

ECONorthwest

ECONOMICS • FINANCE • PLANNING

Phone • (541) 687-0051
FAX • (541) 344-0562
info@eugene.econw.com

Suite 400
99 W. 10th Avenue
Eugene, Oregon 97401-3001

Other Offices
Portland • (503) 222-6060
Seattle • (206) 622-2403

20 October 2003

TO: Greg Winterowd, Winterbrook Planning Services
FROM: Bob Parker
SUBJECT: SITE REQUIREMENTS FOR WOODBURN TARGET INDUSTRIES

BACKGROUND

In 2001, ECONorthwest and WPS completed an Economic Opportunities Analysis (EOA) for the City of Woodburn. The EOA included a local economic development strategy that was adopted by the Woodburn City Council. That strategy requires substantial amendments to the City's planning documents, including justification for an Urban Growth Boundary expansion.

In early 2002, Winterbrook Planning (Winterbrook) began work with the City to prepare the necessary plan amendments and findings to justify the UGB expansion. As a part of Winterbrook's preliminary work, ECO developed revised population and employment forecasts. To supplement previous work conducted by ECO, Winterbrook requested ECONorthwest complete additional research on three issues:

1. The impact the City's economic development strategies will have on household incomes;
2. Demand for non-residential land implied by the revised employment forecast; and
3. Site needs for industries targeted as part of the City's economic development strategy.

This memorandum addresses the third task: site needs for target industries. It provides a summary of the results of the second task—the land need, combined with the City's economic development and targeted industries strategy drive demand for non-residential sites.

PURPOSE AND METHODS

The EOA described the general site needs of target industries. To justify a UGB expansion, however, requires more detail. Consistent with Tasks 2 and 3 of our work program, the key objectives of this memorandum are to:

- Identify the site requirements of target industries identified in the 2000 Woodburn Economic Opportunities Analysis;
- Develop a matrix of target industries and site requirements; and

We began this analysis by reviewing the 2000-2020 employment forecasts. The 2000-2020 employment forecasts provide the basis for our provisional demand estimates for non-residential land. The provisional estimates apply assumptions about employment density—specifically employees per acre, and square footage of built space per employee. ECO used additional assumptions about vacancy rate, employment that requires no built space, and other variables.

ECO initiated Task 3 with a series of interviews with realtors and developers to gather more information about site needs and preferences. We will also conduct a literature review to describe trends in industrial development, with a specific focus on business parks. Finally, we will use data from Task 2 and the EOA to estimate the number of sites, by size class and locational requirements, needed to accommodate forecast employment by target industry in Woodburn.

FINDINGS

DEMAND FOR COMMERCIAL AND INDUSTRIAL LAND

Table 1 shows the amount of new land and built space needed for each land use type in Woodburn over the 2000–2020 period. The results assume the medium employment forecast of 7,140 new jobs between 2000 and 2020. The amount of land needed (in acres) is calculated by dividing employment growth that will require new space by the employees/acre assumption for each land use type, with an adjustment for vacancy. Square feet of building space needed is calculated by multiplying employment growth that will require new building space by the square feet per employee assumption for each land use type, with an adjustment for vacancy.

Table 1. Woodburn vacant land and new built space need by land use type, medium employment forecast, 2000–2020

| Type | Acres of land | | Sq. Ft. of building space | |
|--------------|---------------|-------------|---------------------------|-------------|
| Commercial | 70.6 | 19% | 847,174 | 22% |
| Office | 41.2 | 11% | 577,391 | 15% |
| Industrial | 224.1 | 61% | 2,039,728 | 54% |
| Public | 33.3 | 9% | 332,800 | 9% |
| Total | 369.3 | 100% | 3,797,093 | 100% |

Source: ECONorthwest.

Table 1 shows that about 370 acres of *new development* and 3.80 million square feet of building space are needed to accommodate the 6,346 new employees forecasted for the next 20 years to be accommodated in buildings that will be constructed on vacant land. Industrial uses are projected to need the most land and building space, almost 225 acres and 2.04 million square feet.

SITE NEEDS OF TARGET INDUSTRIES

This section describes general site requirements and considerations for relocating and expanding commercial and industrial firms, as well as specific site requirements for target industries identified in the Woodburn Economic Opportunities Analysis (ECONorthwest,

2000). To supplement the analysis, ECO interviewed Willamette Valley realtors and developers with expertise on developments in target areas in the Willamette Valley.

The required site and building characteristics for the target industries identified in the EOA range widely. As such, a variety of parcel sizes, building types and land use designations will be required to attract target industries. Overall, the most important factors echoed throughout the literature and interviews include appropriate parcel size and location, labor force quality, access to the Interstate highway system, and proximity to customers.

The Woodburn EOA concluded that the site needs of target industries generally fall into one of four types of site classifications: large lot industrial sites (40-80+ acre parcels); campus research and development (R&D) and smaller manufacturing sites (20 to 40 acre parcels); smaller light industrial/office sites (4-20 acre parcels); and speculative space within office/flex and mixed-use developments.

Large lot target industries include Electronic and Electric Equipment manufacturing (i.e., silicon chip fabrication plants). These users are generally more land intensive (typical site requirements exceed 100 acres) and have a relatively high level of environmental and water system impacts.

Industries with firms that may locate in campus research and development (R&D) and manufacturing sites include Electronic and Electric Equipment and the rest of the manufacturing industries may fall into this category.

Smaller light industrial/office sites (4-20 acre parcels) and speculative space within office/flex and mixed-use developments could accommodate smaller manufacturing firms, firms in Wholesale Trade and all of the Non-Industrial target industries.

Table 3 summarizes the lot sizes needed for firms in target industries for which data is available at this time. The acreage figures for some target industries are slightly different than those reported in the EOA. This reflects the additional research conducted on the site needs of target industries for this analysis.

Table 3. Typical lot size requirements for firms in target industries

| Industry | Lot Size (acres) | Site Needs |
|-------------------------------------|-------------------------|-------------------|
| Printing & Publishing | 5 - 30 | |
| Stone, Clay & Glass | 10 - 65 | Flat |
| Fabricated Metals | 5 - 20 | Flat |
| Industrial Machinery | 10 - 20 | Flat |
| Electronics - Fab Plants | 100 - 300 | Suitable Soil |
| Electronics - Other | 5 - 30 | |
| Transportation Equipment | 10 - 20 | Flat |
| Trucking & Warehousing | varies | |
| Wholesale Trade | varies | |
| Non-Depository Insitutions | 1 - 5 | |
| Business Services | 1 - 5 | |
| Health Services | 1 - 10 | |
| Engineering & Management | 1 - 5 | |

Source: Woodburn Economic Opportunities Analysis, ECONorthwest, 2000.

There is a fair amount of variability between site requirements of different firms targeted in the Woodburn EOA. Parcel size varied from approximately 0.5 acres to 100+ acre sites. Placement of the firms ranged commercial to heavy industrial. Transportation, especially interstate access, was an important factor for almost all firms. While some firms needed to be close to customers, others site requirements included proximity to inputs.

The following sections describe the locational and site needs of typical firms in target industries.

Industry 27: Printing and Publishing

According to Steve Cody of the Printing Industries of America, approximately 75 percent of printing and publishing firms are small, family owned businesses with 15 or fewer employees. Site requirements for smaller firms are substantially different from the larger firms, which can employ 250 or more employees. The smaller firms can operate on relatively small parcels (approximately .5 acre) in buildings that are about 2,000 square feet. They generally locate within 20 miles of their clients, so access, in the form of a good, local transportation system, is key.

Larger firms generally run web presses and may run up to three shifts per day. They need electric utilities that offer good rates at all times, including peak and off times. Water utilities will also be an issue as the web presses are partially cooled by water. The web presses also use natural gas. Interstate and airport transportation will be a larger concern for large printers and publishers as their clients may be located throughout the United States and they may have rush jobs that must be delivered over night. They may also want rail access as they may ship paper in by the boxcar. Land requirements for larger firms are 20 to 30 acres minimum, not including buildings for administrative purposes.

Environmental concerns will also be an issue. Volatile organic compound (VOC) emission permitting laws will be a consideration. A variety of chemicals are used in the process and

the sewage process will become important as to how much processing printing waste must undergo. Septic systems are not able to handle the waste that the printing process produces. Sewage systems should be able to handle isopropyl alcohol.

It is difficult to find a printing labor force that is pre-trained. Most training is only available on the job. Many employers are looking for smart workers that are willing to start in an entry-level position and work their way up the ladder. Computer skills will be important for workers that are involved in pre-press activities, as these are almost entirely computerized.

Industry 32: Stone, Clay, Glass, and Concrete

There are three different types of glass production—flow, insulating, and coated glass. Each has different site and utility needs according to Jeff Petersen with Cardinal FG— a glass manufacturer in Michigan. Of these, flow glass has the most requirements. A significant and inexpensive supply of natural gas is critical to flow glass manufacturing as a typical firm can use up to 110,000 M BTUs per month. Additionally, a supply of good quality sand is essential to the manufacturing of flow glass.

Sites for flow glass manufacturing tend to be rectangular and approximately 65 acres. Flow glass manufacturing releases some pollutants, so there are a number of environmental issues that must be addressed and permits that must be obtained before a plant can initiate production. The community must be willing to have an industry that has a smokestack (though smoke does not necessarily come out of the stack, it is necessary to scrub the pollutants). These firms operate 24 hours per day.

Insulating and coated glass manufacturers do not require the large sites required by flow glass manufacturers—they generally need 20 to 25 acre sites and proximity to customers. Moreover, prevailing wage rates and unemployment rates will compute heavily into whether or not a location is suitable for a plant.

Freeway location and transportation issues are important to all types of glass manufacturing. Good access to the site is important for shipping reasons. Because of the fragile nature of glass, all roads must be paved.

Stone and concrete products firms are looking for 10-acre or larger sites, according to Keith Peal at Baker Rock Resources. These firms locate in heavy industrial sites and need room for a plant, a shop, truck loading and parking. Electricity and power are important utilities for these firms. Transportation facilities are also very important. Firms often look to locate satellite operations in rural areas. It is important for the firms to be located close to customers and be able to easily access them. Because they generate heavy truck traffic, staying out of residential areas is a concern.

Industry 34: Fabricated Metal Products, Except Machinery and Transportation Equipment

According to Mary Mallow of the Fabricated Metal Products Association, energy requirements will be one of the main criteria for selecting a location, especially for larger firms. Energy requirements vary between those operating large welding shops, as opposed to those with automated machines. Roughly half of the metal products shops have

approximately 10 to 20 employees and operate in relatively small shops. Access to different kinds of gas will also be important for many shops (other than natural gas).

David Hammerstein of the Oregon Precision Metal Fabricators Association commented on the negative effect the recession has had on this industry. Many metal fabricators make electronics and computer equipment and the downturn has affected the volume of work. Generally, these firms need sites that are five acres or less. Building sizes range from roughly 15,000 sq. ft. to 100,000 sq. ft. Basic utilities are needed for all shops, and manufacturers that paint their products need natural gas. Overall, fabricated metal products firms do not use an inordinate amount of electricity or natural gas.

Hammerstein noted that most production is relatively clean and there facilities could easily blend into a business park. Interstate access is beneficial, but not as critical as it is for many other industries.

Industry 35: Industrial and Commercial Machinery and Computer Equipment

Representatives of the Association for Manufacturing Technology felt there was such variety within this industry that it is almost impossible to generalize regarding site requirements. Firms range from computer manufacturers, to machine's that make rollerblades to tractors. Acreage requirements cover a vast range, as would utilities, transportation issues and labor force, depending on the type of product being produced.

Industry 36: Electronic and Other Electrical Equipment and Components, Except Computer Equipment

This industry has a variety of site needs. Businesses tend to locate in business parks or light industrial areas and generally have site needs of 5 to 30 acres. Electricity is important to manufacturers in this industry, but is not as critical as other electricity-intensive industrials. Good access is also an issue, but the products manufactured by this industry tend to be smaller and sites will not generate heavy truck traffic. This industry requires a mix of skilled and semi-skilled workers. Many of the training needs can be met through local community colleges, or on the job training.

Industry 37: Transportation Equipment

Transportation equipment includes manufacturing for passenger and cargo by land, air, and water. The vast majority of automobile manufacturers are located in the Midwest. According to industry representatives, auto parts manufacturers often locate adjacent to the auto assembly plant in order to ship parts as quickly as possible to the plant.

David Napier of the Aerospace Industries Association states that the most important factors for locating aerospace firms is access to a major airport or port. Shipment of large parts for airplanes, missiles, and space ships require large containers. Most aerospace parts firms want to locate close to an airport or port, or close to their major customers. Some parts are shipped via truck and interstate access would be important. While the workforce is fairly mobile, it is a fairly small and specialized group. Most training occurs on the job.

Industry 42: Motor Freight Transportation and Warehousing

One of the most important site location factors for motor freight transportation and warehousing is going to be the location of both customers and suppliers. Available labor, local taxes and overall business costs will then determine site determination.

Transportation in the form of access to a major interstate is critical to all firms in this category. Rail service may also be an important transportation factor.

A recent survey cited labor availability, costs, and quality as one of the main reasons for relocating or expanding into specific regions (this same survey placed the Northwest as the lowest priority for expansion, 10 percent).¹ Additional factors identified in the article are access to large markets, excellent highway system, centrally located, and a large labor pool. Larger companies have greater sensitivity to labor issues, and smaller companies rated labor costs, building and space availability and access to third-party logistics providers as key site selection factors.

According to Wally Weart, site selection consultant, motor freight transportation needs will vary depending on if the firm is a motor carrier, a less truckload (LTL), or a truck loader. A motor carrier needs the smallest amount of land, primarily used to park trailers or a garage to service trucks. They don't store goods and primarily relay trailers and change drivers. An LTL would need a 25-acre site for loading goods, parking, and loading. Truckload distributors also need large sites for handling goods and loading.

Industry 50: Wholesale Trade-Durable Goods and Industry 51: Wholesale Trade-Non-Durable Goods

These two industries are typified by extensive warehouse use. Buildings range from 10,000 to over 100,000 square feet. Such industries tend to be land intensive and have low employee-per-acre ratios. They require good transportation access, but water, sewer, and electricity demands tend to be low relative to other industries.

Industry 73: Business Services and Industry 61: Non-Depository Credit Institutions

Business services and non-depository credit institutions are most likely to locate in commercial zoned land. This could be located in a business park or in a downtown or mixed-use area. There is a wide range of site preferences, from very small (.5 acre sites) to large (20+ acres) for a corporate campus. Telecommunications are likely to be one of the most important utilities, as many businesses today require high speed Internet service.

According to Gunkemeyer et. al. one of the trends in site selection for business parks is for increasingly stringent standards. High-tech or corporate clients are attracted to locations with strict standards, which benefit the community as well by higher assessed property values, lower depreciation, and employers that pay higher average wages.²

Back office and customer service call centers are increasingly located in suburban or rural areas and also rely on good telecommunications utilities. These companies tend to look for a

¹ Mackay, John. "Getting the Goods on Distribution Sites." Area Development Online. August 2001.

² Gunkemeyer, Moss and Thomas. <http://www.rri.wvu.edu/WebBook/Thomas/development1.html#introduction>.

specific labor pool, low-cost leaseable space, reliable telecommunications and low local taxes.³ Areas with a mild climate are favored because of reduced power outages and employee absenteeism. Call centers tend to operate 24 hours per day and have a large employee base with high turnover, so a transient workforce near such areas as a university, large retirement community, or unemployed homemakers is viewed as favorable. Employee amenities including public transportation, shops and restaurants are also beneficial.

Industry 80: Health Services

Health service sites will vary depending on the kinds of activities being conducted, from very small clinics and doctor's offices, to large hospitals or research facilities. Smaller clinics may be able locate in certain commercial areas. Professional health service offices tend to desire close proximity to hospitals and often locate in commercial zones. Site requirements range from 0.5 acre to 5 or more acres depending on the scale of the operation. Good access is essential for patients.

Industry 87: Engineering, Accounting, Research, Management, and Related Services

Many of the businesses listed in Industry 87 can locate in commercial areas or business, high-tech, or science parks. Many of these services benefit from locating close to a major research university and may require a large capital investment. These sites tend to be highly specialized, and are not suitable in many locations. By bringing together university researchers and small entrepreneurs, many smaller companies can combine research and development facilities and costs.

According to Arend, typical research park occupants have unpredictable growth rates and need flexible lease options. This is an inherently risky sector, especially when start-up firms are involved. New facilities tend to have larger floor areas and are one to three stories tall. Biotech firms tend to have the largest space requirements. High quality water is often important for many of research companies. Building requirements for laboratories are different than office space and must be accommodated.

Quality of life issues may be more important for this sector than other sectors. Many firms that employ "knowledge" employees find quality of life factors as critical to recruiting an adequate labor force. Quality of life increases as a factor if a firm is relocating a large number of employees.

SUMMARY

Table 4 summarizes the number of sites by size class Woodburn will need to implement its economic development strategy. The land needs analysis concluded that Woodburn will need about 370 acres to accommodate 7,140 new employees between 2000 and 2020. Table 4 includes sites that total over 500 acres. Site needs can be conceived as a pyramid with few large sites at the top and many smaller sites at the bottom. Such a land inventory scheme is consistent with OAR 660-009 which requires cities to maintain an adequate inventory of sites.

³ Gunkemeyer, Moss and Thomas. <http://www.rri.wvu.edu/WebBook/Thomas/development1.html#introduction>.

The table identifies a need for five sites of 25 acres or larger. While inclusion of such sites in its land inventory will exceed the identified land need based on the medium range employment forecast, an adequate supply of sites will provide Woodburn more flexibility in its economic development efforts and by accommodating the siting requirements of industries targeted in the EOA.

Table 4. Summary of estimated site needs by size, Woodburn 2000-2020

| Site Size (acres) | Number of Sites | Average Site Size | Estimated Acres |
|--------------------------|------------------------|--------------------------|------------------------|
| 100 or more | 1 | 125.0 | 125.0 |
| 50-100 | 1 | 70.0 | 70.0 |
| 25-50 | 3 | 35.0 | 105.0 |
| 10-25 | 5 | 15.0 | 75.0 |
| 5-10 | 7 | 8.0 | 56.0 |
| 2-5 | 10 | 4.0 | 40.0 |
| Less than 2 | 15 | 1.0 | 15.0 |
| Total/Average | 42 | 11.6 | 486.0 |

Source: ECONorthwest

This hierarchy of need is consistent with the requirements of Goal 9 and OAR 660-009. Specifically, 660-009-0015(2) requires that “industrial and commercial uses with compatible site requirements should be grouped together into common site categories to simplify identification of site needs and subsequent planning.” Moreover, 660-009-0025(1) requires plans to identify needed sites:

The plan shall identify the approximate number and acreage of sites needed to accommodate industrial and commercial uses to implement plan policies. The need for sites should be specified in several broad "site categories," (e.g., light industrial, heavy industrial, commercial office, commercial retail, highway commercial, etc.) combining compatible uses with similar site requirements. It is not necessary to provide a different type of site for each industrial or commercial use which may locate in the planning area. Several broad site categories will provide for industrial and commercial uses likely to occur in most planning areas.

Thus, the administrative rule that implements Goal 9 recognizes that sites designated for employment can accommodate different types of employment. This is made explicit in OAR 660-009-0025(2): “Plans shall designate land suitable to meet the site needs identified in section (1) of this rule. The total acreage of land designated in each site category shall at least equal the projected land needs for each category during the 20-year planning period.”

Table 4 assumes that most site needs will be for industrial uses. Commercial and office needs will be met largely through infill and redevelopment, and public uses will be largely met on residential land. The analysis assumes that limited office and supporting commercial uses will be met on industrial lands. This is consistent with OAR 660-009-0025(2) which states “jurisdictions need not designate sites for neighborhood commercial uses in urbanizing areas if they have adopted plan policies which provide clear standards

for redesignation of residential land to provide for such uses.” Discussions with City staff have identified a special need for a single commercial node the location of which has not been identified at this point.

Table 4 provides a preliminary allocation of land needed for employment by site size. It does not, however, address many of the other key issues required by Goal 9 and OAR 660-009-0025 (designation of lands for commercial and industrial sites). Good planning and state policy dictate that factors such as serviceability, access, proximity to markets, and other issues are considered when designating lands. Woodburn has already made many decisions that are reflected in its current comprehensive plan, comprehensive plan map, and zoning ordinance. Preliminary analysis, however, suggests that Woodburn will need to expand its UGB to accommodate future commercial and industrial uses. This provides both constraints and opportunities as the City reviews potential areas for inclusion in its UGB.

APPENDIX A: LITERATURE REVIEW

One of the objectives of Task 3 was to develop a better understanding of development trends for commercial and industrial lands. To accomplish this, ECO reviewed a number of Websites and articles to determine recent trends in site selection and factors cities should consider when developing business and industrial parks. We paid particular attention to sources that addressed specific site requirement concerns for the identified target industries. ECO identified two websites that pertain entirely to site selection: Site Selection Online (www.siteselection.com); and Area Development (www.areadevelopment.com). Many articles reviewed for this appendix were drawn from these two websites. The International Economic Development Council also has a wide range of information that was quite helpful (www.iedconline.org). Finally, one of the most comprehensive articles regarding community preparedness for industry recruitment by Gunkemeyer, Moss and Thomas, titled, “Community Preparedness for Site Development.”

The literature suggests communities should address a number of issues when formulating a strategy to attract new industries. Competition for new and expanding businesses is fierce. Each year, over 15,000 U.S. communities compete for approximately 100 to 200 new major business construction projects.⁴ Most businesses locate in the same region and approximately 60% are due to expansion.⁵ Site selection criteria is driven primarily by site location, utilities, amenities, labor force, local taxes, and transportation factors.

The International Economic Development Council identified the following trends in site selection.⁶

- Cities and regional organizations are marketing via the Internet to encourage firms to locate in their area. Web sites offer extensive information about the community 24 hours a day, seven days a week and can be downloaded at any time from anywhere in the world.
- Each site location firm requires data be reported differently. Communities with quick, flexible data presentation capabilities have an advantage in the site selection process.
- One-stop permitting centers streamline the permitting process by issuing the necessary permits and licenses that a business needs to begin or expand operations.
- Performance-based incentives are used to attract businesses and assure taxpayers that they will recoup public investments like tax abatements, land write-downs, etc.

⁴ International Economic Development Council. “Economic Development Reference Guide,” <http://www.iedconline.org/hotlinks/SiteSel.html>. 10/25/02.

⁵ Ibid.

⁶ Ibid.

- States and cities are mapping their technology infrastructure, such as fiber optic networks, to help firms identify specific locations with access to needed technology resources.
- The availability of skilled workers is a high priority, sometimes more so than financial incentives. High-tech firms are seeking to be near universities and community colleges with solid technology programs.
- Buildings are being retrofitted with fiber optic cable to attract tenant firms, especially small technology firms that need fast, high-bandwidth connections to the Internet.
- Utilities work closely with local and state governments to help companies choose new sites, with the added advantage of being privately held.
- Attracting and retaining skilled workers requires that firms seek out places offering a high quality of life that is vibrant and exciting for a wide range of people and lifestyles.
- Remediated brownfields can offer large tracts of open land in or near to center cities. Remediation usually occurs with the use of redevelopment incentives for manufacturing and some retail uses.
- Geographical information systems (GIS) provide dynamic site selection information including available properties, demographics, and business analysis.
- Site location professionals conduct 30% to 55% of all site selection searches, creating demand for new U.S. and international site location consulting firms.
- Back office locations are increasingly moving from urban areas into suburban and even rural areas, taking advantage of lower wage and office costs.

The International Economic Development Council has created a site selections standard spreadsheet to help communities collect the information that industries are looking for during the site selection process. By having site data organized and readily available, communities can easily respond to industry requests for site criteria. They estimate the amount of time firms take has decreased from six months to about 45 to 60 days. Communities have to be ready to respond to requests for information on very short notice, and different firms need different kinds of information.

According to Gunkemeyer et. al. data preparation is key to responsible fiscal economic development policy, “the more a community considers site-selection criteria before it selects or develops a particular site for promotion, the lower the likelihood becomes that local leaders will need to explain why they spent so many public dollars on a site that is drawing

no interest.”⁷ The authors provide a detailed module to help communities prepare for industrial and warehouse site development.

They highlight a number of factors that must line up for a site to be considered ready for development.⁸ One of the most important factors is transportation and accessibility of the site. Whether shuttling employees to work, bringing in raw materials, or shipping final products, transportation facilities including easy freeway access to rail or airport facilities, are critical in firm site selection decision-making.

Available labor force is another key factor, often quantified by commuting patterns. “An average of 30 minutes one way for production workers, 20 minutes one way for clerical workers, and 43 minutes one way for technical and professional workers is a normal standard.”⁹ Firms also review turnover rates, productivity levels, types and amount of skilled workers for their industry in the area, management recruitment, and other labor force issues in a potential site area.

Adequate water, sewer, power, telecommunications and other key utilities are often threshold factors for many industrial manufacturers. The reliability and ability for growth are important for many industries. Not only should utilities be in place or planned for, the land should be zoned appropriately for the type of use being recruited. Project delays due to rezoning issues can be costly to the potential firm, something they are looking to avoid. Along with proper zoning, incompatible uses should be located in other areas or properly buffered.

Additional factors include clear ownership of appropriate parcels, appropriate topography, and soil conditions that are relatively flat with good drainage. Proper zoning as well as parcel size and shape are factors in site selection. Researchers note that many firms look at site requirements first, incentives second. Finally, additional studies that assess the environmental condition or archeological resources may save time for the firm being recruited and make the site more attractive.

Site-seeking employers are interested in reducing their risks, which Gunkemeyer et. al. separate into four categories; profit, workforce, infrastructure, and timing. Firms are looking for a reasonable rate of return. A general rule of thumb is for a company to show a return on their investment within 6 to 10 years. Communities can make their sites more competitive by providing incentives such as tax inducements related to job creation or low- or no-interest loans that help to reduce the company’s profit risk and decrease the time before they see a return on their investment.

Firms are also looking at reducing their workforce risk, that is, employers want to be assured of an adequate labor pool with the skills and qualities most attractive to that

⁷ Gunkemeyer, William, Myra Moss and Jerold R. Thomas, “Community Preparedness for Site Development,” Ohio State University Extension. <http://www.rri.wvu.edu/WebBook/Thomas/development1.html#introduction>. 10/25/02.

⁸ Ibid.

⁹ Ibid.

industry. Communities can address this concern with adequate education and training of its populace.

Infrastructure risk is another factor that firms look into for current and future needs. They may not risk a location if utilities, such as water or electricity, are not deemed reliable or excess capacity is unavailable for possible expansion. Additionally, fire, police, and waste management services must meet minimum requirements for many firms. Communities that invest in these services show prospective employers a track record that should project into the future.

Timing is everything—especially in today’s fast-paced environment, where firms are looking to break ground within 90 to 120 days of making a location decision. It is beneficial for the firm to begin revenue-producing activities as soon as possible, to counterbalance start-up and construction costs. Firms are looking to take advantage of market opportunities and fulfill promises to clients.

In a recent survey, 127 firms ranked the top factors in order of importance for choosing a site and a community:¹⁰

- Availability and skill level of labor force
- Pro-business government
- Corporate income tax rates
- Good roads and transportation
- Real estate prices and property taxes
- Educational system
- Proximity to customers
- Personal income tax
- Colleges and universities
- Proximity to suppliers
- Healthy “downtown”
- Proximity to competition

Investments in education and infrastructure are two incentives that a community can offer a firm looking to relocate or expand, that have long lasting benefits for the community. The local high school or college can offer classes that are specific to skills needed for the local

¹⁰ Gunkemeyer, Moss and Thomas. <http://www.rri.wvu.edu/WebBook/Thomas/development1.html#introduction>.

business, or offer facilities. Infrastructure improvements such as roads, sewer, and water may be more beneficial to potential firms.

Business, Research, and Industrial Parks

Gunkemeyer et. al. notes the importance of business and industrial parks as preparation for attracting new business and not trying to “sell from an empty wagon.” The authors state that communities must establish clear goals and objectives for their proposed development parks.

“Parks and sites should have, at a minimum, preliminary engineering plans for the location of utilities and infrastructure, a site plan showing the size and configuration of individual parcels within the property (which can be modified to suit an individual company’s needs), preliminary environmental and historical assessments, and stated general conditions related to the sale or lease and use of the property.”¹¹

Arend notes that many business parks are capitalizing on smart growth principles that include minimizing the impact of the park on the local environment and community. Some parks incorporate naturally wooded areas into their developments. Employment centers built around a transit node benefit employers and employees in reducing commuting costs and releasing land from parking requirements.

The minimum size of a park is generally about 25 acres, however, depending on the industries being courted, a much larger park may be needed. As well, a larger site may be needed to justify preliminary engineering, environmental reports, and utility and infrastructure construction. The trend is for firms to locate in parks with stricter development standards, which are seen as safeguards to protect the company’s investment by ensuring that the neighbors in the park will be kept to the same standards.

Heavy industrial and contractor uses will be looking for sites with no performance standards that often have unpaved roads, very basic utilities and outdoor storage is often uncovered or fenced. Basic performance standards are attractive for parks targeting heavy and medium industrial uses. Roads are normally paved and utilities are provided. It is allowable, in general, to build metal buildings. Moderate performance standards are conducive to medium to light industry and allow mixed-uses with buffers and some landscaping requirements. Off-street parking and loading docks are common. There are generally some architectural criteria for buildings.

The most restrictive business or industrial park has advanced performance standards with an emphasis on aesthetics. Grounds tend to resemble a “park” with low density, required landscaping, no outdoor storage, and offices with light versions of manufacturing, warehousing, or distribution operations permitted. Corporate campuses often have advanced performance standards.

Gunkemeyer et. al. outlines a strategy for developing a site that includes a feasibility assessment, completion of an engineering study and development of a market strategy.

¹¹ Gunkemeyer, Moss and Thomas. <http://www.rri.wvu.edu/WebBook/Thomas/development1.html#introduction>.

They also address costs of developing commercial and industrial sites, including site acquisition, planning and design fees, infrastructure costs, and financing costs. These fees may or may not be paid by the City.

One of the newer trends in industrial and business parks is a move towards sustainability and environmentally friendly developments. Will Denecke with Opus Development noted that parks in the Portland Metropolitan Area are incorporating more green amenities than in the past. He noted that this tends to increase the cost of parks, which is passed on to tenants. Increasingly, business owners and managers are looking for developments that incorporate environmentally friendly aspects in both design and in the relationship between the tenants of the park.

One of the goals of eco-industrial development is to work with firms to cut consumption of raw materials and exchange and recycle waste products. By connecting the firms that locate in an industrial park, supporters are hoping to mimic nature with environmentally friendly returns. These parks look to cut costs for transportation, disposal, and resources. Companies pool resources to share environmental management, waste recycling, marketing, and product development. This type of planning takes extra effort, but may benefit the community, as well as park occupants. By creating a niche, as an eco-industrial park, the community offers a unique location to firms that are concerned with their environmental image and practices.

Real estate and developer interviews

According to **Greg Specht**, most firms, regardless of industry, are looking for a number of amenities, including:

- Range of parcels between 5 and 50 acres. Larger parcels are particularly attractive because of the lack of availability in the Portland metropolitan area.
- Properly zoned land
- Sites readily available
- No environmental issues
- Flat topography
- Minimal barriers to development
- The master plan should allow for businesses that cater to industry workers, including retail, restaurants and gas stations for industry workers and activities.
- Good freeway access

One of his strongest recommendations was to create an expedited regulatory process. To implement this process, the City of Woodburn should assign a dedicated staff person to each application and allow for a fee for an expedited review. Expedition can take the form of paying a double fee to have the application reviewed by an outside engineering firm

approved by the city. Specht believed the City of Beaverton does this. He believed it would be a boon if the City could guarantee permit processing within 60 days.

A second recommendation focused on assembling large parcels. The City of Woodburn may want to consider assembling City owned parcels similar to the Portland Development Commission and reselling to industry. Assemblage may need to take the form of condemnation, if necessary.

Stu MacAdam of MacAdam Forbes believes that big box distribution warehouses will be the most likely industry to locate in Woodburn. He felt it is essential to preserve 100,000 sq. ft. or larger parcels that are close to the freeway will help entice these industries to town. He felt that Willamette Valley labor force and land cost issues are important factors for site location. In his estimation, Woodburn has a good labor force and they will have a comparative advantage to Portland metropolitan area locations if they can compile large parcels, as the Portland area is perceived as running out of large sites.

Will Denecke of Opus Development provided insight into office and industrial park developments. He noted that many parks in the Portland Metro area are incorporating more pedestrian and bicycle access, as well as overall environmental amenities, such as onsite detention and less impervious surface. Tenants are requiring high-speed Internet access and reliable power at high quantities are also important.