



## Employment Data Series / MAY 2010 /

PSRC produces several versions of employment data for specific purposes. Differences exist among them, and data users should understand these distinctions in order to make appropriate—and avoid making inappropriate—comparisons between various data series.

### Covered Employment Estimates

PSRC's source for actual job counts is derived from the Quarterly Census of Employment and Wages (QCEW), a dataset generated from unemployment insurance reporting requirements and controlled by the Washington State Employment Security Department (ESD).<sup>1</sup> The database contains records of all business establishments required to participate in the state's unemployment insurance program, along with number of covered employees, total wages paid, and industry code. PSRC then assigns geographic x,y coordinates to the records based on site address. Individual records in the dataset are confidential as stipulated by state and federal law, and summary values are subject to suppression.<sup>2</sup>

Private sector jobs in the database are categorized by the current North American Industrial Classification System (NAICS); public sector jobs are categorized separately, either as "Education" (public schools and colleges), or "Government" (all else). Because federally recognized tribes are sovereign governments, all of their employees are categorized "Government," whether they provide public services or work in a tribally owned business.

Some job categories are exempt from the State Employment Security Act and thus absent from the database: unincorporated self-employed, jobs paid purely on commission, corporate officers, uniformed military, elected officials, church jobs, and railroad workers. Exempt jobs comprise roughly 10 percent of all employment.<sup>3</sup> Additionally, PSRC removes some records for workplaces without valid addresses, temporary agency employment (not reported at place of work), and ski resorts (seasonal concentrations). The database is further supplemented by a periodic survey of public sector employers and the Boeing Company, the results of which are used to disaggregate headquarters employment in the database to actual multiple workplaces.

**Direct estimates.** The resulting database is both geographically detailed and directly reported. Estimates for local planning geographies—such as regional centers, buffers of transit stations, or economic development zones—are typically direct estimates from this database.

**Benchmarked estimates.** The covered employment database is the also source for the city- and tract-level covered employment estimates PSRC publishes on its website. However, these estimates are benchmarked; i.e., proportionally adjusted to match preliminary ESD (and U.S. Bureau of Labor Statistics) estimates for the same reporting period (March), at the county and major sector level. This compensates for the employment records that were removed from the database because they could not be precisely sited (as mentioned above).

<sup>1</sup> ES-202 is another, obsolete name for this dataset, referencing the form employers were previously asked to submit.

<sup>2</sup> See <http://www.bls.gov/bls/confidentiality.htm>, <http://apps.leg.wa.gov/rcw/default.aspx?cite=50.13>. State agencies and BLS use suppression rules for QCEW data rather than alternative methods to obscure confidential values.

<sup>3</sup> BLS estimates of exempt categories for 2008 accounted for nearly 8 percent of all jobs; See <http://www.bls.gov/cew/cewbultn.htm>.

## Total Employment Estimates

Some planning applications require estimates for all jobs, including those absent from the QCEW. PSRC uses the following method to estimate total employment from the QCEW covered employment database: (1) multiplier factors by major industry sector are derived from several large-scale government survey sources and applied to the private sector Covered Employment estimates, and (2) uniformed military estimates from the Department of Defense (DOD) are added to the public sector estimates.

In light of additional assumptions, these estimates are by nature more comprehensive but less precise than the Covered Employment estimates. The central presumption of a multiplier—that unreported jobs locate proportionally to reported ones—especially erodes at smaller scales. Underlying industrial codes are unchanged.

## Forecast Employment Series

**Regional forecast.** PSRC’s regional economic model uses and produces estimates of what is termed wage and salary employment. This includes various jobs types exempt from Employment Security Act reporting, but does not capture agricultural and domestic jobs, or the unincorporated self-employed (i.e., proprietors).

**Small Area Forecast.** PSRC’s Population, Households, and Employment Forecasts (also known as the Small Area Forecasts) include all jobs but the construction/resource sector (most construction jobs move repeatedly during the year and often do not report worksite location; the same is true for a large fraction of resource jobs). Small Area Forecasts use Standard Industrial Code (SIC) for sector classification rather than NAICS. Two large workplaces—the University of Washington, Seattle, and Puget Sound Naval Shipyard—are reclassified in both regional and subregional forecasts, and educational services are classified with public education rather than the services sector (see table below). These exclusions and reclassifications will become unnecessary when PSRC transitions to UrbanSim, its next integrated land use and travel modeling system.

	Covered Employment (Direct)	Covered Employment (Benchmarked)	Total Employment	Regional Forecast Employment	Small Area Forecast Employment
Industrial categories	NAICS	NAICS	NAICS	NAICS	SIC
Corresponds to preliminary ESD employment estimates	N	Y	N	N	N
Construction/resource jobs	Y	Y	Y	Y	N
Agricultural & domestic jobs	Y	Y	Y	N	Y
Corporate officers, elected officials, church jobs, railroad jobs, etc.	N	N	Y (Scaled)	Y	Y (Scaled)
Proprietors (unincorporated self-employed)	N	N	Y	N	Y
Stationed uniformed military	N	N	Y	Y	Y
Afloat military (to ship’s naval base)	N	N	Y	Y	Y
Tribal businesses (including casinos) as:	Government	Government	Government	Government	Government
University of Washington as:	Education	Education	Education	Government	Government
P. S. Naval Shipyard as:	Government	Government	Government	Manufacturing	Manufacturing
Private schools as:	(Ed) Services	(Ed) Services	(Ed) Services	Education	Education