State Employment: An Examination of the Data with Focus on Higher Education

A recent *Seattle Post Intelligencer* article reported on state employment growth 1996-2005.¹ It noted that state employment grew 16.3 percent and significantly outpaced the 12.4 percent population growth. Particularly implicated was Higher Education with a 24 percent increase in full time employment.

The analysis was based on a miscommunication between Washington State Office of Financial Management (OFM) and the Evergreen Foundation.

In cooperation with the OFM research analyst who provided the data for the original PI article, I have established a detailed new dataset to clarify state employment growth.

The core issue is that OFM identifies state employment **but not funding source**. Only a fraction of total state employment is actually be funded by state appropriations. The remaining employment is funded by alternative funds **but still reported as "state employment**." The PI article assumes all state employment was state funded.

No other sector is more distorted by this error than higher education. Correcting the data for the error associated with Washington's higher education system alone, lowers the growth rate of total state funded employment by 4 percent to 12.3 percent (01 percent *less* than the population growth rate).

<u>In addition, the PI article featured four</u> other, major problems

1) Comparing state funded employment to state population is misleading. Meaningful measures of state employment compare agency performance with workload.

For example, the Department of Corrections' 32 percent upswing in employment must be compared to a 42 percent increase in the state prison population (keyword: Mandatory Sentencing).

The same is true for the case of higher education: Between 1993 and 2005, the number of students taught at the University of Washington increased 17.7 percent, while state-funded UW employment fell 17 percent. Overall, state funded employment for higher education in Washington State fell 7.7 percent over that period. (see Tables 1 and 2). Between 1996 and 2005 (the time period under

¹ State government's hiring outpaces population growth, August 1 2005 http://seattlepi.nwsource.com/local/234770_gworkers01.html

consideration in the article, higher ed state funded employment rose 17.9 percent (not 24 percent as reported).

2) Growth in state employment as reported by the Office of Financial Management and the Seattle PI may be a POSITIVE event for the State

Some state agencies depend not only on state funding. They may be efficient enterprises that create employment on the basis of alternative funding sources. For example, the Washington higher education sector generates more self financed jobs than it saw funded by the state – twice as many (table 3).

Some of the non-state funded job growth may again be funded by citizens' payments (such as tuition, housing, parking). Other employment growth may purely be a sign of excellence. Table 4 reports the number of jobs created by grants and contracts across the state by Higher Education – a total of 12,163 in 2005.

The more successful Higher Education (and any other state sector) is in attracting non-state funds, the worse the state appears in aggregate employment statistics that do not distinguish between <u>state funded</u> and <u>non-state funded</u> employment.

One can actually identify a large job creation multiplier effect that quantifies how many non-state funded jobs are created for each state funded position in higher education. One state funded positions creates up to 4 non-state funded jobs (see UW, Table 5).

3) Time Frame

The choice of the base year is important if one uses simple "beginning versus end" comparisons. For example, depending on the base year being 1993 or 1994, total state funding either declines 8 percent or increases 8 percent by 2005 (table 2).

1) Workload and Price Considerations

State government faces mandates. It provides prisons, roads, schools, for example. Costs for these mandates vary according to workloads (i.e., number of prisoners, cars, students) **and** according to price changes in a particular sector. For example, the cost of road maintenance roads changes even when only the price of gas fluctuates. The state itself identifies future budget drivers in Table 6. It will be unlikely that the state can reduce its FTEs in these areas; and it would be nonsensical to align FTE growth in these areas with population growth.

Table 1 Higher Education State Funded FTEs

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5901	5878	5707	4141	3777	3924	3932	4060	3886	4000	4056	4103	3997	4966	4738
3423	3382	3355	2608	2495	2532	2678	2692	2787	2625	2703	2643	2667	2666	2728
944	917	914	613	609	630	640	596	606	617	585	735	892	928	894
762	759	756	571	571	614	639	622	613	680	677	850	621	629	988
509	485	498	359	363	406	435	461	449	504	505	501	442	944	422
1053	1058	1024	928	910	897	957	1062	1048	1068	1142	1147	1162	1128	1199
7279	7473	8595	8544	8871	7315	7479	7727	7865	7962	8290	8362	8435	8257	8256
0	0	0	0	0	0	0	0	5	9	16	16	16	16	16
0	1	2	4	3	5	5	9	0	0	0	0	0	0	0
19871	19951	20851	17768	17599	16322	16765	17229	17259	17464	17975	18356	18231	19534	19241
	5901 3423 944 762 509 1053 7279 0	5901 5878 3423 3382 944 917 762 759 509 485 1053 1058 7279 7473 0 0 0 1	5901 5878 5707 3423 3382 3355 944 917 914 762 759 756 509 485 498 1053 1058 1024 7279 7473 8595 0 0 0 0 1 2	5901 5878 5707 4141 3423 3382 3355 2608 944 917 914 613 762 759 756 571 509 485 498 359 1053 1058 1024 928 7279 7473 8595 8544 0 0 0 0 0 1 2 4	1991 1992 1993 1994 1995 5901 5878 5707 4141 3777 3423 3382 3355 2608 2495 944 917 914 613 609 762 759 756 571 571 509 485 498 359 363 1053 1058 1024 928 910 7279 7473 8595 8544 8871 0 0 0 0 0 1 2 4 3	1991 1992 1993 1994 1995 1996 5901 5878 5707 4141 3777 3924 3423 3382 3355 2608 2495 2532 944 917 914 613 609 630 762 759 756 571 571 614 509 485 498 359 363 406 1053 1058 1024 928 910 897 7279 7473 8595 8544 8871 7315 0 0 0 0 0 0 1 2 4 3 5	1991 1992 1993 1994 1995 1996 1997 5901 5878 5707 4141 3777 3924 3932 3423 3382 3355 2608 2495 2532 2678 944 917 914 613 609 630 640 762 759 756 571 571 614 639 509 485 498 359 363 406 435 1053 1058 1024 928 910 897 957 7279 7473 8595 8544 8871 7315 7479 0 0 0 0 0 0 0 1 2 4 3 5 5	1991 1992 1993 1994 1995 1996 1997 1998 5901 5878 5707 4141 3777 3924 3932 4060 3423 3382 3355 2608 2495 2532 2678 2692 944 917 914 613 609 630 640 596 762 759 756 571 571 614 639 622 509 485 498 359 363 406 435 461 1053 1058 1024 928 910 897 957 1062 7279 7473 8595 8544 8871 7315 7479 7727 0 0 0 0 0 0 0 0 1 2 4 3 5 5 9	1991 1992 1993 1994 1995 1996 1997 1998 1999 5901 5878 5707 4141 3777 3924 3932 4060 3886 3423 3382 3355 2608 2495 2532 2678 2692 2787 944 917 914 613 609 630 640 596 606 762 759 756 571 571 614 639 622 613 509 485 498 359 363 406 435 461 449 1053 1058 1024 928 910 897 957 1062 1048 7279 7473 8595 8544 8871 7315 7479 7727 7865 0 0 0 0 0 0 5 9 0 0 1 2 4 3 5 5	1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 5901 5878 5707 4141 3777 3924 3932 4060 3886 4000 3423 3382 3355 2608 2495 2532 2678 2692 2787 2625 944 917 914 613 609 630 640 596 606 617 762 759 756 571 571 614 639 622 613 680 509 485 498 359 363 406 435 461 449 504 1053 1058 1024 928 910 897 957 1062 1048 1068 7279 7473 8595 8544 8871 7315 7479 7727 7865 7962 0 0 0 0 0 0 5 9	1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 5901 5878 5707 4141 3777 3924 3932 4060 3886 4000 4056 3423 3382 3355 2608 2495 2532 2678 2692 2787 2625 2703 944 917 914 613 609 630 640 596 606 617 585 762 759 756 571 571 614 639 622 613 680 677 509 485 498 359 363 406 435 461 449 504 505 1053 1058 1024 928 910 897 957 1062 1048 1068 1142 7279 7473 8595 8544 8871 7315 7479 7727 7865 7962 8290	1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 5901 5878 5707 4141 3777 3924 3932 4060 3886 4000 4056 4103 3423 3382 3355 2608 2495 2532 2678 2692 2787 2625 2703 2643 944 917 914 613 609 630 640 596 606 617 585 735 762 759 756 571 571 614 639 622 613 680 677 850 509 485 498 359 363 406 435 461 449 504 505 501 1053 1058 1024 928 910 897 957 1062 1048 1068 1142 1147 7279 7473 8595 8544	1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 5901 5878 5707 4141 3777 3924 3932 4060 3886 4000 4056 4103 3997 3423 3382 3355 2608 2495 2532 2678 2692 2787 2625 2703 2643 2667 944 917 914 613 609 630 640 596 606 617 585 735 892 762 759 756 571 571 614 639 622 613 680 677 850 621 509 485 498 359 363 406 435 461 449 504 505 501 442 1053 1058 1024 928 910 897 957 1062 1048 1068 1142	1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 5901 5878 5707 4141 3777 3924 3932 4060 3886 4000 4056 4103 3997 4966 3423 3382 3355 2608 2495 2532 2678 2692 2787 2625 2703 2643 2667 2666 944 917 914 613 609 630 640 596 606 617 585 735 892 928 762 759 756 571 571 614 639 622 613 680 677 850 621 629 509 485 498 359 363 406 435 461 449 504 505 501 442 944 1053 1058 1024 928 910

Table 2
Higher Education State Funded FTEs
Percentage Changes

	1991 - 2005	1992 - 2005	1993 - 2005	1994 - 2005	1995 - 2005	1996 - 2005	1997 - 2005	1998 - 2005	1999 - 2005	2000 - 2005	2001 - 2005	2002 - 2005	2003 - 2005	2004 - 2005
UW	-19.71%	-19.38%	-16.98%	14.44%	25.44%	20.77%	20.52%	16.72%	21.95%	18.46%	16.81%	15.50%	18.56%	-4.58%
WSU	-20.29%	-19.34%	-18.68%	4.59%	9.34%	7.75%	1.88%	1.35%	-2.11%	3.95%	0.92%	3.24%	2.30%	2.32%
EWU	-5.29%	-2.42%	-2.19%	45.83%	46.79%	41.88%	39.84%	50.09%	47.50%	45.00%	52.93%	21.69%	0.27%	-3.61%
CWU	29.73%	30.24%	30.76%	73.15%	73.17%	61.03%	54.57%	58.86%	61.16%	45.35%	45.89%	16.25%	59.13%	57.16%
TESC	-17.05%	-12.94%	-15.26%	17.53%	16.33%	4.02%	-3.07%	-8.57%	-6.10%	-16.34%	-16.46%	-15.82%	-4.50%	-55.32%
WWU	13.86%	13.38%	17.08%	29.21%	31.75%	33.68%	25.24%	12.92%	14.47%	12.32%	5.01%	4.55%	3.17%	6.32%
CTC	13.42%	10.48%	-3.94%	-3.37%	-6.93%	12.86%	10.39%	6.83%	4.97%	3.68%	-0.42%	-1.28%	-2.13%	-0.02%
SIRTI									227.42%	78.62%	0.00%	0.00%	0.00%	0.00%
Total	-3.17%	-3.56%	-7.72%	8.29%	9.33%	17.88%	14.77%	11.68%	11.49%	10.18%	7.05%	4.82%	5.54%	-1.50%

Table 3
Higher Education Non-State Funded FTEs

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
UW	11,210	11,784	12,334	13,646	14,278	14,523	14,964	15,315	16,003	16,434	17,168	18,819	18,425	18,238	18,844
WSU	2,286	2,419	2,494	3,218	3,423	3,597	3,651	3,704	3,675	3,841	3,810	4,343	4,364	4,409	4,719
EWU	469	516	492	736	728	700	707	737	772	785	863	862	715	596	616
CWU	469	499	504	617	672	714	739	763	687	763	802	1,810	1,174	1,204	1,020
TESC	189	214	222	341	360	332	355	369	346	312	350	363	388	862	421
SIRTI	0	0	0	0	0	0	0	0	16	11	2	5	6	7	8
Jt C	0	0	0	1	6	17	22	20	0	0	0	0	0	0	0
WWU	591	670	701	739	764	765	797	899	881	875	916	921	894	877	924
CTCs	2,704	2,931	3,422	3,528	3,761	5,393	5,607	5,934	6,252	6,688	6,933	7,143	7,227	7,593	7,772
Total	17,918	19,034	20,170	22,827	23,990	26,041	26,841	27,742	28,631	29,709	30,844	34,266	33,192	33,785	34,323

Table 4
Higher Education Non-State Funded FTEs
Grants and Contracts

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
UW	4620	4951	5121	5221	5322	5501	5531	5651	5842	6186	6267	6740	7189	7487	7506
WSU	950	1036	1120	1106	1069	1059	1061	1088	1152	1181	1170	1210	1317	1365	1369
EWU	171	206	196	209	194	204	213	229	238	220	234	230	235	236	226
CWU	45	51	52	51	59	59	67	79	84	77	95	115	89	95	107
TESC	61	65	69	71	69	71	77	75	72	69	72	74	82	148	75
SIRTI	0	0	0	0	0	0	0	0	11	11	1	1	0	1	0
JTC	0	0	0		4	8	10	8	0	0	0	0	0	0	0
WWU	162	201	211	179	169	150	154	173	158	123	159	157	175	149	148
CTC	1334	1386	1621	1709	1788	1813	1892	1952	2125	2346	2588	2701	2752	2775	2733
Total	7344	7897	8390	8546	8674	8866	9005	9254	9682	10214	10585	11228	11841	12256	12163

Table 5
Job Multiplier
Non-State Funded Jobs Per State Funded FTE

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
University of Washington	3.7	3.8	3.8	4.1	4.1	4.2	4.6	4.6	3.7	4.0
Washington State University	1.4	1.4	1.4	1.3	1.5	1.4	1.6	1.6	1.7	1.7
Eastern Washington University	1.1	1.1	1.2	1.3	1.3	1.5	1.2	0.8	0.6	0.7
Central Washington University	1.2	1.2	1.2	1.1	1.1	1.2	2.1	1.9	1.9	1.0
The Evergreen State College	0.8	0.8	0.8	0.8	0.6	0.7	0.7	0.9	0.9	1.0
Spokane Intercollege R&T Institute	NA	NA	NA	3.3	1.3	0.1	0.3	0.4	0.4	0.5
Joint Center for Higher Education	3.4	4.0	2.3	NA						
Western Washington University	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Community/Technical College System	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9

Table 6Projected Change in Budget Driver Populations 2005-2009

