that seismic regulations and the cost of upgrading facilities all but prohibits the conversion of District buildings to new industrial uses.

Local Demand

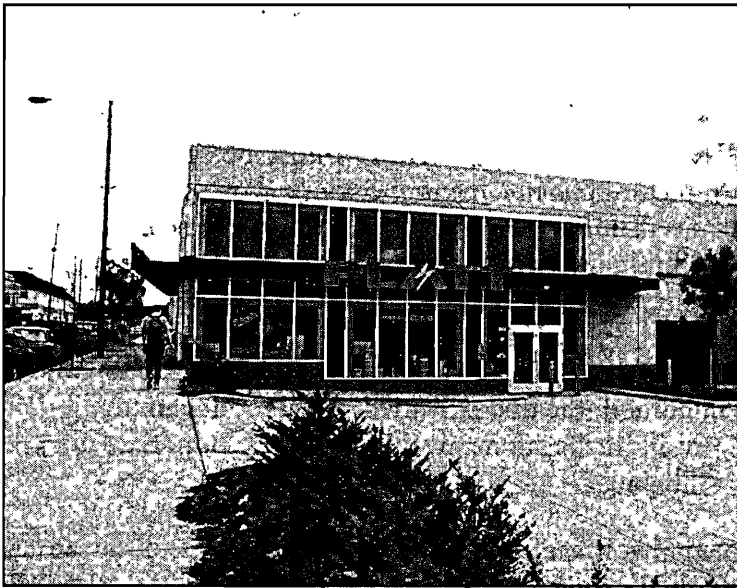
The customer base of all of the interviewed firms extends at least throughout the Portland metropolitan region. The few firms that produce a unique product and do not have branches extend their market to include the entire Northwest (Oregon, Washington, and Idaho). One firm even has customers from Alaska and Hawaii. All firms indicated that the majority of their customers are from Oregon and Washington. When asked about differences in

customer knowledge and sophistication, no firms indicated that Central Eastside or Portland metro customers are any different from their other customers.

Firm Strategy, Structure, and Rivalry

The firms that were interviewed seemed to fall into one of two categories: *generic*, those that sell products similar to others, or *unique*, those that sell specialized products. For example, electrical and paint distributors could be considered generic while a company that manufactures specialty wood moldings would be considered unique. These categories are not intended to be exclusive – there is certainly significant differentiation between types and brands of paint, and a specialty hardware distributor may also deal in generic products. However, in general the generic firms could readily identify similar firms in the Central Eastside, while the unique firms had trouble identifying any competitors in the entire Portland metro area.

None of the respondents recognized any interaction (formal collaboration or informal exchanges of information) among similar District firms. However, interrelated firms that sell tile, hardware, electrical parts, paint, occasionally work on the same construction project. One



An example of new industrial development in the District.

respondent indicated that firms will work with the suppliers they know, regardless of where they are located.

Despite comments about a lack of interaction, some building and construction firms along with other businesses in the district have collaborated to create a “East Bank Design District” brochure and marketing concept that capitalizes on the complementary nature of the many home building suppliers in the District. An ad hoc committee spearheaded by one local business, Rejuvenation,

met monthly for 6-8 months and examined different group marketing opportunities, producing a brochure and several newspaper advertisements. This group's activities were limited, however, by a lack of leadership and structure.

Several firms said that trade organizations were an important source of interaction and information. These interactions take place through newsletters, national trade shows, and conferences. These associations include:

- National Association of Electrical Distributors
- Associated Builders and Contractors Pacific Northwest Chapter
- Door and Hardware Institute

- Paint Contractors Guild
- National Commercial Hardware Association

Additional trade organizations not mentioned in interviews include the Associated General Contractors, Oregon-Columbia chapter and the National Electrical Contractors Association, Oregon-Columbia chapter.

Related and Supporting Industries

Firms that do not manufacture the products that they distribute indicate that their suppliers are distributed nationally, with a greater reliance on suppliers in the western states. Only one company indicated international suppliers. None of the respondents recognized any interaction or feedback with their suppliers. Location had little influence on supplier choice. The contractor is excluded from this because he does not purchase physical inputs. His "suppliers" are the subcontractors, who are located throughout the region.

All respondents cited trade shows and trade magazines as the most important sources of information about new products and industry trends. One firm owner said they read all the magazines they can get their hands on. Vendors are another important source of information.

Locational Trends

Interviewees were asked about trends in the types of businesses locating in the Central Eastside. The construction supply market is stable in the Portland region, despite a slowing construction market, according to interview sources. Several respondents identified a building and construction niche in the District. One respondent noted that while the current group of businesses is stable, a new large operation couldn't move in because there isn't enough space available. He indicated that if his business grew significantly he'd have to relocate outside of the District where more space is available. One firm recently relocated their production functions to Northwest Portland after an exhaustive and unsuccessful search for a central city building that didn't need prohibitively expensive seismic upgrades.

Summary

The firms selected for interviews from the Building/Construction industry group are intentionally diverse, to reflect the diversity within our classification and the Central Eastside. The theory of industry clusters emphasizes interactions and collaborations between firms in related fields, such as the related fields of our respondents. The diversity of firms in this group may hide opportunities for collaboration between related firms. In addition, interactions between very similar firms may have been missed because there was not the opportunity to conduct interviews with, for example, two or three electrical distributors. Diversity may act as a barrier to collaboration between related firms in the District.

The results of these interviews indicate that the Building and Construction industry group in the Central Eastside poorly meets the criteria for a cluster as previously discussed. There is no cooperative method of obtaining qualified employees or advocating with government for common needs or regulatory concerns. Local customers are no more knowledgeable or demanding than other customers, and there are no relationships with local suppliers to meet

special needs. The generic nature of this group is a large part of the reason that it lacks "cluster" cooperation. It is likely that all metropolitan regions have local concentrations of distributors of basic supplies like paint and electrical, along with a few specialty producers. In addition, since most of these firms are distributors, there are few opportunities for innovations in product design or production. Despite these findings the cluster approach is valuable for this industry group as a way to get firms thinking about common needs and interests.

Metals Manufacturing Profile

Metals manufacturing businesses are particularly important to the Portland metropolitan region and have been identified in *Regional Connections*, a study of regional clusters, as being a significant contributor to the regional economy. There was initially anecdotal evidence that

“No city in the Northwest has the variety and depth of metals companies that the Portland area does... ”

there were few new businesses in this group that locating in the district. As the metals industry group included mainly manufacturing firms, the group was selected as an important industry group to study due to its manufacturing role in the Central Eastside and its importance to the region.

- *Regional Connections*

A 1996 study entitled the *Portland Area Metals Industry Analysis* emphasized that many metals firms have been located in the six-county region for years because their founders are from the area (Whelan and Dalzell, 1996). Many located in the area decades ago in conjunction with the shipbuilding and timber industries.

The study also found that a large number of metals firms offer value-added goods and a limited amount of firms specialize in high volume manufacturing. Both of these observations were tied to the Portland region's distance from major consumer centers. Many metals companies in the region have specialized in producing smaller quantities of specialized goods due to greater costs of shipping to customers (Whelan and Dalzell 1996, p. 42).

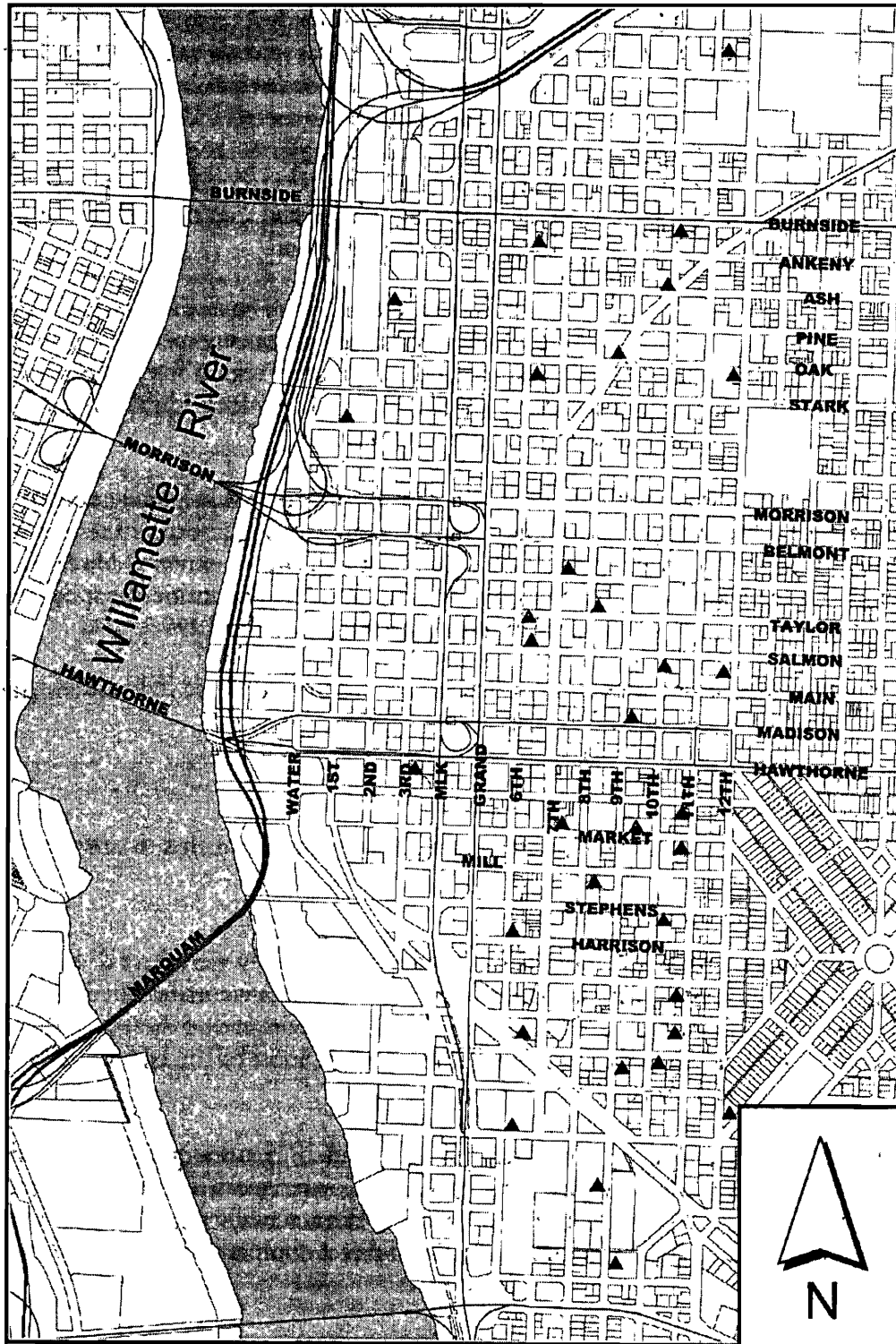
Based on previous cluster studies the following SIC codes were used in identifying metals manufacturing businesses in the District:

- Primary metals industries (SIC 33)
- Fabricated metal products (SIC 34)
- Industrial machinery and equipment (SIC 35 – some four digit subcategories were excluded)
- Transportation equipment (SIC 37)

Additional businesses were added to the initial inventory if they were found to be related or complementary. Thirty-two metals manufacturing businesses were identified within the Central Eastside. (See Appendix D) The geographic distribution of these metals businesses within the Central Eastside is fairly dispersed. However, most of the businesses are located east of 6th Avenue and south of Yamhill Street.

The range of businesses within the District is quite broad. Firms are quite specialized, and there are few businesses that offer the same products or services. There are firms in the District with the same SIC code, but many of these firms actually specialize in particular products or services, and this limits the amount of direct competition between firms.

Metals Manufacturing Firms in the District



0 0.25 0.5 Miles

▲ Business Locations

Interview Findings

The metals industry firms that were interviewed reflected the overall diversity of the metals industry in Portland. No two firms offered the same product or service, although there were overlapping and complementary relationships and products among several firms. The firms that were interviewed included:

- A firm that specializes in fabrication of heating and ventilating ducts
- A manufacturer of bakery equipment that specializes in equipment that is used for making cookie dough
- An firm which specializes in custom metal stamping
- A firm that serves other machine shops by anodizing and chromating metals for products such as computer chassis or bicycles
- A custom wire products manufacturer specializing in making display racks out of wire. Products also include racks for refrigerators and ovens, as well as literature racks

Most of the businesses are small and all five are entirely located within the Central Eastside Industrial District. Two of the firms date back to the 1930s and one of the firms has been in the district since around the 1950s. The other two firms have been in the district 5-8 years. Two of the older firms were family owned and have been passed from grandfather or father to son. There was also anecdotal evidence that a few of the firms that did not complete interviews were family owned and have been passed between generations.

Factor conditions

Questions on job skills, training institutions, and infrastructure in the Central Eastside and the region resulted in some striking similarities as well as significant diversity among metals firms. First, three of the five businesses chose to locate in the district because they had longevity in the area. These were the three oldest metals firms. The other two firms cited the Central Eastside's central location as a compelling factor. All three firms reported some difficulty in finding employees.



Custom Stamping is a prominent Central Eastside metals manufacturing company.

In terms of workforce needs, most of the firms reported that they had both skilled and unskilled positions. Skills identified as important to the businesses include:

- Arc and spot welding
- Industrial painting and coating
- Tool and dye making
- Math/trigonometry skills
- Drafting

Some firms said that they do on-the-job training and that people can start from the entry level and work their way up to more skilled, higher paying positions.

Resources for finding employees include a state-run apprenticeship program and the state employment office. Several of the interviews reveal dissatisfaction with area educational programs. One business owner comments:

"Nobody is fulfilling the need for tool and dye makers. These are vanishing skills. Most of the people with these skills are in their late 40s and 50s. There are not a lot of people coming out of schools with skills to be tool design engineers."

In terms of the Central Eastside's physical infrastructure, three out of the five firms say that their infrastructure needs are met. Two of the firms mentioned transportation issues. One business owner cited continuing difficulty with truck access and loading and unloading. The other business owner considers the lack of a southbound on-ramp to I-5 a significant negative factor.

Each interviewed firm has a slightly different perspective when it comes to local government regulations and involvement. One business owner reported that local government does not affect their business. Two business owners reported that lower taxes would be desirable. One owner reported the lack of access to I-5 southbound as a negative factor. Parking and transportation issues directly affect businesses in this group. It is critical for these businesses to be able to load and unload trucks on narrow streets in the District, yet there have been instances where businesses have received parking tickets for doing this.

The City of Portland's electrical code was reported as a problem by another business owner. According to the owner, the City of Portland's electric code is extremely restrictive in regards to foreign equipment. This means that it is difficult and costly to get foreign equipment and operators certified by the City and this affects the cost of using certain kinds of equipment, and thus the cost of doing business. The business owner reported that many other cities do not have this kind of restrictive electrical code.

Another owner said of zoning and the industrial sanctuary designation:

"Periodically there is talk of redeveloping parts of the area, and periodically they have talked about moving the freeway. I think this is an indicator of bad faith on the part of the city; I'm afraid that they will put the freeway in through here[in another part of the district], and then redevelop the waterfront like the other side of the river."

As discussed earlier in this section, there is a perception among some owners that there may be pressure on the industrial sanctuary to allow for non-industrial uses. This is another factor in the firms perception of local government involvement in the district.

There were varied responses to the question of local government involvement in the metals manufacturing firms. None of the firms mentioned receiving incentives or benefits from the urban renewal district. Each firm had a different perception of local government

involvement, although a few of the owners mentioned transportation related constraints such as parking and loading.

Local Demand

Most of the firms do business in Pacific Northwest states, with a concentration of customers in Oregon and Washington, but also including Northern California, Nevada, Idaho and Southern Montana. Two of the firms have a few international customers. All of the firms reported that many of their customers are located within the Portland metropolitan region.

Four of the five firms reported that customer location does not affect how demanding they are. One of the firms clarified that distant customers expect to have to wait due to shipping time, so it is the more local firms that demand just-in-time deliveries.

Firm Strategy, Structure, Rivalry

All of the business owners report that there is virtually no collaboration among metals manufacturing firms. One owner comments, "No, generally speaking we do not collaborate... as competitors we're very much in our own little worlds."

Despite the lack of reported collaboration among businesses, many of the business owners belong to industry associations. All of the industry organizations that were mentioned are national, suggesting that either there is little interest in local organizations, or there aren't any organizations that unite the common interests of local metals firms. The national associations include:

- National Small Businesses United (NSBU)
- American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE)
- American Electroplaters Finishing Society (AEFS)
- Retailer's Bakery Association (RBA)
- American School Food Service Association (ASFSA)
- North American Association of Food Equipment Manufacturers (NAFEM)

No national organizations were mentioned by more than one firm. The range of associations suggests that the firms do not collaborate by industry group or cluster, but by other firm characteristics.

Several firms also mentioned trade magazines and tool and machine shows as ways in which competitors and related businesses exchange ideas and learn about technological change and innovation.

Related and Supporting Industries

All five firms reported that the majority of their suppliers are local. Some firms also order supplies from outside of the region for particular inputs that are not available locally. Some of the industrial painting and coating materials must be ordered from the east coast, because they are a specialized product.

Three of the firms said that they interact directly with suppliers to improve the quality of their products. Another firm reported that it is difficult to interact with suppliers due to the structure of the steel industry. The business owner reported that the steel industry is extremely resistant to change and that one must be a larger firm such as an automobile manufacturer in order to influence the quality of their products.

Beyond the supply of primarily metals inputs, suppliers of machining or other metals manufacturing equipment were said to interact frequently with business owners. Promotional brochures for cutting edge equipment were reported as one way that business owners find out about technological advancements and ways to improve production.

Locational Trends

All five of the metals manufacturing firms reported that they did not foresee many future increases in similar businesses within the Central Eastside. One business owner commented,

"In the Central Eastside, I don't think that you'll see another stamper move in here. It would be nice to see some more small machine shops and platers. There hasn't been a lot of 'industry industry' moving in, mostly extremely light industry... some businesses that could even be called retail. Our business is very capital intensive and requires enormous investment. People that are going to make the same kind of investment can go out to buy cheap land. There is always the risk that as the area around the industrial sanctuary gentrifies and commercializes it is a risk that heavy industry may not be able to continue."

In general, metals firms did not have any immediate plans to move out of the Central Eastside; however, business owners also noted that there were few new metals firms moving into the district.

In the focus group conducted with real estate brokers, Oregon Brass Works was mentioned as a major metals business that had moved out of the Central Eastside. According to focus group participants, the site would never be used again for metals manufacturing citing the small size of the site and rising land costs. Another focus group participant commented that metals manufacturing firms are still in the Central Eastside because they always have been in the District. If the metals industry is growing, then these firms are likely to be bought out and businesses will merge. This consolidation will necessitate more space, so they will move out. If a metals firm is a small service company, they will likely stay in the District.

Summary

Metals manufacturing is the smallest group of the three industry groups that were studied. Firms within the Central Eastside are very diverse and therefore, do not report many similar competitors in close proximity. In general, the firms that were interviewed did not report much interaction with other metals firms. This group, therefore, does not exhibit many elements of a cluster.

All of the firms interviewed, and other studies that have been conducted at both the city and regional level, report that there is a labor shortage. This labor shortage can be attributed to the larger national economy, but firms also note that there may be local factors contributing to the shortage. These factors include lack of public knowledge about metals manufacturing job opportunities and a need for greater connection between jobs and educational programs (Cindi Carrel, et al., March 1996).

Metals manufacturing firms have the potential to work together to address their workforce needs. There are several workforce training and other educational institutions within the district, as well as many throughout the Portland metropolitan region. Another source of information and collaboration for firms could be in participation in local, instead of just national, trade organizations. Some of the local metals manufacturing trade associations include:

- Oregon Metals Industry Council
- Oregon Precision Metal Fabricators Association
- Portland Metro Tool and Die Association
- Cooperative for Manufacturing Excellence

Participation of metals firms within the Central Eastside, as well as the potential for future links with the Central Eastside Industrial Council, may provide opportunities for addressing workforce concerns as well as other common goals and concerns.

Creative Services Profile

Creative services businesses are increasing dramatically in the Portland metropolitan region. Businesses of this type provide services such as advertising, graphic design, computer software design, motion picture and theatrical production, and public relations. Over the last few years, the City of Portland has targeted these businesses for their potential to bring a “new type of

“Creative Services is an industry with strong Central City concentration, good wages and rapid growth, while having characteristics consistent with industries of the future.”

industry” to the area. The ‘Creative Services Project’ was begun by a small group of industry leaders and encouragement from the City of Portland in 1997. The focus of the project was to look at the potential of creative service business to add to the approximately 75,000 jobs slated for the Central City (which includes the Central Eastside) by 2040 (Scruggs, Cortright, and Douglas, 1999).

Since that time the City, through PDC, has built a strategy to attract creative services businesses to central city areas. The report *Designing Portland’s Future: The Role of the Creative Service Industry*, released in June 1999, makes a strong case for viewing creative services as a cluster. It describes and presents evidence to how creative service firms have a

strong relationship to each other as suppliers and customers of each others’ services and products:

“By considering these industries as a cluster, the region can better develop strategies and programs that will increase revenues, promote innovation, and enhance marketing of creative services firms and freelancers (Scruggs, Cortright, and Douglas, 1999.”

Regional Connections identifies Creative and Professional Services as a “latent industry cluster,” a sector of the economy that exhibits some, but not necessarily all aspects of a cluster. This grouping includes such diverse professions as advertising, architecture, law, and accounting. This region-wide study identifies 5,952 firms and 43,767 jobs with an average wage of \$34,004 that fit under the cluster.

According to PDC, more than 800 creative services firms in the Portland region employ an estimated 13,500 workers. In addition, 1,400 to 2,000 businesses use the services of freelancers. The industry has a payroll of more than \$600 million annually. Between 1992 and 1997, the number of jobs in the creative services industry grew by 9 percent, twice as fast as the average business in the metropolitan area. Wages in this field average \$44,000 a year, compared with the region’s average wage of \$31,240 (Portland Development Commission press release, 1999).

Most recently, members of the creative services trade and professional organizations have formed the Oregon Creative Services Alliance. PDC has taken a leadership role in the creation of this organization. The Alliance will serve as a marketing group to help creative services businesses create a “brand image” and nurture local talent.

“The Alliance’s efforts will facilitate promotion, meeting space, and a chance to latch on to the group dynamic that makes Portland so special.” (Portland Development Commission, 2000)

Currently, the Alliance is spearheading a national marketing campaign that includes hiring an Alliance Director, establishing an interactive web site, facilitating a creative services internship program, and coordinating a conference for fall 2000. In addition, the City has identified funds to pay for the development of a Creative Services Center, to serve as a “bricks and mortar hub” for the cluster. This building will most likely be located within the boundaries of the South Park Blocks or the Downtown Waterfront Urban Renewal Areas. It will be home to Alliance staff, key industry associations, and possibly a creative services incubator which will provide office space for emerging companies. The goal is to have the center occupied by December 2000.



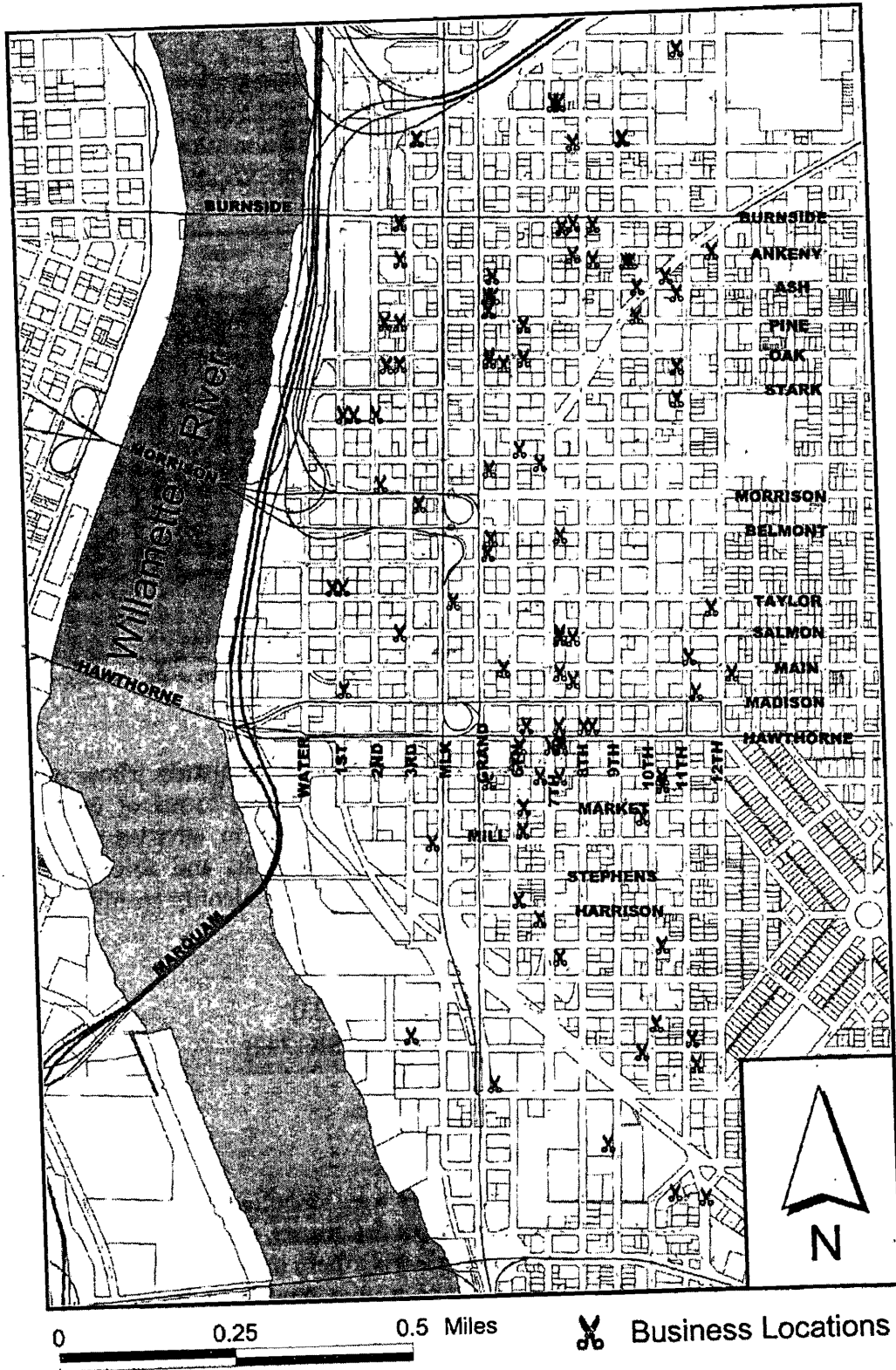
Admiral Typesetting is an example of a creative services business.

This study of creative service businesses in the District is based on the same definition and SIC codes as “Designing Portland’s Future,” a report on the creative service industry prepared for PDC. This study expands upon the PDC definition of creative services to include printing firms that perform supporting services to other creative service businesses. According to the report, creative services businesses include highly specialized industries whose primary focus is to design, produce and deliver creative content in various forms of media and communication. The cluster includes companies and freelancers in advertising, graphic design, public relations, commercial photography, video, multimedia and software. The following two and three-digit SIC codes were used in that report to identify creative services businesses in the District:

- Advertising Agencies and Services (SIC 731)
- Advertising, Commercial Photo, Graphic Design (SIC 733)
- Computer Software, Integration and Data Processing (SIC 737)
- Motion Pictures (SIC 78)
- Theatrical Producers and Services (SIC 7922)
- Public Relations Services (SIC 8743)

One-hundred and thirty-three creative services businesses were identified within the District. The geographic distribution of these is spread throughout the district, with concentrations on certain blocks, due to the small nature of businesses, allowing them to co-locate in one building or block. (See Appendix E for a detailed list of creative services businesses in the district.)

Creative Services Firms in the District



Interview Findings

Seven Creative Services business owners in the Central Eastside were interviewed to determine interactions and relationships that exist between them. Interviewed firms represent a wide range of product, services and size diversity within the industry. The firms that were interviewed included:

- A video producer that serves a mostly corporate clientele
- A full-service ad firm specializing in collateral print material, media placement, in-house photography and design.
- A sign making company with a production facility in the CEID that creates signs for events, trade show booths, and fleet lettering.
- A commercial photographer that specializes in product and food advertisements for small catalogs and brochures
- A freelance graphic designer who develops marketing pieces for local events and performances
- A graphic design firm that specializes in environmental graphics, a new sector of graphic design known as "information architecture" which focuses on how information gets passed along and understood by people
- A typesetting/pre-press company which prepares graphic files that go to film for advertising, flyers, and stationery

The majority of the businesses that were interviewed moved to the area in the mid-1980s to escape from rising rents in downtown or business gentrification in the Pearl District. Cheap rent, great views of the city, proximity to downtown, and the availability of parking (as compared to downtown), were all factors in locating their businesses in the District. Most of the businesses have fewer than 5 employees; three of them are freelancers. Four of the seven own the building they are in. Most of the businesses operate out of just one location in the District, however two of them have branch offices in Washington and California.

Factor Conditions

Most of the interviewed businesses reported difficulty in finding qualified employees because of the highly-specific and high tech nature of their work. Most of the positions are for employees skilled in a specialized trade. These skills include:

- Graphic design
- Computer programming
- Digital graphics
- Environmental design
- Printing processes
- Architecture

Most businesses reported that they have to train employees on the job, although one business is able to find college graduates with sufficient skills. One of the businesses uses subcontractors on an as-needed basis to do pieces of work. This business also uses temporary employment agencies to find employees that are trained in graphic design.

None of the business owners rely on local training programs to fulfill their workforce development needs. Either they are able to find qualified employees on their own, or they do on-the-job training themselves because of the unique qualifications necessary for the jobs. Most of the businesses are small and do not have a great demand for new employees. It is possible that no one generic training program would be appropriate for businesses in this group.

Most of the interviewed businesses are satisfied with the physical infrastructure provided in the Central Eastside. Access to freeways was cited as a critical factor because of the need to get their products to clients in a short time. All of the owners who cited this need were satisfied with access to freeways and local roads. Three of the businesses have clients that come on-site and rely on the availability of on-street parking. This was not cited as a problem, however some thought it could become a problem in the future.

Government regulations and investment in the Central Eastside has affected businesses in varying ways. One business owner sees a positive change taking place in the District but is not sure if this is due to government policy or regulations. The owner said that it is due, in part, to a "heightened sense of community... the area used to be just an industrial center, but now there is a mix of people working, living and recreating in the area." One interviewee questioned the continued industrial zoning in the area. Zoning has changed to exclude live/work lofts and the interviewee feels this is unfair. Another business owner has made substantial investments in property to keep up with city regulations. The owner appreciates the older buildings for their historic value and lower rents. Another person thought that the industrial sanctuary zoning gives too much power to "old-style industry" and thinks that the area by the river might be better used. This person likes the idea of developing the area so property values rise. All in all, business owners seem to benefit from lower rents that come with industrial zoning, though they question the continued industrial sanctuary policy because they see more commercial, housing uses increasing. Yet they do not want rents or land values to rise too much and want to avoid the type of gentrification that has occurred in the Pearl District.

Local Demand

Most customers and clients of the businesses interviewed are located in the Portland region, however, three have both national and international clients, with some as far away as Germany and Iceland. Two of the business owners thought that local customers push their company to innovate and improve the quality of their products. Because a lot of their business caters to customers who need "just in time" service, they are forced to innovate and adapt to keep these customers. Their adaptability and ability to provide responsive and on-time service draws customers back to them. The other five business owners did not report much difference in levels of demand between their local and more distant customers.

One firm reported that differences in the quality of customer demand has more to do with the size of the client firm, rather than its location. Smaller business clients tend to require more intensive, ongoing communication and follow-up. In this business owner's opinion, the larger the client firm, the less demanding they are, as they require lower maintenance efforts.

Firm Strategy, Structure, Rivalry

Most of the business owners think there are a lot of similar businesses in the Portland region (and some in the Central Eastside.) Some of the similar businesses are located in close proximity to one another. For example, at 7th and Hawthorne there is a small enclave of graphic design businesses that people refer to as “graphics central.”

“We feed each other jobs based on the personal relationships we have established through our work.”

The level of interaction and collaboration between similar firms varies greatly. Four business owners thought there was little, if any, interaction occurring between creative services businesses. One said that they have “friendly relationships, but little interaction.” Three business owners thought that

*– Creative Services
Business Owner*

informal relationships and interactions between businesses occur regularly and are very important to their business. “There are definitely benefits in these relationships. We trade clients and refer each other to jobs.” They also thought they benefited from the flow of information these relationships bring. They reported that they often call similar businesses to ask questions about the field in general and to refer clients.

Many of the business owners belong to trade and business associations which facilitate interaction, information sharing and collaboration. Organizations that interviewees belong to and participate in include:

- American Society of Media Photographers (ASMP) – Oregon Chapter
- American Institute of Graphic Artists (AIGA) – Portland Chapter
- Graphic Artists Guild (GAG) – Portland Chapter
- Pacific Printing & Imaging Association (PPI) – Portland Office
- Portland Oregon Visitors Association (POVA)

Many of these trade organizations are national but have local Portland chapters that meet on a monthly basis. One business owner stated that “membership in these organizations is very important because of the exposure to clients.” Another interviewee said that they go to trade organization meetings only when there is a topic of interest on the agenda.

Related and Supporting Industries

Suppliers of needed inputs are generally local with many of them using suppliers right in the District. Some have established relationships with suppliers because of the need for just in time services and inputs. Interactions and relationships with suppliers are very important to businesses in this group to ensure that the final product is of high quality. A fair amount of job sharing occurs between creative services businesses and their suppliers. One business owner said, “We feed each other jobs based on the personal relationships we have established through our work.”

Business owners rely on information from trade magazines, newsletters, national conferences and conventions to get information about new products or industry trends. A paper products trade show was recently hosted at OMSI, which one interviewee praised for the amount of

new product information there. Two respondents said that they engage in informal conversations with associates to stay abreast of current industry trends.

When asked who the leading firms in the local industry are, there was a range of answers. Wieden and Kennedy, Mayer Reed, Revere Graphics, Studio 3 were some of the "role model" businesses that creative services firms look to in the region. A few respondents thought of themselves as leaders in the industry.

Locational Trends

Business owners who were interviewed see an increased number of creative service businesses in the District. They see the area becoming trendy as creative service businesses realize the amenities of location, access, and affordability. One business owner noticed an increase in creative service, or "cousin" industries in the District. This business owner noted that "... as things change from industrial, the area is attracting more people in related businesses."

Industrial Sanctuary zoning policy was amended in April 1999 to allow for the location of more office/light industry in areas zoned IG1 and IG2. This change was a part of a larger process to amend the City of Portland's zoning code to be in compliance with Title 4 of the Urban Growth Management Functional Plan. The zoning change effectively allows and encourages the development of more creative service type businesses in industrial sanctuary areas.

Summary

The seven creative services firms interviewed for this profile represent a diverse sample of business types located in the District. On the whole, creative services businesses in the District are small, with a substantial amount of professional freelancers. Through interviews, it was revealed that businesses rely on one another for job referrals, competitive suppliers and information on new technologies. The informal relationships and flow of information that seems to occur between these businesses closely resembles the cluster concept.

Business owners perceive a substantial amount of growth in similar businesses in the Central Eastside, and this may be working to create a new identity for the area. Workforce needs of these businesses are quite specific, making it difficult to coordinate on workforce training, however basic computer and design skills were mentioned in multiple interviews.

Participation in trade organizations is common among business owners in this group. Local chapters of national industry organizations provide opportunities for informal networking and formal educational training on technical aspects of the field. The majority of customers for these businesses are local, however it is significant to note the national and international customers as well.

Industry Groups or Clusters?

After using the cluster concept to organize our study of these three industry groups, it is clear that the concept works best to understand the competitive advantage of a *region*, rather than a small district. Because cluster theory is partly based on the amount a region exports in relation to other regions, it can be problematic to apply the concept at a neighborhood scale or to an individual industrial district.

Despite the regional focus of the cluster concept, it is a meaningful base for understanding how businesses within a district function. Porter's cluster concept offers an exciting new tool to understand the Central Eastside or to apply to other industrial districts. It is a lens that can be used to understand the district in a new way, by groups of related businesses and products. In the past, broad categories such as wholesale, retail or distribution have been used to understand industrial districts. The cluster model provides an alternative method of understanding the way firms relate in a way that is closer to how they act in the economy. The cluster concept can also highlight common needs of businesses that function similarly, work together, and rely on common customer bases and institutions.

The basic elements of the cluster concept, such as the four factors of the Diamond of Competitive Advantage, provide an excellent starting point to understand how business groups in a small area relate to large regional clusters. Businesses in the Central Eastside connect with larger regional clusters as customers, suppliers and competitors. Some of them produce inputs or services that larger businesses need.

In studying industry groups using Porter's cluster concept, findings show how well groups of businesses at the district scale behave as clusters. Each of the three groups studied exhibit some elements of the cluster concept. Some have established relationships that foster information exchange; others participate in similar trade or industry organizations; others rely on one another for job sharing. Our conclusions are that none of them are a complete cluster, as defined by Porter, but that it is still useful to think of the collective needs of these groups. This approach can direct investments that will enhance the group's competitiveness and generate new business growth in the District. This information can help in understanding the economic development of the district as a whole.

“Clusters represent a new way of thinking about location, challenging much of the conventional wisdom about how companies should be configured, how institutions such as universities can contribute to competitive success, and how governments can promote economic development and prosperity.”

-Michael Porter, 1999

Community Organizations in the Central Eastside

Interviews with organizations in the area provide a base that the Council can build upon in order to link area businesses with organizations in the area. Community-based organizations are a vital part of matching potential employees to employers in the District as well as looking into the potential for future collaboration for other common needs and goals.

Organizations and institutions located in the District are critically important to its continued success as a healthy employment center. A large number of social service agencies are located in the area and provide a resource for low to middle income people who pass through, live or work there. They serve a number of different roles including provision of emergency food, affordable housing, job training, adult and youth counseling, community building, and small business support.

It is important to realize the contribution of a few of the major non-profit and educational training institutions in the District which play a key role in the future development of the area.

REACH Community Development Corporation, Inc. has been located on the edge of the District since 1982. Their location at SE Salmon and 12th Ave. is representative of the service they provide – a bridge between the housing and other needs of Southeast Portland residents. While REACH is primarily a provider of affordable housing for people below the median income, they also provide an array of other services for youth, elderly, and small businesses in the area. At this time, they are interested in serving as a linkage agency between residents and the workforce. While they don't want to duplicate the workforce training programs that are already functioning in the city, they do see a growing need for connecting residents with family-wage jobs. REACH has worked to revitalize two main street business districts, or 'target areas' - Belmont and Milwaukie - by building solid relationships with small business owners and residents. They have expressed interest in expanding this approach to East Burnside, where there are plans underway for business revitalization and infrastructure enhancements.

Benson Polytechnic High School is a magnet high school that draws students from all over Portland. Also located on the edge of the District, this school requires all of its students to choose a professional or technical course of study. The school offers a variety of programs including Communications, Construction, Drafting, Electric/Electronics, Health Occupations, Manufacturing Engineering, and Transportation Technology. Benson works informally with an array of businesses in the area to provide off-site internship, work and training experiences. Businesses, such as Portland Bottling, Portland Family Practice, and Woodcrafters, often call the school to offer students part-time jobs and internships. Some students are able to receive work experience credits that count toward their diploma, although this is currently not a requirement of the school. Benson also works with PGE, Wacker Siltronics, Intel, and Boeing to sponsor both student and teacher learning experiences and training.

Benson has worked with the Council in the past to create employment opportunities for students with appropriate businesses. Changes in staff and funding at the school has made this connection challenging to maintain. The Structured Work Experience Coordinator at

Benison has expressed interest in reestablishing the link with the Council to better inform them of the training programs and skills that students are developing. This flow of information could serve to create new internships that would benefit both students and local businesses.

The **Portland Community College Central Portland Workforce Training Center** is located on Water Avenue just north of OMSI. Its curriculum is oriented primarily towards professional development. They offer programs in business management, continuing education for insurance and real estate agents, training for health professionals, computer education, adult skills/literacy, and classes for seniors. There are no obvious linkages between the educational programs offered at PCC and the workforce training needs of Central Eastside industry groups we surveyed, and the campus program coordinator did not know of any cooperative relationships between PCC and Central Eastside businesses. There may be more opportunity here for linking training to the Central Eastside by tailoring PCC's computer training programs to the specific needs of district businesses and employees. For example, Goodwill is working with PCC to set up a joint computer programming training that would teach high-tech skills.

Goodwill Industries of the Columbia Willamette has a long history in the District. Their presence in the District is very important; they are a social service provider, job training center, and for-profit business. They employ over 100 people in both service and management functions at their site on 6th Ave. They primarily serve the disabled and special needs populations. Vocational rehabilitation programs include training in office technology, business information systems, community work-experience referrals, and long and short-term job placement services.

Goodwill has a solid history of involvement with the Council, with representatives serving on the Board and subcommittees such as Land-Use and Community Policing. The Council's mission, to expand employment and training, fits closely with Goodwill's. Goodwill views itself as a business, not a charity organization, and strives to practice sound business principles. They foresee expanding their marketing efforts to local businesses (to hire their clients as employees) by relying on accurate business database information collected by the Council. In this way, they could further their mission of providing living wage jobs to local residents.

Although the organization was not interviewed, the **International Refugee Center of Oregon (IRCO)** would be another opportunity for the Central Eastside Industrial Council to link area businesses with potential employees. The organization is located just beyond the boundary of the Central Eastside Industrial District. IRCO provides job-training and job-related English classes to recent immigrants to the United States. The Central Eastside provides a variety of employment opportunities for IRCO's client population.

Finally, **Portland State University (PSU)** provides another opportunity for the Council to work with undergraduate and graduate students as well as the research institutes that are located on campus. PSU offers courses in urban studies and planning, community development, business, and other disciplines that may relate to the Council and area businesses. This project is an example of the kind of collaboration that the Council can find within the university context.

In terms of workforce training, there are certain common skills that could benefit each of the industry groups that this study has explored. First, all three groups have businesses that require some type of computer skills. Interviews with businesses in the building and construction industry group revealed that computers are used to keep inventories. Some metals and building and construction firms look for potential employees with Computer Aided Design (CAD) and blueprint reading skills. Creative services firms need employees with computer skills that range from word processing and spreadsheets to design and desktop publishing programs. Depending on the kind of firms that are interested in exploring collaboration with educational institutions, specific computer training programs can be sought.

The large number of small firms that are located in the District could also be an opportunity for businesses to work together to offer employee training programs or programs for entrepreneurs and business owners. PSU's **Business Outreach Program** and the **Oregon Association for Minority Entrepreneurs (OAME)** provide help for those that are interested in starting a business. These organizations might also be a source for information about other training opportunities for those that already own a small business, but are looking for additional information about expanding their products or looking for additional financing for updating equipment or production processes.

There are many other opportunities for the Council to partner with other community-based organizations and educational and training programs. The Council's time and funds are limited and a next step could be exploring the needs of particular industry groups in terms of workforce needs, product development, or other common needs and goals. Brainstorming with other community-based organizations can help the Council explore its future role in the area, as well as contribute to the goals of other organizations within the district.

Assets and Constraints in Relation to Industry Groups

Assets

The District has a number of general assets that make it an attractive place for businesses location. These include a central location close to downtown, good freeway access, and the availability of parking and cheaper rents (relative to downtown). A focus group was conducted with real estate brokers that illuminated the physical assets of the district.

In general, the presence of related businesses in the District is an asset for some businesses that move to the District. This is especially true for the building and construction group, where wholesale distributors seek to locate near their competitors in order to draw on a shared customer base of contractors. The influence of proximity is stronger for those businesses that have a retail presence or derive much of their business from customers coming to them. A critical mass of businesses in the area can draw customers that need to comparison shop or want to buy multiple products from related businesses. Therefore, one of the assets of the district is that there are a number of firms that provide related products and services.

The single greatest strength identified by the focus group was the District's central location. Proximity to the downtown allows short travel time to business meetings with clients or service providers. Location in the center of the region, along with a confluence of highways, allows equally fast travel time to a delivery site or work site anywhere in the metropolitan area. This is a particularly important benefit for distribution oriented firms in the Building and Construction group. In addition, major travel streets such as Highway 99E (Grand Ave. and MLK Blvd.), Burnside St., Morrison/Belmont, 7th Ave., and Hawthorne Blvd. provide visibility and access for incoming customers. Some of the industrial firms here have a retail component and they benefit from this visibility.

The size of building sites can be an asset for small businesses. The relatively small size of available industrial space, usually between 5,000 and 20,000 square feet, is especially well suited for smaller businesses with uses such as retail/distribution or small scale production. When businesses grow beyond the capacity of their existing space, it is often difficult to find larger space or expand within the CEID, so some larger firms, like Promotion Products, Inc. have moved out.

There are other assets that are more beneficial to one industry group over another. For example, for the creative services industry group, a fiber optics line runs under the railroad tracks right through the District which may allow for future connections for technology intensive businesses. Low building values may also serve to draw in creative services businesses who need low rents and prefer unique industrial spaces. The creative service 'product' often fluctuates given the season and demand from customers. Though creative services businesses often have high value products, their business is not always stable and predictable. Because business fluctuates so much for these firms, the CEID offers low building values where they can afford to locate. According to the interviews, high profit margin one month, allows them to make up for slow business at other times. The low rents/mortgages in the CEID allow them to stay there. In addition, creative service

employees often demand a central location, according to a group of real estate brokers that participated in a focus group. These employees demand the amenities of good public transit, a unique environment, and proximity to downtown culture and restaurants.

Constraints

Similarly, there are a number of constraints that affect the District as a whole, and some that are more relevant or restrictive to particular groups. Many of these constraints relate to the physical infrastructure of the District and its aging building stock. The transportation infrastructure in the District presents many challenges to businesses that rely on efficient streets. The streets throughout the District are narrow and the blocks are the same 200 foot blocks that are found throughout Portland. The short blocks and narrow streets makes it difficult for modern trucks to navigate. It is especially difficult for these larger trucks to turn around or back into loading zones.

Historically, the District was home to many rail-dependent businesses. Now, most of the rail spurs along the north-south streets are unused. The main rail line, however, running down what would be First Avenue, is heavily used by both freight and passenger rail. Service along these tracks is frequent and the trains are often very long. While the bridge viaducts pass over the tracks, surface traffic must wait for the trains to pass, leaving businesses along Water Avenue no access to the rest of the District.

Many older buildings in the District take up a whole block, leaving no space for on site parking. In the past, this parking problem was exacerbated by commuters who parked for free in the Central Eastside and walked to their office jobs downtown. Recently, a parking permit program was begun, which allows street parking for business owners and employees only, with guests and customers limited to two hours.

The District is home to a large number of older industrial buildings. Many of these buildings are in need of significant, and expensive, seismic and Americans with Disabilities Act improvements. Some of the realtors we spoke with pointed out that many industrial users cannot pay rents that are high enough to pay for these renovations. Likewise, industrial rents cannot support the costs of demolition and new construction. Therefore, many buildings remain in poor condition. Some speculate that other uses, like office space, can attract users willing to pay higher rents that would support renovation of many of these buildings. Under current industrial zoning, however, these uses are prohibited.

The building situation is further exacerbated by the fact that many of the older buildings are poorly configured for modern industrial uses. Much of the District was built in a time before forklifts, so buildings were built with multiple stories and with low ceilings that allow stacking of product only as high as a person could reach. Older construction techniques required that buildings have many pillars and walls to support the roof and upper floors. Today, however, industrial users and distributors demand spaces high ceilings and open floor areas. Some of the Building and Construction firms in our inventory, for example, produce their products in larger, newer facilities in the Columbia Corridor, and have distribution or retail facilities in the District.

Synthesis and Opportunities: Building a Niche in the Regional Economy

This report hopes to inspire an ongoing process of exploring the strengths of the Central Eastside and the connections between District businesses and the rest of the region. The Council serves as a critical link to the cooperation of Central Eastside businesses. It is both a vehicle for communication among businesses and is important in building the competitive advantage of the District as a place to do business.

This project identified three opportunities based on the study of industry groups and the district as a whole. The following actions can be taken to build on the work that the Council currently performs.

Cooperation to provide for common needs

The exploration of interrelated businesses has revealed common issues in terms of Central Eastside businesses' needs. These include workforce, infrastructure, and other common needs and goals. The Council can continue to be an important forum for discussing the mutual needs of firms. The Council has long focused on the needs of area businesses, and can continue to work towards solving common needs of the identified industry groups.

As discussed earlier, all three industry groups indicated difficulty fulfilling the need for qualified employees. At the same time, the district is home to a number of workforce organizations mentioned earlier. This presents an opportunity for the Council to facilitate partnerships between these organizations and the Council's member businesses. Beginning such partnerships would strengthen both the workers trained by these workforce organizations and the businesses that benefit from the trained employees. The Council could research the workforce needs of its members in greater detail and approach the workforce organizations to seek to create programs that meet those needs. Firms that work together can help to ensure that there are adequate training and internship opportunities. Employees that work in competitive clusters of businesses will have more of an incentive to invest in their continued education. Even when businesses have only limited opportunities for career growth, employees may be able to move within a cluster, gaining more experience and transferring this knowledge to complementary businesses.

"The existence of a cluster signals an opportunity"

- Porter, 2000

The Council has already experimented with a mentoring program that matched employers with interns from Benson high school. While this program lasted for only a limited time, there may be new opportunities for partnering with local educational institutions. This project is another example of the Council partnering with students in a way that enhances both the student's education and the Council's organizational capacity.

The Council has also had a long history in advocating for the infrastructure needs of area businesses. By continuing to explore relationships among businesses in clusters, the Council

will be equipped to recognize common needs among firms. These common needs range from more traditional infrastructure needs to keeping up with industry trends and technological change.

Outreach to new businesses and industries

As discussed in the creative services profile, there are some businesses that do not feel that the Council represents them. It is hoped that this study can be a springboard for the Council to explore new businesses that may be included in Council activities. The Council could host meetings where they address topics relevant to specific industry groups. For example, the Council could host a speaker from the newly forming Creative Services 'Alliance' to keep local businesses abreast of collaborative efforts. The Council could use this strategy to include other industry groups. This will not only potentially increase the membership of the Council, but it will strengthen its voice when speaking about issues relating to the District as a whole.

The city initiative to highlight the Portland metropolitan region as a "creative service hub" will have a significant impact on creative service businesses in the District. The ability of these businesses to tap into the work of the Alliance and PDC will be critical. The Alliance newsletter will keep creative businesses better informed. A 'creative conference' in fall 2000 will be another opportunity to make a name for the sector. The City has identified nearly \$6 million in tax increment funds to pay for the development of a Creative Services Center. The building is being planned for downtown and will have state of the art technologies to attract creative services businesses. Businesses in the District should be made aware of how they fit in with these plans, and how they could benefit from the new building.

Marketing this district based on its key industries

Taking note of the strengths of the Central Eastside in terms of groups of interrelated businesses can help the Council to develop a unique identity for the district. The strengths and relationships of firms can be used to market the strengths of the district, helping to both draw new businesses as well as retain existing businesses.

A group of building retailers has already created a brochure that markets the district as a center for design and high quality interior and exterior building materials. These efforts help to bring new customers to the area and to build the district's reputation for high quality, value added products. It is an example of both complementary and competing firms working together for mutual benefit. Marketing of the district's strengths not only benefits those businesses that relate to building and construction, but may also have positive spillover effects. As the district becomes known for quality products, other businesses may benefit from the increased exposure.

Another example of a marketing strategy for the district could be developing the theme of a one-stop building and construction center for contractors and construction firms. While the Central Eastside may be known informally as the location to pick up electrical supplies or to buy roofing materials, the Council or cooperating businesses could market the district as a "one-stop" - a central place to go to find all kinds of subcontracting and building supplies. The potential for group marketing is stronger where a diversity of specializations of firms

within the industry group exists. This allows for a broader base of products and services to be included, which will make the marketing effort attractive to a broader customer base.

Metals firms within the Central Eastside are also significantly specialized and firms could market the district as a place with a diversity of quality metals products. Metals firms could also better link themselves with the larger regional metals cluster. The Portland metropolitan area is known for its metals products, and local metals businesses could do more to capitalize on this strength through exploring new ways to collaborate at a regional level.

Concluding Thoughts

The research and recommendations presented here illuminates the behavior and relationships among existing industry groups in the Central Eastside. For the Council, this information will serve to expand its knowledge of Central Eastside businesses as well as present opportunities for cooperation and growth that will benefit the District.

The Central Eastside has been, and will continue to be, a source of policy debate as to its future character and use. At her recent State of the City address, Portland Mayor Vera Katz advocated for eventually relocating or eliminating the I-5 freeway through the district and opening up the land for development. While this project does not tackle these far-reaching political issues, what is provided here is useful background information for anyone discussing the future of economic development in the District. It is hoped that it will be useful to city planners, economic development professionals, real estate professionals, and citizens at-large as they strive to improve the competitiveness of the Portland region.

The vitality of the Central Eastside is important to those who work, live, or recreate in the area. Through building on Portland's central city strengths as well as the clusters of the greater region, the Central Eastside will continue to carve an important niche in the regional economy.

Appendix A - Telephone Survey Questions for Business Owners

General/Background Questions:

- 1) We have some basic information about your business... Can you tell me a little bit more about your products/type of business? Who are clients? Number of employees?
- 2) How long has your business been located in the Central Eastside Industrial District?
 - Do you own or lease the building you are in?
- 3) What part of your firm is located in the CEID? (headquarters, branch, R&D, manufacturing)
- 4) Why did you locate your business in the CEID?
 - Did you locate there because of the proximity of businesses similar to your own? (Is this an advantage to you?)
 - Did you locate there because of the location or land value? Or because of investment in the area?

Questions on Factor Conditions (*such as a specialized labor pool, specialized infrastructure and selective disadvantages that drive innovation*):

- 5) What **job skills** are important to your firm?
 - How easy is it to find qualified employees?
 - Which skills do you see as being plentiful in the region? Which are in short supply?
 - How local are your employees? Do many live near your business?
 - How many employees do you have?
- 6) Are **local schools and training institutions** fulfilling your firm's workforce development needs?
 - What are their strengths? What are their shortcomings?
- 7) Which types of **infrastructure** (shipping, communications, utilities, etc.) do you consider to be especially important to your business?
 - Are your needs being satisfied in the CEID (physical building; streets/highways/railways; telecommunication services; utilities-electric, water, sewer, garbage, parking)?

Questions on Home Demand (*local customers who push companies to innovate, especially if their tastes or needs anticipate global demand*):

- 8) Where are your **customers** located?
 - Are your customers local, national, international?
 - Do you sell wholesale or retail?
- 9) Is there a difference between your local and more distant customers?

- Are local customers more demanding?

Questions on Firm Strategy, Structure, Rivalry (*involves intense local rivalry among area industries that is more motivating than foreign competition, as well as a local "culture" which influences individual industries' attitudes toward innovation and competition*):

10) Are there a large number of similar businesses (within the CEID or Portland region)?

- Who are they?
- Do you belong to a trade organization pertaining to your business? How important is this?

11) In your industry, how much interaction is there between similar firms? (collaborate in trade organization, employee training, R&D, informal meetings)

- Do these relationships/interactions benefit your business? How?

Questions on Related and Supporting Industries (*specifically internationally competitive local supplier industries, creating a high quality, supportive business infrastructure, and spurring innovation and spin-off industries*):

12) Where are your suppliers located? Are they local, regional, or beyond?

- Are local suppliers of higher quality than suppliers from other regions?
- Do you interact with suppliers to improve the quality of your products/business (i.e. *collaborate*) with your local suppliers? (trade associations, communicate, etc.)
- If you buy from distant suppliers, why do you buy from them rather than local ones? (lack of suppliers, high cost, low quality)?

Concluding Questions:

13) Do you foresee an increase or decrease of businesses like your own, or notice any trends as to the kind of businesses locating in the Central Eastside?

14) When you want to learn more about new products or industry trends (to be more competitive), where do you go to get information?

15) Among firms in your industry, who are viewed as the leaders? (in the CEID and in general)

16) How has **local government regulations or investment** (zoning, environmental regulations, the industrial sanctuary, urban renewal district, transportation or other infrastructure) affected you business?

Appendix B – Real Estate Focus Group

Date: Friday, February 11, 2000

Time: 7:30 - 8:30 a.m.

Location: Portland Community College, Workforce Training Center

Questions:

1. What strengths do you emphasize about the District when marketing the area to prospective businesses?
2. What kinds of businesses do you generally market to for location in the District?
3. What influence (if any) does the presence of similar firms have on businesses' decision to locate in the District? What are the factors that attract businesses to the District?
4. We have identified and are researching three groupings of businesses: metals, building/construction, and creative services. Do you see businesses in each of these groupings moving into or out of the District? Do you see any other trends in the types of businesses that are located in the District?
5. From your perspective, how satisfied are businesses with the infrastructure and zoning present in the District?

Appendix C – Building & Construction Business Inventory

Identified Building & Construction Businesses in the CEID

| # | Company | Address |
|-----|-------------------------------------|--------------------------|
| 1. | A B C Electric, Inc. | 135 NE 9th Ave. |
| 2. | A-1 Master Crane | 2300 SE 7th |
| 3. | Acme Construction Supply Co | 330 SE Salmon St |
| 4. | Air Filter Sales & Service | 1138 SE 10th Ave. |
| 5. | Air Supply, Inc. | 232 NE 9th Ave. |
| 6. | AIREFCO | 920 SE Caruthers |
| 7. | Airway Supply, Inc. | 1015 SE Grant |
| 8. | Albright Glass Co. | 1212 SE Powell |
| 9. | Allstate Electric Co., Inc. | 1035 SE Mill |
| 10. | Ann Sacks | 1210 SE Grand |
| 11. | Arjae Sheet Metal Co., Inc. | 240 SE 2nd Ave. |
| 12. | Associated Furniture Mfg. | 1305 SE MLK Blvd |
| 13. | B & B Contractor Supply | 1607 SE 7th Ave. |
| 14. | Bachofner Electric, Inc. | 55 SE Main St. |
| 15. | Balzer Pacific Equipment Co. | 2136 SE 8th Ave. |
| 16. | Beaver Sales | 307 SE Hawthorne |
| 17. | Best Marble & Granite | 902 SE MILL |
| 18. | Boilermakers Local 72 | 1125 SE Madison St, #201 |
| 19. | Bressie Electric Construction | 922 SE Oak St. |
| 20. | Burke Engineering Co. | 605 SE Grant St. |
| 21. | Carpet Creations Unlimited | 641 SE Mill St. |
| 22. | Carpets for Kids | 115 SE 9th Ave. |
| 23. | Cascade Contractors Supply | 2425 SE 8th Ave. |
| 24. | C B Enterprise | 1125 SE Division St. |
| 25. | Centric Elevator Corp. | 340 SE 6th Ave. |
| 26. | Charles H. Day Co., Inc. | 602 SE 11th Ave. |
| 27. | Classico Marmo | 1320 SE 8th |
| 28. | Cline Glass Co., Inc. | 1135 SE Grand Ave. |
| 29. | Coast Industrial Supply Co., Inc. | 2435 SE 10th Ave. |
| 30. | Cochran Electrical Co., Inc. | 626 SE Main St. |
| 31. | Colonial Building Maintenance, Inc. | 917 SE Lincoln Ave. |
| 32. | Conrad Stonecutting Marble & Mason | 1613 SE 6th Ave. |
| 33. | Contract Furnishings Mart | 915 SE Sandy |
| 34. | Cooper Construction Co. | 2305 SE 9th |
| 35. | Copco Refrigeration, Inc. | 840 SE Washington St. |
| 36. | Copeland Lumber Yards, Inc. | 901 NE Glisan St. |
| 37. | Creative Woodworking | 1036 SE Taylor |
| 38. | C Schiewe & Associates, Inc. | 1024 NE Davis St. |
| 39. | Custom Wood Signs | 1020 SE Clinton |
| 40. | C Z Becker | 1623 SE 12th |
| 41. | Dave Bearson Construction | 1031 SE Mill |
| 42. | Dealers Supply Co Inc | 110 SE Washington |
| 43. | Dirtworks | 819 SE Taylor |
| 44. | Disdero Lumber Co. | 1504 SE Woodward |
| 45. | Door Distributors of Oregon, Inc. | 330 SE Division Pl |
| 46. | Earth Anchors/LZB Inc | 619 SE 12th Ave. |

Identified Building & Construction Businesses in the CEID

| # | Company | Address |
|-----|---------------------------------|-----------------------|
| 47. | East Side Electric Supply, Inc. | 302 SE 7th Ave. |
| 48. | Energy Controls | 811 SE Sherman |
| 49. | Eurostone | 931 SE 6th |
| 50. | Familian NW | 2776 SE 8th |
| 51. | Fashion Tech, Inc. | 2010 SE 8th Ave. |
| 52. | Fox & Associates, Inc. | 1030 SE Clinton St. |
| 53. | General Threaded Product Co. | 2318 SE 10th Ave. |
| 54. | Generation Development Inc | 232 SE Oak |
| 55. | G F I Inc. | 425 SE 3rd |
| 56. | Hadco Supply | 920 SE Caruthers |
| 57. | Hall Tool Company | 1724 SE Grand Ave |
| 58. | Hammond Building Co. | 619 SE Division Pl |
| 59. | H E Mitchell Co., Inc. | 118 SE 8th Ave. |
| 60. | Hippo Hardware & Trading Co. | 1040 E Burnside St. |
| 61. | HVAC Inc. | 815 SE Sherman |
| 62. | Insulation Contracting Inc | 133 SE Madison |
| 63. | Interstate Mechanical Inc | 2609 SE 6th Ave. |
| 64. | Intrepid Marble & Granite | 316 SE Taylor |
| 65. | Jewell Glass Co. | 2134 SE 9th Ave.. |
| 66. | Johnson Heating Supply | 232 NE 9th |
| 67. | Johnstone Supply | 1010 SE Ash |
| 68. | Joseph F. Mower Painting | 107 SE Washington St. |
| 69. | K & M Contractors Service, Inc. | 1313 SE 12th Ave. |
| 70. | Keller Supply Co. | 2320 SE Grand |
| 71. | Kennedy Construction | 315 SE 7th |
| 72. | Knez Building Materials Co | 814 SE Market |
| 73. | Larry & Chuck's Heating Inc. | 2026 SE 11th Ave. |
| 74. | Lavier Enterprises | 321 SE Alder |
| 75. | Lim's Refrigeration | 930 SE Lincoln |
| 76. | Linoleum City | 623 SE MLK Blvd. |
| 77. | Lorentz Bruun Construction | 3636 SE 20th |
| 78. | Majestic Mantel Co. | 1015 E Burnside |
| 79. | Marblecraft | 1929 SE 10th Ave. |
| 80. | Marions Carpets Inc | 1635 SE Grand |
| 81. | Masons Supply Co. | 2637 SE 12th Ave. |
| 82. | McCary Art Glass | 125 SE 11th |
| 83. | McCoy Electric Co Inc | 2014 SE 9th Ave. |
| 84. | McCoy Stair & Millwork | 342 SE Caruthers |
| 85. | McDonald-Miller Service | 1240 SE 12th Ave. |
| 86. | Mega Pacific | 3377 SE 21st |
| 87. | Meshier Supply Co | 312 SE Stark |
| 88. | Milan Granite & Marble | 203 NE Grand |
| 89. | Miller Paint Co. | 317 SE Grand |
| 90. | Morrison & Associates | 1115 SE Morrison |
| 91. | Mt. Hood Fasteners | 1009 SE Lincoln |
| 92. | National Builders Hardware | 1019 SE 10th Ave |
| 93. | Nor-Air Inc | 211 SE Yamhill |
| 94. | Nor-Mom Distributing, Inc. | 1134 SE Stark |

Identified Building & Construction Businesses in the CEID

| # | Company | Address |
|------|------------------------------------|------------------------|
| 95. | North Pacific Lumber | 815 NE Davis |
| 96. | North Pacific Millwork | 107 SE Washington St. |
| 97. | Northwest Diamond Blade | 109 SE Alder |
| 98. | Northwest Vinyl | 621 SE 7th Ave. |
| 99. | Oregon Breakers, Inc. | 914 SE Stephens |
| 100. | Oregon Electric Co. | 1010 SE 11th |
| 101. | Oregon Roofers Supply | 1810 SE 10th Ave. |
| 102. | Oregon Tile & Marble | 1845 SE 3rd |
| 103. | Pacific Putty Co., Inc. | 1330 SE 8th Ave. |
| 104. | Pameco Aire | 1015 SE Stark St. |
| 105. | Parker Paints | 1024 SE Grand |
| 106. | Portland Contractors Supply | 120 NE 9th Ave. |
| 107. | Portland Door Controls, Inc. | 432 SE 9th Ave. |
| 108. | Pratt & Larson Tile, Inc. | 1201 SE 3rd Ave. |
| 109. | Protemp Association Inc | 807 NE Couch |
| 110. | Refrigeration Supplies Distributor | 740 SE Oak St. |
| 111. | Rejuvenation Inc | 1100 SE Grand |
| 112. | Reliant Elevator Co. | 109 SE Alder #104 |
| 113. | Robben & Sons | 2214 SE 8th |
| 114. | Robertson Hay & Wallace | 1801 SE Grand Ave. |
| 115. | Rodda Paint | 321 SE Taylor |
| 116. | Roofmaster Products Inc. | 107 SE Washington St.. |
| 117. | S B Power Tool Company | 623 SE 12th Ave. |
| 118. | Safway Steel Products | 1835 SE 10th Ave. |
| 119. | Specialty Flooring & Tile, Inc. | 2603 SE Grand Ave. |
| 120. | Standard Supply Co. | 934 SE 6th Ave. |
| 121. | Stauffer Supply Inc | 810 SE Sherman |
| 122. | Steeler Construction Supply | 814 SE Market St. |
| 123. | Stone Center, Inc. | 2603 SE Grand Ave. |
| 124. | Taylor Electric Supply/Rexel Inc | 1709 SE 3rd |
| 125. | Thermal Supply Co., Inc. | 1907 SE Grand Ave. |
| 126. | Total Mechanical, Inc. | 2416 SE 10th Ave. |
| 127. | Venetian Blind Co., Inc., The | 531 SE MLK Blvd. |
| 128. | Versatile Sash & Woodwork | 1100 SE Grand |
| 129. | WESCOR | 1110 SE Alder |
| 130. | West Side Electric | 1834 SE 8th Ave. |
| 131. | Western Engineers, Inc. | 2105 SE 9th Ave. |
| 132. | Wholesale 4, Inc. | 706 SE Grand |
| 133. | Willow Classic Woodworking | 107 SE Washington St.. |
| 134. | W L May Co. | 1120 SE Madison |
| 135. | Woodcrafters Lumber | 212 NE 6th Ave. |

Appendix D - Metals Manufacturing Business Inventory

Identified Metals Manufacturing Businesses in the CEID

| | Company | Address |
|-----|------------------------------------|-----------------------|
| 1. | Acme Welding Inc | 637 SE Salmon |
| 2. | American Finishing Techniques | 819 SE Taylor |
| 3. | American Metal Products Co. | 1532 SE 3rd Ave |
| 4. | Apex Anodizing | 627 SE Division Pl |
| 5. | Arjae Sheet Metal Co., Inc. | 240 SE 2nd Ave |
| 6. | Brong Paul Machine Works, Inc. | 421 NE 12th Ave |
| 7. | Carter Machine and Tool | 2436 SE 12th Ave |
| 8. | Cascade Coil Drapery, Inc. | 1239 SE 12th Ave |
| 9. | Chains & Sprockets | 1106 SE 6th Ave |
| 10. | Coast Cutlery | 609 SE Ankeny St |
| 11. | Custom Stamping & Mfg. | 923 SE Madison St |
| 12. | Dependable Pattern Works, Inc. | 737 SE Market St |
| 13. | General Threaded Products Co. | 2318 SE 10th Ave |
| 14. | Gilbertson Machine Shop, Inc. | 731 SE Yamhill |
| 15. | Hamblet Wire Products | 1006 SE Salmon St |
| 16. | Landeen Welding Supplies | 815 SE Oak |
| 17. | Larson and King Automotive Mach. | 1727 SE 11th |
| 18. | Leininger, R., Polishing & Plating | 627 SE Division PL |
| 19. | Machines Products, Inc. | 1629 SE 11th Ave |
| 20. | Mackinnon Tool & Machinery Co. | 1001 SE Sandy Blvd |
| 21. | Marion's Roller Bar Service, Inc. | 611 SE Harrison St |
| 22. | Martin Machine Shop | 2131 SE 11th |
| 23. | McGuire Bearing Co | 947 SE Market |
| 24. | Messenger Knife Co. | 834 SE Mill |
| 25. | Oregon Plating Co., Inc. | 436 SE 6th Ave |
| 26. | Regal Manufacturing | 2235 SE 11th Ave |
| 27. | Rhodes, H.C., Bakery Equipment | 400 NE 11th Ave |
| 28. | Royal Bearing Inc | 1924 SE 10th |
| 29. | The Irwin-Hodson Company | 2838 SE 9th |
| 30. | Total Performance Converters | 1010 E Burnside St |
| 31. | U.S. Coating, Inc. | 107 SE Washington St. |
| 32. | Willamette Pattern Works, Inc. | 2336 SE 9th Ave |

Appendix E – Creative Services Business Inventory

Identified Creative Services Businesses in the CEID

| # | Company | Address |
|-----|------------------------------------|---------------------------|
| 1. | Aden Keith Photography | 1613 SE 7th |
| 2. | Admiral Typesetting | 700 SE Hawthorne |
| 3. | Advanced Impressions | 1210 SE 7th |
| 4. | Advanced Post & Press | 321 NE Davis |
| 5. | AK Media/Ackerly | 715 NE Everett St |
| 6. | Anderson & Dabrowski Architects | 1805 SE MLK Jr. Blvd #200 |
| 7. | Andres Mark Studio | 17 SE 3rd Ave |
| 8. | Artlinx | 105 SE Taylor |
| 9. | Asci, Inc. | 1125 SE Madison St #203 |
| 10. | Audio Visual Headquarters (AVHQ) | 1634 SE 10th |
| 11. | Becker Productions | 538 SE Ash |
| 12. | Biasi Dennis Designs | 1201 SE 3rd |
| 13. | Bidegain Ray Studio | 17 SE 3rd, Suite 403 |
| 14. | Bistolas Associates, Inc. | 975 SE Sandy BLVD |
| 15. | Blackeye Design | 614 SE Hawthorne |
| 16. | Bonini Photography | 615 SE Alder |
| 17. | Bryan Potter Design | 221 SE 11th |
| 18. | Burt Peterson Photography | 2025 SE 7th Ave |
| 19. | Business Printing Co. | 2251 NE Glisan |
| 20. | Camera Graphics, Inc. | 1200 SE 7th Ave |
| 21. | Century Litho, Inc. | 2432 SE 11th Ave |
| 22. | Charlton/Engel Marketing | 419 Se Pine |
| 23. | Chris Michael Graphic Design | 700 SE Hawthorne |
| 24. | Citizens Graphic Arts | 709 SE 7th Ave |
| 25. | City Microfilming | 1516 SE 7th |
| 26. | City Sign Company, Inc. | 304 SE 2nd Ave |
| 27. | Clark Retouching | 431 NE 11th |
| 28. | Collins Mosaics, Inc. | 532 SE Belmont |
| 29. | Colourscan Inc. | 727 SE Hawthorne |
| 30. | Columbia Printing & Graphics | 801 SE Hawthorne |
| 31. | Command Post | 538 SE Ash |
| 32. | Condit Studio | 1636 SE 10th Ave |
| 33. | Coriolis Publishing | 425 SE 3rd Ave |
| 34. | Craig Holmes Illustration | 17 SE 3rd |
| 35. | Creative Photo. by Barry Sugarman | 1613 SE 7th |
| 36. | Customs Screen Printing & Embroid. | 915 NE Davis |
| 37. | Dale Montgomery Photographer | 119 SE Main St. |
| 38. | Damp Ink | 232 SE Oak |
| 39. | David Emmite Studio | 615 Se Alder #300 |
| 40. | Dempsey & Campbell Printing Co | 1700 SE 6th Ave |
| 41. | Deshler Jon Photography | 408 SE 6th Ave |
| 42. | Design Ink | 1614 SE 10th |
| 43. | Design Pacifica | 414 SE Grand Ave |
| 44. | DHX Advertising | 217 NE 8th Ave |

Identified Creative Services Businesses in the CEID

| # | Company | Address |
|-----|---------------------------------|-----------------------|
| 45. | Dyoya Design | 105 SE Taylor |
| 46. | Electro Art | 1917 Se 7th |
| 47. | Eric Griswold Photography | 1210 SE Gideon St |
| 48. | Errol Graphics | 17 SE 3rd |
| 49. | Express Copy, Inc. | 215 SE Morrison |
| 50. | Farwest Graphics Equipment | 139 SE Washington St |
| 51. | Fish Advertising | 537 SE Ash |
| 52. | Fresh Cup Magazine | 400 SE Grand Ave |
| 53. | Full Court Press | 107 SE Washington St |
| 54. | Fullfillment Specialities, Inc. | 539 SE Division Place |
| 55. | Gary's Computer Services | 1731 SE 10th |
| 56. | GLLHR BLL PHOTOGRAPHER | 537 SE Ash |
| 57. | Gramco Bookbinding, Inc. | 2635 SE 9th Ave |
| 58. | Graphic Arts Supply Co. | 122 SE 8th |
| 59. | Graphic Station | 1512 SE 7th |
| 60. | Hall of Dreams | 17 SE 3rd |
| 61. | Hand Silk Screen | 916 SE 7th |
| 62. | Hega Bojo Visual Studio | 221 SE 11th |
| 63. | Hightower Woodward Photography | 17 SE 3rd Ave |
| 64. | Holland Studio | 134 SE Taylor |
| 65. | Hollywood Costume | 635 SE Hawthorne |
| 66. | Image Control Systems, Inc. | 310 SE 6th Ave |
| 67. | Imago Theatre | 17 SE 8th |
| 68. | J L Custom Inc. | 1614 SE 7th |
| 69. | Jeff Dayne & Company | 731 NE Everett St |
| 70. | J K Advertising | 123 NE 3rd, #313 |
| 71. | Just Out | 123 NE 3rd, #465 |
| 72. | Karen Downs Graphic Design | 700 SE Hawthorne |
| 73. | KBOO-FM Foundation | 20 SE 8th |
| 74. | Kolour Services LLC | 433 NE 11th Ave |
| 75. | KPTV-12 Oregon TV | 211 SE Caruthers |
| 76. | Lasko Printing Co. | 1037 SE Ash |
| 77. | Latitudes | 611 SE Harrison |
| 78. | Lightspeed Studios, Inc. | 217 NE 8th Ave |
| 79. | Litho-Art, Inc. | 601 SE Clay St |
| 80. | Little Turtle Press | 107 SE Washington St. |
| 81. | Mark Bettinger Architects | 615 SE Alder |
| 82. | M G B Creative Group | 614 SE Hawthorne |
| 83. | Michael Cacy Studio | 537 SE Ash, #31 |
| 84. | Millcross Litho, Inc. | 1105 SE Main St |
| 85. | Minton-Smith Graphic Design | 737 SE Sandy Blvd. |
| 86. | Miracle Theater Group | 425 SE 6th |
| 87. | Mokal Music | 17 SE 3rd |
| 88. | Multnomah Printing | 1339 SE 8th |
| 89. | Munroe Photography | 111 SE Madison |
| 90. | Nangeroni Designs | 615 SE Alder |

Identified Creative Services Businesses in the CEID

| # | Company | Address |
|------|----------------------------------|---------------------|
| 91. | Negative Perfection | 930 NE Sandy Blvd |
| 92. | Neon Graphics | 1115 SE Caruthers |
| 93. | Northern Light Studio, Inc. | 2407 SE 10th Ave |
| 94. | Northwest Printing Co. | 825 SE Hawthorne |
| 95. | Northwest Sign Supply, Inc. | 1303 SE 6th Ave |
| 96. | Omni Video | 911 NE Davis |
| 97. | One World, Inc. | 525 SE 11th Ave |
| 98. | Onsite Technology | 526 SE Clay |
| 99. | Oregon Blueprint Co | 732 SE Hawthorne |
| 100. | Oregon Screen Impressions | 1215 SE 8th |
| 101. | Paula Productions | 527 SE Pine |
| 102. | Photography by John Ellis | 17 SE 3rd Ave |
| 103. | Photo-Lith Co., Inc. | 109 SE 8th Ave |
| 104. | Piper, Jim Photography | 922 SE Ankeny |
| 105. | P M A Consulting | 936 SE Ankeny |
| 106. | P M H Design | 79 SE Taylor |
| 107. | Polara Studios | 614 SE Hawthorne |
| 108. | Printing Management Group | 623 SE Mill |
| 109. | Proline Audio Visual | 1010 SE Sherman |
| 110. | Prothe Studio | 107 SE Washington |
| 111. | Raized Printing | 523 SE Yamhill |
| 112. | Rapid Bind | 2718 SE 14th |
| 113. | Revere Graphics, Inc. | 726 SE Grand Ave |
| 114. | Revisky John Photo | 537 SE Ash |
| 115. | S.I. Ford Custom Screen Printing | 1040 SE Clinton St |
| 116. | Sam Potts Studio | 111 SE Madison |
| 117. | Sidewinder Productions | 232 SE Oak |
| 118. | Sight and Sound Alliance | 538 SE Ash |
| 119. | Signs Now | 1110 SE MLK Blvd |
| 120. | Smart Stuff | 2100 SE 10th |
| 121. | Stage 4 Theater | 527 SE Pine |
| 122. | Steflik Betty Graphic Design | 615 SE Alder #303-A |
| 123. | Strode Eckert Photographic | 2136 SE 7th Ave |
| 124. | Studio 3, Inc. | 1316 SE 12th Ave |
| 125. | Studio Group, Inc. | 101 SE 12th Ave |
| 126. | The Groff Vern Studio | 101 SE 12th Ave |
| 127. | The Print Shop | 1214 SE 7th |
| 128. | The Woodcarver | 525 SE Pine |
| 129. | Total Work of Art, Inc. | 201 SE Washington |
| 130. | Undercover Records | 232 SE Oak |
| 131. | Vince's Printing Co. | 524 SE Ash St |
| 132. | Vision Crafters | 1129 SE 12th |
| 133. | Watson Printing | 326 SE Morrison |
| 134. | Webster Colcord Pictures | 305 SE 3rd |
| 135. | Western Business Promotions | 1316 SE 7th |

Appendix F - Central Eastside Organizations

| # | Organization | Address |
|-----|---|-----------------------|
| 1. | AFSCME | 815 NE Davis, Ste 200 |
| 2. | Bakers Union Local 114 | 901 SE Oak St |
| 3. | Buckman Community Association | 2021 SE Salmon |
| 4. | Carpenters Exterior & Interior Specialists Local 2154 | 1125 SE Madison |
| 5. | Catholic Community Services - Portland | 231 SE 12th Ave |
| 6. | Central Eastside Industrial Council | 33 SE Grand |
| 7. | Child Development Center | 234 SE 7th Ave |
| 8. | Citizen Review Board Judicial Dept. | 123 NE 3rd, #280 |
| 9. | City Team Ministries | 526 SE Grand Ave |
| 10. | Community Project for At Risk Youth | 1510 SE Water |
| 11. | Confederated Tribes of Grande Ronde | 1110 SE Alder |
| 12. | D H B Volunteer Program | 123 NE 3rd, #336 |
| 13. | Disadvantaged Workers of America, Inc. | 12 SE Grand Ave |
| 14. | Goodwill Industries | 1943 SE 6th Ave |
| 15. | Hooper Detox Center | 20 NE MLK Blvd |
| 16. | Hotel Employees & Restaurant Employees Local 9 | 1125 SE Madison St |
| 17. | Housing and Community Services Dept. | 123 NE 3rd, #220 |
| 18. | Industries for the Blind Program | 535 SE 12th Ave |
| 19. | Janus Youth Programs, Inc. | 738 NE Davis St |
| 20. | Jobs With Justice | 815 NE Davis |
| 21. | Join A Center for Involvement | 330 SE 11th |
| 22. | Juvenile Rights Project, Inc. | 123 NE 3rd Ave |
| 23. | Labor's Community Service Agency | 1125 SE Madison St |
| 24. | Multnomah County | 407 NE 12th |
| 25. | Multnomah County Corrections | 421 SE 10th |
| 26. | Multnomah County Elections Division | 1040 SE Morrison |
| 27. | Multnomah County Health Division | 20 NE 10th |
| 28. | NASBEV National Beverage Retailers Marketing | 400 SE Grand |
| 29. | Norse Hall Association | 111 NE 11th Ave |
| 30. | Northwest Oregon Labor Council / AFL-CIO | 1125 SE Madison St |
| 31. | Opening to Life | 532 SE Ankeny |
| 32. | Oregon Association of Clean Water Agencies | 537 SE Ash St |
| 33. | Oregon Commission for the Blind | 535 SE 12th Ave |
| 34. | Oregon Health Sciences University | 364 SE 8th Ave |
| 35. | Oregon Museum of Science and Industry | 1945 SE Water Ave |
| 36. | Oregon State Public Research Group | 1536 SE 11th Ave |
| 37. | Oregon-Columbia Chapter NECA, Inc. | 601 NE Everett St |
| 38. | Occupational Safety Health Administration | 505 SE 12th |
| 39. | Pacific Green Party | 205 SE Grand |
| 40. | Portland Community College Workforce Training Ctr. | 1626 SE Water Ave. |
| 41. | Portland Police Athletic Association | 618 SE Alder St |
| 42. | Reach Community Development Corp. | 1135 SE Salmon |
| 43. | Salvation Army ARC | 139 SE MLK Jr. Blvd |

| # | Organization | Address |
|-----|-----------------------------|----------------------|
| 44. | Solar Energy Oregon | 205 SE Grand |
| 45. | St. Francis Parish | 330 SE 11th Ave |
| 46. | United Transportation Union | 811 SE Stark |
| 47. | Volunteers of America | 537 SE Alder |
| 48. | Westside Community Focus | 1125 SE Madison #102 |
| 49. | Work Progress, Inc. | 604 SE Water |

Appendix G - Interviews

Brett Bayne, Macadam Forbes
Jeff Becker, Becker Productions
Jeff Brooks, Grubb & Ellis Co.
Ray Brossart, Arjae Sheet Metal Company.
Larry Corwin, McCoy Stair and Millwork
Tom deChenne, Norris, Beggs, and Simpson
Bob Donis, Eoff Electric
Karen Downs, Karen Downs Graphic Design
Don Drake, Melvin Mark Brokerage
Tom Duncan, Rhodes H.C. Bakery Equipment
Peter Finley Fry
Eric Griswold, Eric Griswold Photography
Mack Hamlin, American Business Properties
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Tim Holmes, DHX Advertising
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Mary Roberts, Rejuvenation
Matt Roberts, Apex Anodizing
David Schlatter, Colliers International
David Stout, Custom Stamping
Mark Teppola, National Builders Hardware
Peggy Torgeson, Signs Now
Dee Walsh, Reach Community Development Corp.
Dan Wocke, Miller Paint

Bibliography

- 1000 Friends of Oregon. June 1984. The Central Eastside Industrial District: Benefactor to Portland's Economy. Portland, Oregon.
- Abbott, Carl. 1983. Portland: Planning, Politics, and Growth in a Twentieth Century City. Lincoln and London: University of Nebraska Press.
- Beckman, Stephanie. Fall, 1997. Local Industrial Policy: Two Case Studies Reveal the Strengths and Weaknesses of Portland's Approach. Field Area Paper for Master of Urban and Regional Planning Program, Portland State University: Portland, Oregon.
- Blakely, Edward J. 1994. Planning Local Economic Development: Theory and Practice. Second Edition. Thousand Oaks, California: Sage Publications, Inc.
- Carrell, Cindi, Dottenand Associates, Inc., Marcia Douglas and Jennifer Lawrence, Workforce and Target Industries, Portland Development Commission. March 1996. *Metals Workforce Needs Assessment: A Profile of growth to the year 2000*. Portland, Oregon
- Cortwright, Joseph, Marcia Douglas, and Patricia Scruggs. June 1999. Designing Portland's Future: The Role of the Creative Services Industry and Creative Service Resource Directory. Portland, Oregon.
- City of Portland. August 1997. East Portland Community Plan Project Summary. Portland, Oregon.
- City of Portland. September 21, 1994. Prosperous Portland: The City of Portland's Economic Development Policy. Portland, Oregon.
- City of Portland, Bureau of Planning. March 1975. Portland Industrial Land: Development Possibilities. Portland, Oregon: City of Portland.
- City of Portland, Bureau of Planning. June 1976. Overall Economic Development Program. Portland, Oregon: City of Portland.
- City of Portland, Bureau of Planning. May 1978. Central Eastside Industrial Revitalization Study. Portland, Oregon: City of Portland.
- City of Portland, Bureau of Planning. August 1988. Central City Plan. Portland, Oregon: City of Portland.
- City of Portland, Bureau of Planning. January 1989. Visions for Portland's Eastside Riverfront: A Report to the City Council. Portland, Oregon: City of Portland.

- City of Portland, Bureau of Planning. July 31, 1991. Special Design Guidelines for the Design Zone of the Central Eastside District of the Central City Plan. Portland Oregon: City of Portland.
- City of Portland Development Commission, Economic Development. Sept. 7, 1984. Central Eastside Industrial District Revitalization Study. Portland, Oregon: City of Portland.
- Contacts Influential, 1999. Contacts Influential, Contacts Influential Portland.
- Fry, Peter. 1999. "Movers and Stayers in Portland, Oregon's Central Eastside Industrial District." Portland, Oregon: Portland State University.
- Fry, Peter - Editor. 1994. 1994 Business Directory. Portland, Oregon: Central Eastside Industrial Council.
- Giloth, Robert P. 1998. Jobs and Economic Development: Strategies and Practice. Thousand Oaks, California: Sage Publications, Inc.
- Goff, Phil and Joseph Karman. January 1998. East Bank 2040 Masterplan. University of Oregon's Portland Architecture Program.
- Goldfield, Robert. May 17, 1996. "Old industrial site may get new life," in the *Business Journal - Portland*, volume 13, number 12, p 1(2).
- Institute of Portland Metropolitan Studies. April 1999. Progress of A Region: The Metropolitan Portland Economy in the 1990s. Regional Connections Project, Portland State University.
- Journal of American Economic Revitalization. February 2000. Economic Development Quarterly. Volume 14, Number 1, Sage Periodicals Press.
- Lydersen, Kari. May 30, 1996. "PCC's new center serves the district well," in *The Oregonian*. Portland, Oregon.
- Metro. December 17, 1998. Urban Growth Management Functional Plan. Portland, Oregon.
- Miller, Brian K. March 1999. "Suburban Siren Song Luring Portland Firms," in *The Business Journal*. Portland, Oregon.
- Otak, Inc. December 1, 1999. Regional Industrial Land Study for the Portland-Vancouver Metropolitan Area. Portland, Oregon.
- Overstreet, James. July 7, 1997. "Sprucing up the Inner City: Industrial Park Adds Jobs to Vacant Area" in *Memphis Business Journal*, v19 n9 p1(2). Memphis, Tennessee.

- Porter, Michael E. 1998. On Competition. Boston: Harvard Business School Press.
- Portland Development Commission. December 1999. Press Release – ‘PDC Seeks Space for Creative Services Center’
- Portland Development Commission. July 1986. Central Eastside Urban Renewal Plan. Portland, Oregon: Portland Development Commission.
- Portland Development Commission. February 10, 1999. *Eastbank at Burnside: Lower East Burnside Redevelopment Plan*. Portland, Oregon: Portland Development Commission.
- Rose, Michael. “City, state land deal driven by the PDC’s east-side strategy,” in *The Business Journal*. Portland, Oregon. Volume 16, Number 35.
- Urban Land Institute. 1994. Urban Growth: Development Prospects and Issues. Washington, D.C.: Urban Land Institute.
- University of Minnesota Extension Service. 1999. Industry clusters, an economic development strategy for Minnesota, preliminary report.
<http://www.hhh.umn.edu/centers/slp/edwed/ic-rep.htm>.
- Whelan, Robert (EcoNorthwest) and Julius Dalzell (Oregon Graduate Institution) for Portland Development Commission. December 1996. *Portland Area Metals Industry Analysis*. Portland, Oregon.

