



534 SW Third Avenue, Suite 300 • Portland, OR 97204 • (503) 497-1000 • fax (503) 223-0073 • www.friends.org

Southern Oregon Office • PO Box 2442 • Grants Pass, OR 97528 • (541) 474-1155 • fax (541) 474-9389

Willamette Valley Office • 189 Liberty Street NE, Suite 307A • Salem, OR 97301 • (503) 371-7261 • fax (503) 371-7596

Central Oregon Office • PO Box 242 • Bend, OR 97709 • (541) 382-7557 • fax (541) 317-9129

July 14, 2009

Richard Whitman, Director
Steve Oulman, Regional Representative
Department of Land Conservation & Development
635 Capitol Street, NE
Suite 150
Salem, Or 97301

Subject: Objection to PowerPoint presentation by City of Newberg at June 5, LCDC hearing.

At the June 5, 2009 LCDC hearing on Newberg's URA, the city presented a PowerPoint presentation to the Commission.

The city presented Slide 15 as an excerpt from the record. However, it was labeled with an inaccurate and misleading caption; the caption did not appear in the record. The effect of the inaccurate caption and the accompanying oral presentation was to mislead the Commission as to what the slide actually depicts.

Similarly, the city presented slide 16 in a manner that misrepresented what it depicts.

Background

Newberg alleges a need for large, flat parcels of farm land, in part based on the on the site needs of "target industries." In the Director's decision, DLCD staff found that Newberg did not identify any target industries likely to locate in Newberg or the site requirements of any target industries.¹

Slide 15

The city presented Slide 15 as a list of Newberg's "targeted industries," and the slide was captioned as "Targeted Industries."

¹ For example, in the Director's report of May 14, the Director concluded (p. 9):

"[T]he city ... failed to identify specific target industries and attendant land needs....[T]he city lacks an adequate factual basis for its conclusions about the future need for land with specific characteristics. The director found that speculation about the future demand for a type of urban land was insufficient to justify a land need to be satisfied through designation of a URA."

The list itself does appear in Newberg's Economic Opportunities Analysis (EOA).² However, it is *not* a list of Newberg's targeted industries and it does *not* have that caption. Rather, it is described in the EOA as a list of "industry clusters" identified in the "Portland Regional Business Plan," as ones that "the Portland region should focus its economic development efforts upon."³

Furthermore, the Newberg EOA does not conclude that Newberg should target these industries. In fact, the EOA explicitly states:

"Recruiting specific new businesses to Newberg such as those listed in the Regional Business Plan should be encouraged. However, the majority of Newberg's economic development efforts should be focused upon supporting existing local businesses."⁴

As Mr. Winterowd presented Slides 15 and 16 to the Commission, he said the following:

"We applied suitability criteria but only after had done an analysis of target industries which is manifestly in the record, we have a list of them with their site sizes." (See attached transcript)

It was disingenuous for the city to label the slide "Targeted Industries," and for Mr. Winterowd to present it as a list of Newberg's target industries. The list was not identified as such in the record. As the record shows and your staff concluded, there is no analysis in the record of targeted industries for Newberg. And as described below under Slide 16, there is no list of site sizes for these targeted industries, even if they did apply to Newberg.

We discussed this issue with DLCDC Regional Representative Steve Oulman in a telephone conversation on June 30. Mr. Oulman agreed that the slide's caption and its presentation misrepresented its contents.

Slide 16

Slide 16 is captioned "Typical Lot Size Requirements for Firms in Selected Industries." It was misrepresented to LCDC as a list of site requirements for Newberg's target industries. It is not. Rather, it is a generic, representative list of lot sizes in representative employment

² Economic Opportunity Analysis (EOA), p. 13

³ EOA, p. 13

⁴ Record p. 227; EOA p. 14

classifications for which data is available, which is clear from the context in which it appears.⁵ The memo from which it is taken explains:

“Newberg has not identified formally the types of commercial or industrial development it would like to attract... because there are no published documents that target specific types of commercial and industrial development, the site suitability criteria offered in this preliminary memo are generalized.”⁶

As we explained in our oral and written testimony to the Department and Commission, and in our supplemental memo submitted on July 14, we believe there is no legal or policy basis under the Urban Reserve Rule for Newberg to use targeted industries, or any other “specific characteristics,” as a basis to designate urban reserves and, in particular, to designate large parcel of farm land in those urban reserves. The Department agrees. Therefore, there is no basis for the Commission to even consider whether or not there are “targeted industries” for Newberg or their site requirements.

However, we file this objection to insure that the record is not misrepresented. There is no evidentiary basis for any conclusions about “target industries” and Newberg.

Sincerely,



Sid Friedman
1000 Friends of Oregon



Ilsa Perse
Friends of Yamhill County

Attachments: Slide 15
Excerpts from Record (EOA)
Slide 16
Excerpts from Record (Winterowd memo).
Transcript

Cc: Barton Brierly, City of Newberg
Ken Friday, Yamhill County
Grace Schaad, Objector
Lane Shetterly, representing Objectors Mike and Cathy Stuhr
Lee and Amy Does, Objectors

⁵ In addition, the “Selected Industries” in Slide 16’s generic list of typical site requirements does not even match-up with the Portland Regional Business Plan list which the city misrepresented as a list of Newberg’s target industries.

⁶ Record p. 160

Targeted Industries

- ◆ Established
 - ◆ High Tech (Semiconductors/Silicon, Imaging & Display Technology)
 - ◆ Metals, Machinery, Transportation Equipment
 - ◆ Nursery Products
 - ◆ Specialty Foods and Food Processing
 - ◆ Lumber and Wood Products

- ◆ Emerging
 - ◆ High Tech (Nano & Micro Technology, Cyber-Security, Health/Medical Information Technology)
 - ◆ Creative Services (Advertising, Public Relations, Film and Video, Web/Internet Content and Design)
 - ◆ Sports Apparel/Recreation-Related Products

- ◆ Targeted (clusters desired to create and establish)
 - ◆ Biotech/Bioscience (Medical Devices, Bioinformatics, Pharmaceuticals, Genomics, Anti-Virals)
 - ◆ Sustainable Industries (Renewable Energy, Resource Efficiency Technologies, Sustainable Building Materials, Green Chemistry)
 - ◆ Professional Services (Architecture, Engineering, Legal and Financial Services, etc.)
 - ◆ Distribution & Logistics

Source: Newberg Economic Opportunities Analysis, Record p. 226

Excerpts from Economic Opportunities Analysis:

On January 3, 2005, the Newberg City Council passed Resolution No. 2005-2554, which stated the city's support for the framework of the Portland Regional Business Plan of the Regional Economic Development Partners...

The Regional Business Plan identifies specific, traded-sector industry clusters that should be supported to enhance the economic base of the region...

The Plan identifies the following industry clusters that the Portland region should focus its economic development efforts:

- Established
 - High Tech (Semiconductors/Silicon, Imaging & Display Technology)
 - Metals, Machinery, Transportation Equipment
 - Nursery Products
 - Specialty Foods and Food Processing
 - Lumber and Wood Products

- Emerging
 - High Tech (Nano & Micro Technology, Cyber-Security, Health/Medical Information Technology)
 - Creative Services (Advertising, Public Relations, Film and Video, Web/Internet Content and Design)
 - Sports Apparel/Recreation-Related Products

- Targeted (clusters desired to create and establish)
 - Biotech/Bioscience (Medical Devices, Bioinformatics, Pharmaceuticals, Genomics, Anti-Virals)
 - Sustainable Industries (Renewable Energy, Resource Efficiency Technologies, Sustainable Building Materials, Green Chemistry)
 - Professional Services (Architecture, Engineering, Legal and Financial Services, etc.)
 - Distribution & Logistics

* * *

Recruiting specific new businesses to Newberg such as those listed in the Regional Business Plan should be encouraged. However, the majority of Newberg's economic development efforts should be focused upon supporting existing local businesses. In the

economic development profession, there is a general principal call the “80/20 rule”, which means that 80 percent of an area’s economic development efforts should be dedicated towards the retention and expansion of existing local businesses. Another saying goes “Your good businesses are your competitor’s best recruitment prospects!” This means that a community should ensure, as much as possible, that their local businesses are happy and prosperous, or else they may look elsewhere to do business. The point is that it is far easier, effective and efficient to try to maintain and expand your economy through one’s local industries than to attract new ones.

Record pp. 225-227

Slide 16

Table 2. Typical Lot Size Requirements for Firms in Selected Industries

Industry	Lot Size (acres)	Site Needs
Printing & Publishing	5 - 10	Flat, serviceable
Stone, Clay & Glass	10 - 20	Flat, serviceable, arterial access, no residential conflict
Fabricated Metals	10 - 20	Flat, serviceable, arterial access, no residential conflict
Industrial Machinery	10 - 20	Flat, serviceable, arterial access, no residential conflict
Electronics - Fab Plants	50 - 100	Suitable soil, serviceable, arterial access
Electronics - Other	10 - 30	Flat, suitable soil, serviceable, arterial access
Transportation Equipment	10 - 30	Flat, serviceable, arterial access, no residential conflict
Trucking & Warehousing	Varies	Flat, serviceable, no residential conflict, arterial or collector access
Wholesale Trade	Varies	Flat, serviceable, no residential conflict, arterial or collector access
Non-Depository Institutions	1 - 5	Flat, serviceable
Business Services	1 - 5	Flat, serviceable, arterial or collector access
Health Services	1 - 10	Flat, serviceable, arterial or collector access
Engineering & Management	1 - 5	Moderate slope, serviceable, collector access

Source: ECONorthwest

Source: Supplemental Record p. 166



MEMORANDUM

To: Ad Hoc Committee on Newberg’s Future
 From: Greg Winterowd
 Date: REVISED – December 2, 2004
 Re: **Task 2.1– Preliminary Site Suitability Criteria for Commercial and Industrial Uses**

Under Tasks 2.1 and 3.1, Winterbrook is responsible for preparing preliminary site suitability criteria for future Commercial, Industrial, Residential and Public / Institutional land uses. This memorandum focuses on Commercial and Industrial needs and siting criteria, and raises major policy choices regarding the type of community that Newberg would like to become.

These siting criteria, once approved by the Ad Hoc Committee, would be used to evaluate land within approximately seven study areas for plan amendments. Once the Ad Hoc Committee has formulated recommendations regarding commercial and industrial siting needs, Winterbrook will work with staff to finalize a second memorandum that focuses on residential and public / institutional siting needs.

Contents

Task 2.1 Industrial and Commercial Suitability Criteria.....	1
Commercial (Retail and Office) Site Suitability Criteria.....	3
Industrial Siting Criteria	7

Task 2.1 Industrial and Commercial Suitability Criteria

Winterbrook has worked with ECONorthwest to develop preliminary suitability criteria for commercial and industrial land use categories. It is important that suitability criteria be objective and measurable, so that they can be mapped using GIS.

We have reviewed industrial and commercial site suitability criteria from comparably sized and located communities that have prepared Economic Opportunities Analyses (EOAs) as required by Statewide Planning Goal 9, Economy of the State. These include Dallas, McMinnville, Sherwood, Tualatin, Wilsonville and Woodburn.¹

¹ We have reviewed EOAs, target industries identification, and site suitability criteria from these cities. The 2003 PSU population estimates for these cities are highlighted below.

We have also considered ‘target industries’ site suitability criteria prepared by the Portland Development Commission (PDC) in coordination with the Regional Development Partnership, which is chaired by Doug Rux of the city of Tualatin. Metro recently developed industrial site suitability criteria on a regional basis to support recent UGB expansion.

For commercial siting criteria, we have reviewed two ULI (Urban Land Institute) publications: *The Shopping Center Development Handbook* and *Dollars and Cents of Shopping Centers*. We have also relied on our experience in preparing site suitability criteria in other Oregon and Washington jurisdictions.

As envisioned by the Goal 9 (Economy of the State) Rule,² cities typically look at regional, state and national trends to determine the types of commercial developments and industrial firms they want to attract. Different categories of commercial and industrial development have varying siting requirements.

Based on discussions with David Beam, Newberg has not identified formally the types of commercial or industrial development it would like to attract. This does not mean that Newberg has not thought about the issue. However, because there are no published documents that target specific types of commercial and industrial development, the site suitability criteria offered in this preliminary memorandum are generalized. We anticipate that these criteria will be refined as the Ad Hoc Committee and City Council develop a more formal list of target industries and commercial development forms, based on local experience.³

City	2003 Population
Dallas	13,270
Sherwood	14,050
Wilsonville	15,880
Newberg	19,530
Woodburn	21,560
Tualatin	24,790
McMinnville	28,890

² OAR 660-009-0025 (1) requires communities to identify the approximate number and acreage of sites needed to accommodate industrial and commercial uses to implement plan policies. This determination depends, in part, on plan policies and the City’s economic development strategy. Those determinations will be made in the future when the City takes up the issue of economic development strategies and policies. OAR 660-009-0025 (1) also indicates that the need for sites be specified in several broad “site categories”, (e.g., light industrial, heavy industrial, commercial office, commercial retail, highway commercial) that combine compatible uses with similar site requirements. The rules do not require cities to provide a different type of site for each industrial or commercial use that may locate in the planning area.

³As part of this study, ECONorthwest will conduct interviews with local and regional economic development interests to refine the types industries and commercial development Newberg would like to attract. Once “target” commercial and industrial development, then the development of site suitability criteria can be more focused.

Commercial (Retail and Office) Site Suitability Criteria

Johnson Gardner has identified a Year 2025 need for 131 buildable commercial acres compared with the 73-acre supply within the existing UGB, resulting in an aggregate shortage of 58 acres. However, it is uncertain whether land planned for commercial / office use has appropriate site characteristics for such uses.

Based on our limited understanding of retail shopping opportunities in Newberg, area residents frequently must travel to Sherwood or McMinnville to meet even routine shopping needs. For example, residents have complained of the need to drive to outside the area to buy basic items such as a “zipper”. There may be interest in attracting larger retail establishments, such as a major home improvement store. There appears to be a prevailing community view that a wider range of shopping opportunities should be available in Newberg, and that Newberg may lack the type of commercial sites needed to accommodate retail firms that may choose to locate in the community over the next 20 years.

There is a countervailing concern regarding the potential impact that new shopping centers may have on Downtown Newberg. For this reason, we offer two alternatives for the Ad Hoc Committee’s consideration: first, a traditional suburban approach to commercial land allocation, wherein large tracts of land are made available to meet demand for shopping centers; and second, a more conservative approach, that intentionally limits the supply of commercial land to encourage investment in Downtown and Highway 99W redevelopment.

Option 1: Provide Large Shopping Center Tracts

Existing large commercial sites (10-30 acres) in Newberg appear to be limited. With an existing under-supply of retail development combined with expected population growth, the demand for retail development in Newberg is strong.

The Urban Land Institute has identified three types of shopping centers that potentially could be developed in communities such as Newberg: Neighborhood Centers, Community Centers and Regional Centers.

- Neighborhood Centers typically draw from a distance of approximately 1.5 miles;
- Community Centers from 3-5 miles; and
- Regional Centers from 10-20 miles.

Generally, suburban shopping centers (like those found in Sherwood) have floor area ratios of approximately 0.25, with the remainder of the site devoted to parking. For example, a 10-acre site could be expected to accommodate 100,000 square feet of floor area. Big box developments, such as a home improvement store, typically require about a 10-acre site, depending on their size.

We suggest the following siting criteria when identifying potential shopping center sites:

1. **Site Size:** Based on the Johnson Gardner demand analysis and City staff determination that Newberg has a shortage of some 63 buildable commercial acres, it is reasonable to project that Newberg may attract one regional center (20-30 acres), 2 community centers (10-15 acres each), and 2-3 smaller neighborhood centers (3-5 acres).
2. **Topography:** Shopping Center sites should be relatively flat, generally less than 5% slope, and not more than 10% slope.
3. **Land Ownership:** Shopping centers require relatively few ownerships to allow for efficient land development. Generally, shopping center sites should have no more than 2 separately-owned parcels that combine to meet buildable site needs.
4. **Level of Development:** Sites that are developed, or partially developed, are less attractive to suburban shopping center developers. Undeveloped sites are preferred. As a proxy for measuring the existing level of development, the assessed value of improvements on a particular site should not exceed the raw land value.
5. **Natural Features:** Unbuildable land should be removed from the calculation. Lands with protected natural features (wetlands, floodplains, riparian areas) should not be considered in meeting site size requirements. Moreover, a stream or wetland that is located in the middle of a site could have the effect of dividing large retail and office sites, and reducing the area available for development.
6. **Street Access:** Neighborhood Centers should have at least collector street access, Community Centers should have arterial street access, and Regional Centers should have access to a major highway.⁴ Moreover, each street must have adequate capacity to serve proposed centers, or there must be an assured means of funding required improvements to meet Transportation Planning Rule requirements.
7. **Shape:** Commercial sites should be fairly regular in shape and should not be broken up by highways or natural features. Commercial sites should have adequate depth and should not depend on narrow, “strip mall” configurations. Sites should be at least 200 feet deep and the ratio of depth to width should be no less than 1:2.
8. **Services:** Sanitary sewer and water service must be available, and have adequate capacity, to serve the site during the planning period. The City Engineer has developed a 5-tiered ranking system to assess the relative serviceability of specific sites, with 1 being immediately serviceable at a reasonable cost and 3 being unserviceable or prohibitively expensive.
9. **Compatibility:** Except for neighborhood centers, extensive direct borders with single-family residential neighborhoods should be avoided. It is also important to minimize

Deleted: We are working with t

Deleted: to

Deleted: 3

⁴ Note that access to a major highway probably cannot be met by the proposed by-pass, based on our reading of newly-adopted Newberg Comprehensive Plan policies and land use regulations.

conflicts resulting from delivery trucks, outdoor machinery and traffic in residential areas. Therefore, we suggest that if more than 25% of the border of a site abuts property zoned for Low Density Residential use, then the site probably is not be suitable for community or regional shopping center development.

Option 2: Limit the Supply of Large Shopping Center Tracts

As noted above, existing large commercial sites (10-30 acres) in Newberg appear to be limited. However, many communities rely on redevelopment to meet long-term commercial, especially retail, needs. By limiting the supply of retail development where anticipated population growth is expected to maintain strong demand for retail, redevelopment becomes a more feasible option.

Under this option, Newberg would not seek to attract a regional shopping center, but instead would rely on community centers and neighborhood centers to meet long-term commercial needs. Such centers would have a greater community and pedestrian orientation.

Under this option, we suggest the following siting criteria when identifying potential community and neighborhood shopping center sites:

1. **Site Size:** Based on the Johnson Gardner determination that Newberg has a shortage of some 63 buildable commercial acres, it is reasonable to project that Newberg may attract 2-3 community centers (10-15 acres each) and 2-3 smaller neighborhood centers (3-5 acres).
2. **Topography:** Shopping Center sites under this option would still need to be relatively flat, generally less than 5% slope, and not more than 10% slope.
3. **Land Ownership:** By limiting the supply of land for shopping centers, developers will have a greater incentive to consolidate properties to create larger sites. Under the limited supply option, shopping center sites could have as many as 3 separately-owned parcels that combine to meet buildable site needs.
4. **Level of Development:** Sites that are developed, or partially developed, may be more attractive to developers in a limited supply situation. Although undeveloped sites are preferred, the ratio of improvement value to land value may be higher than in Option 1. In a tight market, land with a 1.5:1 improvement-to-land value ratio may still be redevelopable for retail or office use.
5. **Natural Features:** Unbuildable land should be removed from the calculation. Lands with protected natural features (wetlands, floodplains, riparian areas) should not be considered in meeting site size requirements. Streams or wetlands that are located in the middle of a site could have the effect of dividing large retail and office sites, and reducing the area available for development. However, smaller centers are more capable of designing around such features.

6. **Street Access:** Neighborhood Centers still should have at least collector street access; Community Centers still should have arterial street access. However, Regional Centers would no longer use limited highway traffic capacity.
7. **Shape:** Commercial sites should be fairly regular in shape and should not be broken up by highways or natural features. Commercial sites should have adequate depth and should not depend on narrow, “strip mall” configurations. Sites should be at least 200 feet deep and the ratio of depth to width should be no less than 1:2.
8. **Services:** Sanitary sewer and water service must be available, and have adequate capacity, to serve the site during the planning period. The City Engineer has developed a 5-tiered ranking system to assess the relative serviceability of specific sites, with 1 being immediately serviceable at a reasonable cost and 3 being unserviceable or prohibitively expensive.
9. **Compatibility:** Conflicts with single-family residential neighborhoods are less severe under the limited supply scenario, and the availability of sites will be more limited. Therefore, under Option 2, we suggest that up to 50% of the border of a site may abut property zoned for Low Density Residential use.

Deleted: We are working with the

Deleted: to

Deleted: 3

Table 1: Commercial Site Suitability Criteria

Criteria	Option 1: Suburban Model	Option 2: Limited Land Supply
1. Site Size	<ul style="list-style-type: none"> ▪ Regional: 20-30 Acres ▪ Community: 10-15 Acres ▪ Neighborhood: 3-5 Acres 	<ul style="list-style-type: none"> ▪ Regional: Not Applicable ▪ Community: 10-15 Acres ▪ Neighborhood: 3-5 Acres
2. Topography	<ul style="list-style-type: none"> ▪ 5% or less preferred ▪ Not more than 10% 	<ul style="list-style-type: none"> ▪ 5% or less preferred ▪ Not more than 10%
3. Land Ownership	2 or fewer separate ownerships	3 or fewer separate ownerships
4. Development Level	1:1 improvement to land value ratio (assessor’s records)	1.5:1 improvement to land value ratio (assessor’s records)
5. Natural Features	<ul style="list-style-type: none"> ▪ Wetlands, floodplains, streams removed from buildable area ▪ Natural features located at site perimeter 	<ul style="list-style-type: none"> ▪ Wetlands, floodplains, streams removed from buildable area ▪ Natural features located at site perimeter
6. Street Access	<ul style="list-style-type: none"> ▪ Regional: direct highway ▪ Community: direct arterial ▪ Neighborhood: direct collector 	<ul style="list-style-type: none"> ▪ Regional: not applicable ▪ Community: direct arterial ▪ Neighborhood: direct collector
7. Shape	<ul style="list-style-type: none"> ▪ At least 200 feet depth ▪ At least 1:2 width to depth ratio Regional: direct highway	<ul style="list-style-type: none"> ▪ At least 200 feet depth ▪ At least 1:2 width to depth ratio Regional: direct highway
8. Serviceability	Rank 1 or 2	Rank 1 or 2
9. Compatibility	Not more than 25% border with LDR zoned land, except for neighborhood commercial	Not more than 50% border with LDR zoned land
10. Other?		

Industrial Siting Criteria

Johnson Gardner identified a Year 2025 need for 42 buildable industrial acres. This compares with 143-acre supply within the existing UGB. However, 64 industrial acres will be required for the bypass, reducing the *aggregate* surplus to 37 acres. The bypass has the effect of dividing many of Newberg's larger industrial parcels. Thus, it is highly uncertain whether land planned for industrial / employment use has appropriate site characteristics for such uses.

The required site and building characteristics for industries that potentially could locate or expand in Newberg can be inferred from regional and local employment trends.⁵ This analysis identified a wide range of site needs. As such, a variety of parcel sizes, building types, and land use designations are required to attract target industries.

While Newberg may have a reasonably large supply of industrial land, it lacks the types of large sites necessary to attract large manufacturers, industrial parks or corporate offices that desire a campus or isolated setting. The lack of a suitable site forecloses the *opportunity* for Newberg to attract such firms.

OAR 660-009-0025 (2) requires cities to designate sufficient land in each site category to accommodate, at a minimum, the projected land needs for each category during the 20-year planning period. ECONorthwest has identified four types of site classifications for industries:

- (1) large lot industrial sites (50+ acre parcels);
- (2) campus research and development (R&D) and smaller manufacturing sites (20 to 40 acre parcels);
- (3) smaller light industrial/office sites (5 to 20 acre parcels); and
- (4) speculative space within office/flex and mixed-use developments.

This section describes some of the locational and site needs of typical firms. Large-lot target industries include electronic and electric equipment manufacturing (i.e., silicon chip fabrication plants). These uses generally require more land (typical site requirements can exceed 50 acres) and have a relatively high level of environmental and water system impacts.

Smaller light industrial/office sites (5 to 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 2 summarizes the lot sizes needed for firms in selected employment classifications for which data is available at this time.

⁵ ECONorthwest will supplement this information by interviewing realtors and developers in Newberg and the northern Willamette Valley.

Table 2. Typical Lot Size Requirements for Firms in Selected Industries

Industry	Lot Size (acres)	Site Needs
Printing & Publishing	5 - 10	Flat, serviceable
Stone, Clay & Glass	10 - 20	Flat, serviceable, arterial access, no residential conflict
Fabricated Metals	10 - 20	Flat, serviceable, arterial access, no residential conflict
Industrial Machinery	10 - 20	Flat, serviceable, arterial access, no residential conflict
Electronics - Fab Plants	50 - 100	Suitable soil, serviceable, arterial access
Electronics - Other	10 - 30	Flat, suitable soil, serviceable, arterial access
Transportation Equipment	10 - 30	Flat, serviceable, arterial access, no residential conflict
Trucking & Warehousing	Varies	Flat, serviceable, no residential conflict, arterial or collector access
Wholesale Trade	Varies	Flat, serviceable, no residential conflict, arterial or collector access
Non-Depository Institutions	1 - 5	Flat, serviceable
Business Services	1 - 5	Flat, serviceable, arterial or collector access
Health Services	1 - 10	Flat, serviceable, arterial or collector access
Engineering & Management	1 - 5	Moderate slope, serviceable, collector access

Source: ECONorthwest.

Our research on other projects found that many large companies are still seeking suburban locations for corporate campus facilities. Relatively low-cost land, flexibility for future growth, and proximity to labor force are typical reasons for locating facilities such as Nike, Intel, In-Focus, and Tektronix in suburban locations. Given the relatively high cost of land in California and Washington, and short supply of sites over 20 acres throughout the western United States, there are emerging opportunities for the northern Willamette Valley. Newberg's primary disadvantage in this is its distance from the high-tech areas of Wilsonville and Washington County, and poor access to I-5.

Site needs depend on the type of industry. The following section refers to specific industries by Standard Industrial Codes (SIC). More specific locational issues for firms in target industries include the following:

- *Land use conflicts.* According to the public officials and developers/brokers ECO interviewed in other communities, industrial areas have operational characteristics that do not blend as well with residential land uses as they do with office and mixed-use areas. Generally, as the function of industrial use intensifies (e.g., heavy

manufacturing) so to does the importance of buffering to mitigate impacts of noise, outdoor lighting, odors, traffic, and 24-hour 7-day week operations. Avoid location next to Low Density Residential plan designation.

- *Flat sites.* Flat topography (preferably slopes below 5% and definitely not more than 10%) is needed for most targeted employers.
- *Parcel configuration and parking.* Industrial users are attracted to sites that offer adequate flexibility in site circulation and building layout. In general, rectangular sites are preferred with parcel width of at least 200 feet and length that is at least two times the width for build-to-suit sites. Parcel width of at least 400 feet is desired for flex/business park developments.
- *Soil type.* Soils stability and ground vibration are fairly important considerations for special high precision manufacturing processes, such as assembling 800 megahertz or higher speed microchips.
- *Air transportation.* Proximity to air transportation may be important for high technology manufacturing industries, particularly those in the Electronic and Electric Equipment and Industrial Machinery industries. The distance of Newberg to a major airport could be a drawback in attracting certain target industries, just as access to the local airfield may be a benefit.
- *Fiber optics and telephone.* In the near future, most if not all industries shall expect access to high-speed Internet communications. Some industries, such as Internet hotels (a subset of SIC 73—Business Services), require the largest fiber optic telecommunications system available, while others need only redundant T-1 capacity. Therefore, direct access to major communication lines is required.
- *Potable water.* Potable water needs range from domestic levels to 300 thousand gallons per day. Significantly higher levels of water demand are associated with selected industries in SIC 36 (i.e., silicon chip fabrication plants). Emerging technologies, however, are allowing these industries to rely on recycled water with limited on-site water storage and filter treatment. The demand for water for fire suppression also varies. Therefore, Rank 1 or 2 water service is required.
- *Power requirements.* Electricity power requirements range from redundant 115 kilovolt amps (kva) to 230 kva. Average daily power demand generally ranges from approximately 5,000 kilowatt hours (kwh) for small business service operations to 30,000 kwh for very large manufacturing operations. The highest power requirements are associated with SICs 34, 36 (fabrication - metals, and electronic, respectively) and Internet hotels (within SIC 73). For comparison, the typical household requires 2,500 kwh per month during peak demand periods (winter months in Oregon).

- *Transportation.* All of the target industries, with the possible exception of business services, are heavily dependent on surface transportation for efficient movement of goods, commodities, and workers. Poor access to I-5 is a key constraint for Newberg and will continue to be so in the foreseeable future. Direct access (i.e., not through residential or congested commercial areas) to Highway 99W or the future bypass is an important factor for most industries. An adequate highway and arterial roadway network in Newberg and the northern Willamette Valley will be needed for all industries (including business services).
- *Transit.* Transit access is most important to the target industries with the greatest jobs density and consumer activity, particularly SIC 73 (Business Services).
- *Pedestrian and bicycle facilities.* The ability for workers to access amenities and support services such as retail, banking, and recreation areas by foot or bike is increasingly important to employers.
- *Employee training.* It is important for firms in high-tech and other industries to have nearby facilities where employees can conveniently receive training on latest technologies and skills.

In summary, there is a wide range of site requirements for industries that may choose to expand or locate in Newberg. While all of the industries rely on efficient transportation access and basic water, sewer and power infrastructure, they have varying need for parcel size, slope, configuration, and buffer treatments. Transit, pedestrian and bicycle access are needed for commuting, recreation, and access to support amenities.

In order to provide choice among industrial sites, Newberg will need more than 42 acres. It would be reasonable to assume a need for 100-150 industrial acres comprised of sites that have the characteristics outlined in Table 2. Unfortunately, such potential industrial sites typically are located on high value agricultural land. Because of the scarcity of suitable industrial sites in the Willamette Valley, the Goal 9 Rule requires that suitable sites must be protected exclusively for the types of firms that Newberg would like to attract.

Let's start off with the 1000 Friends proposition, we're going to cue up all of our exception areas but we're suppose to do some kind of evaluation under ORS 197.712 which talk about suitability and sites and Goal 9 administrative rule it talks about suitability and sites and the new goal 14 rule also separates suitable sites from buildable land when we looked at those together we thought well there's not a whole lot of point in identifying industrial land need and putting that into the urban reserves that will never meet our industrial land needs because it's in a residential area that's chopped up into small pieces and has poor access, that would be a waste of everyone's time therefore we believe that the suitable word has some meaning in this context so we applied suitability criteria but only after had done an analysis of target industries which is manifestly in the record, we have a list of them with their site sizes and that is in the report that was done by the ad hoc committee, that report by the terms of the EOA and the comprehensive plan was the basis for those plans, those plans acknowledged so we identified our target industries we then identified the types of site sizes they need to have we then went further and said with these sizes and target industries what form might they actually be developed in some would require a large single site some would be developed in industrial or business parks where they would be clustered together and that's where, and so

we systematically applied these criteria for the types of industrial land we would need and we then looked, this was in 2004/2005, we looked around the UGB and said you know there's not many places that meet these requirements these are standard requirements they aren't special to Newberg, you see these in a number of BOA (**Sid, I'm not sure that BOA is correct, I couldn't understand him completely**) around the state and then we concluded after looking through RGIS analysis that there were not enough sites around the UGB that meet the need and that exception areas would not meet those needs we then said how much can we meet in the UGB some of that need could be met within 200 acres though the year 2040 could not be met.