1998 Report on Industrial Employment, Supply and Demand

In 1998, PSRC published *Industrial Land Supply and Demand in the Central Puget Sound Region*, a snapshot of industrial employment, demand for industrial land and supply of industrial land in the region. The report looked at data collected for 60 major concentrations of industrial land that allowed an in-depth understanding of the concentrations in terms of type of industrial area, readiness for development, development activity, and potential for conversion of industrial land to nonindustrial development. The 1998 report highlighted the following findings:

- Net supply of industrial land in the region appeared to exceed demand by about 3 to 1. However, a third of the supply was not served by adequate transportation, water, and other infrastructure. Additionally, the supply was located over a four-county area and was not predominantly found in historically strong real estate markets.
- Approximately 152,000 new jobs in industrial sectors (manufacturing, wholesale trade, construction, and transportation/communications/utilities) was forecasted to be added to the region by the year 2020. This was about 20% of the forecasted job growth in the region.
- Pressure to use industrial land for nonindustrial uses led to concern for displacement of industrial jobs. Some cities addressed this concern by rewriting zoning provisions to protect industry from encroachment by nonindustrial users.

2000 Addendum on Industrial Employment, Land Use and Infrastructure

A second phase of the analysis addressed employment, land use and infrastructure issues that were brought up by the findings of the 1998 report. Major findings of the addendum included:

- Industrial land and industrial jobs were important to the regional economy. Industrial land had specific attributes such as larger parcel size, highway and rail access, and higher thresholds for impacts that were needed by industrial employers.
- Nearly all jurisdictions studied included preservation language in their industrial zoning code and/or comprehensive plans that limited nonindustrial uses in some way, but still permitted a wide range of nonindustrial uses.
- Almost half of the industrial concentrations studied had at least 1,300 jobs (of which more than 50 percent were industrial), were generally served by water and sewer, and were within 2.5 miles of a national highway. These locations were well-positioned to accommodate shorter-term demand for industrial supply.
1998 Report Methodology

Employment. Based on data from the Washington State Employment Securities Department, the report listed regional employment for industrial sectors (manufacturing, wholesale trade, construction, and transportation/communication/utilities) and nonindustrial sectors for years 1980, 1990 and 1996.

Supply. The supply analysis had five primary steps:

1. Define industrial land. Industrial land was defined as urban land designated in comprehensive plans for manufacturing, heavy or light industry, research and development, wholesale trade, warehousing, distribution, and business parks.
2. Identify industrial concentrations. The unit of analysis was a concentration of contiguous industrial land at least 25 acres in size. Concentrations greater than 180 acres in size were categorized as major concentrations.
3. Collect data. For all concentrations, information was collected on gross and net industrial land supply. For major concentrations, additional data collected included: planning and zoning designations, industrial land categorizations, transportation and infrastructure service and adequacy, environmental hazards, parcel sizes and prices, and scale of sales or leasing activity.
4. Calculate estimated net industrial land supply. Vacant and redevelopable parcels were identified as parcels with zero assessed improvement value and assessed improvement value less than 25 percent, respectively. For those parcels identified as vacant or redevelopable, land unavailable for development (critical areas, current and future infrastructure rights-of-way, and open spaces) was deducted from the total, as well as a 10 percent market factor, to arrive at net supply.
5. Describe characteristics. Data collected for major industrial concentrations was used to describe characteristics such as type of industry, readiness for development (transportation and other infrastructure, contaminants, and parcel size), development activity, and potential for erosion of industrial land supply.

Demand. The demand analysis converted job growth to an estimate of land needed to accommodate those jobs using three primary steps and the following formula: land demand = building square feet per job x job growth / building-land coverage ratio.

1. Determine building square feet per employee and building type distribution by industry. A survey of industrial land users and property managers was conducted to determine the building square feet per employee and building type distribution by industry because little research on the issue was available at the time.
2. Apply employment projections. Regional forecasts of employment growth by sector were multiplied by the mean square feet per employee for that sector.
3. Determine land area needed outside of buildings. Building-to-land coverage ratios were used to determine total land needed. The coverage ratio differed by type of building.

2000 Addendum Methodology

Employment. State employment data were analyzed at the sub-sector level to further assess employment on industrial versus nonindustrial lands.

Land Use. To understand the extent to which preservation of industrial land is reflected in local development regulations, the zoning codes of 13 jurisdictions in the region were reviewed. The evaluation noted the range of nonindustrial uses permitted in industrial zones.

Infrastructure. To investigate the shorter-term usefulness of the industrial land supply identified in the 1998 report, information on proximity to a national highway, water and sewer infrastructure adequacy, and existing employment were assessed for major concentrations of industrial land.