

Figure 1: Example of OES Survey Form

OCCUPATIONAL TITLE AND DESCRIPTION OF DUTIES	NUMBER OF EMPLOYEES IN SELECTED WAGE RANGES (Report Part-time Workers According to an Hourly Rate)													Total Employment
	A	B	C	D	E	F	G	H	I	J	K	L	T	
	Hourly (part-time or full-time)	under \$6.75 - 8.49	\$8.50 - 10.74	\$10.75 - 13.49	\$13.50 - 16.99	\$17.00 - 21.49	\$21.50 - 27.24	\$27.25 - 34.49	\$34.50 - 43.74	\$43.75 - 55.49	\$55.50 - 69.99	\$70.00 and over		
Annual (full-time only)	under \$14,040	\$14,040 - 17,679	\$17,680 - 22,359	\$22,360 - 28,079	\$28,080 - 35,359	\$35,360 - 44,719	\$44,720 - 56,679	\$56,680 - 71,709	\$71,710 - 90,999	\$91,000 - 115,439	\$115,440 - 145,599	\$145,600 and over		

Management Occupations

(Managers in this section have other managers/supervisors reporting to them.)

Chief Executives - Determine and formulate policies and provide the overall direction of companies or private and public sector organizations within the guidelines set up by a board of directors or similar governing body. 11-1011	A	B	C	D	E	F	G	H	I	J	K	L	T
General and Operations Managers - Plan, direct, or coordinate the operations of companies or public and private sector organizations. Duties include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse in nature to be classified in any one functional area of management or administration. 11-1021	A	B	C	D	E	F	G	H	I	J	K	L	T
Financial Managers - <i>(Controller)</i> Plan, direct, and coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment. 11-3031	A	B	C	D	E	F	G	H	I	J	K	L	T
Compensation and Benefits Managers - Plan, direct, or coordinate compensation and benefits activities and staff of an organization. Include job analysis and position description managers. 11-3041	A	B	C	D	E	F	G	H	I	J	K	L	T
Industrial Production Managers - <i>(Quality Control Manager)</i> Plan, direct, or coordinate the work activities and resources necessary for manufacturing products in accordance with cost, quality, and quantity specifications. 11-3051	A	B	C	D	E	F	G	H	I	J	K	L	T

Figure 2: Reported Weekly Earnings from CPS Measures of Central Tendency-Dr. Sandra West.

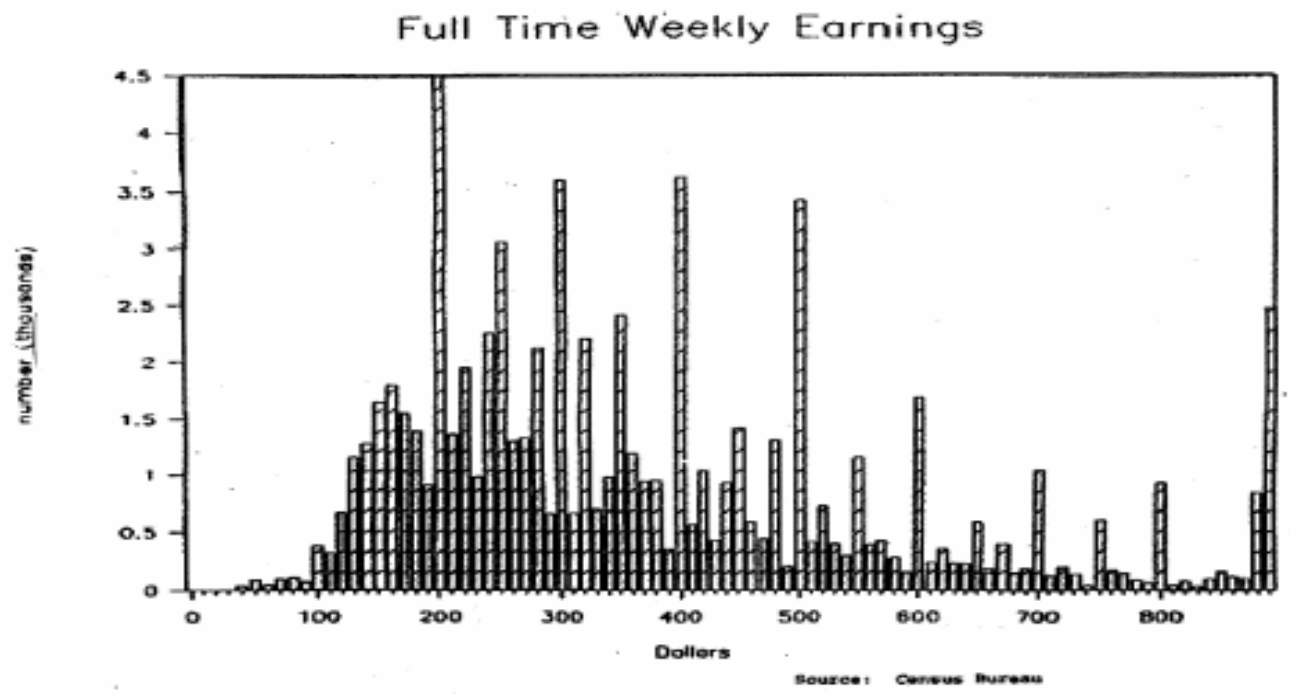


Figure 3: OES Wage Interval Boundaries 2003-2005

OES Wage Interval Boundaries					
Interval	Lower Bound	Upper Bound	Interval Width	% Relative	% CV
A	\$5.15	\$6.74	\$1.60	13.4	7.8
B	\$6.75	\$8.49	\$1.75	11.5	6.6
C	\$8.50	\$10.74	\$2.25	11.7	6.7
D	\$10.75	\$13.49	\$2.75	11.3	6.5
E	\$13.50	\$16.99	\$3.50	11.5	6.6
F	\$17.00	\$21.49	\$4.50	11.7	6.7
G	\$21.50	\$27.24	\$5.75	11.8	6.8
H	\$27.25	\$34.49	\$7.25	11.7	6.8
I	\$34.50	\$43.74	\$9.25	11.8	6.8
J	\$43.75	\$55.49	\$11.75	11.8	6.8
K	\$55.50	\$69.99	\$14.50	11.6	6.7
L	\$70.00		8		

Figure 5: Interval Means 2003-2005

NCS and CPS Interval Means Across Years							
Intervals	NCS Interval Means \$			CPS Interval Means \$			
	2003	2004	2005	2003	2004	2005	
A	5.78	5.79	5.82	5.37	5.37	5.41	
B	7.51	7.52	7.54	7.54	7.54	7.55	
C	9.57	9.55	9.55	9.57	9.56	9.56	
D	12.03	12.03	12.03	12.05	12.06	12.05	
E	15.11	15.11	15.10	15.10	15.10	15.12	
F	19.04	19.06	19.06	19.01	19.01	18.99	
G	24.23	24.27	24.27	24.06	24.05	24.10	
H	30.40	30.42	30.43	30.35	30.39	30.38	
I	38.49	38.60	38.57	38.32	38.30	38.41	
J	48.75	48.54	48.68	48.54	48.46	48.63	
K	61.20	61.39	61.36	61.20	61.29	61.16	
L	107.43	103.91	103.09	163.82	161.43	163.95	
Overall	17.22	17.59	18.07	17.78	18.32	18.82	
<p>· Means Wages in each interval for the three years are about the same.</p>							
Yearly Percentage Change							
			NCS%	CPS%			
		2004	2.15	3.04			
		2005	2.73	2.73			

Figure 7: Validation of OES Methodologies for 2005

Comparison of CPS mean wages to means calculated using NCS Interval means, state minimum wages and a proposed option							
Interval L methodology *							
Year	Occupational Group	CPS Mean Wage	Unweighted Sample Size	90% Confidence Intervals About the CPS Mean Wage	Mean Wage using OES Interval Methodology	Error	% Relative Error
2005	Management Occupations	\$29.96	15,758	(29.51,30.42)	\$28.77	-1.20	(4.00%)
	Business and financial operations occupations	\$25.15	7,131	(24.53,25.77)	\$24.76	-0.39	(1.56%)
	Computer and mathematical science occupations	\$30.64	4,166	(29.67,31.60)	\$29.16	-1.47	(4.81%)
	Architecture and engineering occupations	\$28.90	3,656	(27.95,29.87)	\$28.19	-0.72	(2.50%)
	Life, physical, and social science occupations	\$26.74	1,959	(25.92,27.55)	\$26.16	-0.58	(2.18%)
	Community and social service occupations	\$19.96	3,096	(19.03,20.90)	\$19.35	-0.62	(3.09%)
	Legal occupations	\$32.71	1,872	(31.51,33.92)	\$30.05	-2.67	(8.15%)
	Education, training, and library occupations	\$22.40	11,546	(21.83,22.98)	\$21.14	-1.27	(5.65%)
	Arts, design, entertainment, sports, and media occupations	\$25.52	2,711	(24.80,26.24)	\$22.10	-3.42	(13.4%)
	Healthcare practitioner and technical occupations	\$25.77	8,999	(25.39,26.16)	\$25.30	-0.47	(1.84%)
	Healthcare support occupations	\$11.44	4,234	(11.17,11.71)	\$11.41	-0.03	(0.24%)
	Protective service occupations	\$17.80	3,891	(17.43,18.16)	\$17.71	-0.08	(0.46%)
	Food preparation and serving related occupations	\$9.68	10,489	(9.58, 9.79)	\$9.83	0.15	1.53%
	Building and grounds cleaning and maintenance occupations	\$10.91	6,377	(10.76,11.06)	\$11.02	0.11	1.04%
	Personal care and service occupations	\$11.36	4,755	(11.12,11.60)	\$11.44	0.08	0.75%
	Sales and related occupations	\$17.90	19,043	(17.52,18.28)	\$17.23	-0.67	(3.76%)
	Office and administrative support occupations	\$14.76	27,053	(14.59,14.92)	\$14.54	-0.21	(1.44%)
	Farming, fishing, and forestry occupations	\$9.98	1,355	(9.58,10.37)	\$10.19	0.21	2.11%
	Construction and extraction occupations	\$16.95	10,037	(16.55,17.34)	\$16.68	-0.27	(1.59%)
	Installation, maintenance, and repair occupations	\$18.65	6,651	(18.01,19.29)	\$18.16	-0.49	(2.65%)
	Production occupations	\$14.95	12,487	(14.79,15.12)	\$14.79	-0.16	(1.09%)
	Transportation and material moving occupations	\$14.73	11,153	(14.49,14.97)	\$14.35	-0.38	(2.56%)
2005	All Occupations	\$18.80	178,419	(18.69,18.91)	\$18.27	-0.53	(2.81%)

Figure 8

Group I - OES Occupations with 40% Employment in Interval L					
			Weighted Interval L Employment		
No.	SOC	Occ #	Occupation	% Emp in L	Emp in L
1	29-1067	84	Surgeons	82	44,000
2	29-1061	84	Anesthesiologists	78	22,000
3	29-1064	84	OBGyn	77	17,000
4	29-1063	84	Internists, general	59	29,000
5	29-1066	84	Psychiatrists	50	12,000
6	29-1069	84	Physicians/Surgeons	49	88,000
7	11-1011	4	Chief Executives	49	156,000
8	29-1062	84	Family/Gen. practition	46	52,000
9	53-2011	226	Pilot/Copilot/Fl.engin.	46	35,000
10	29-1065	84	Pediatricians, gen.	43	12,000

Figure 9

Group II - OES Occupations with 15 - 30% Employment in Interval I					
			Weighted Interval L Employment		
No.	SOC	Occ #	Occupation	% Emp in L	Emp in L
11	29-1081	88	Podiatrists	27	2,200
12	23-1011	178	Lawyers	25	134,000
13	29-1199	84	Health Dia/Treat Prac	24	14,000
14	27-2021	199	Athletes and Sports	21	2,600
15	41-3031	255	Secur./Comm./Finance.	19	48,000
16	11-1021	22	General/Operation Mgr.	18	304,000
17	11-2022	243	Sales Managers	18	57,000
18	11-2021	13	Mkt. Managers	17	29,000
19	13-2052	25	Personal Financial Ad.	16	18,000
20	13-2051	7	Financial Managers	15	70,000
21	41-9021	254	Real Estate Brokers	15	6,100
22	25-1112	145	Law teachers, postsec.	15	2,000

Figure 10

Group III - OES Occupations with 5 - 14% Employment in Interval L					
			Weighted	Interval L Employment	
No.	SOC	Occ #	Occupation	% Emp in L	Emp in L
23	29-1041	87	Optometrists	14	3,000
24	29-1011	84	Chiropractors	13	3,000
25	11-3021	64	Computer/Info Sys Mgr	13	34,000
26	11-9121	22	Natural Sciences Mgr.	13	5,000
27	11-9041	59	Engineering Managers	12	23,000
28	15-2011	66	Actuaries	12	1,900
29	29-1199	134	Health Spec. teachers	11	12,000
30	13-1011	22	Agents/Business Mgr.	11	1,200
31	11-2011	13	Ad. & Promo. Mgr.	11	5,000
32	25-1042	114	Bio. Teacher, Postsec.	11	6,000
33	11-2031	13	PR Managers	10	4,000
34	27-2012	187	Producers/Directors	9	5,000
35	41-1012	22	First-line Supv./Mgr.	8	22,000
36	29-1131	86	Veterinarians	7	3,000
37	19-3011	166	Economists	6	800
38	13-2051	25	Financial Analysts	6	11,000
39	19-2042	75	Geoscientists	6	1,700

Figure 11. Mean Wages for Interval L

	All data	Excluding Pilots
1999	\$124.55	\$109.44
2000	107.33	100.76
2001	107.37	101.35
2002	101.14	94.23
Avg	110.10	101.44

Figure 12. Airline Pilots Mean Wages

	NCS Published	NCS Calculated	OES Published
2003	\$ 98.47 / hr	\$ 111,800 / yr	\$ 129,900 / yr
2004	113.82 / hr	121,100 / yr	129,600 / yr
2005	95.50 / hr	116,300 / yr	135,000 / yr

Figure 13

NCS Occupational Groups	
Group	Occupational Description
A	Professional and Technical Occupations
B	Executive, Administrative, and Managerial Occupations
C	Sales Occupations
D	Administrative Support Occupations, Including Clerical
E	Precision Production, Craft, and Repair Occupations
F	Machine Operators, Assemblers, and Inspectors
G	Transportations and Material Moving Occupations
H	Handlers, Equipment Cleaners, Helper, and Labors
K	Service Occupations, Expert Private Household

Figure 14

Options II and III- - NCS Major Occupational Groups				
Mean 2004				
OCS Group	Occupations	Weighted Employment in Interval L	% Employment in Interval L	Mean Wage for Interval L
A	Professional and Technical Occupations	288,800	2.002	\$101.38
B	Executive, Administrative, and Managerial Occupations	210,500	3.584	101.99
C	Sales Occupations	50,100	0.628	127.34
D	Administrative Support Occupations, Including Clerical	500	0.004	116.73
E	Precision Production, Craft, and Repair Occupations	200	0.003	91.59
F	Machine Operators, Assemblers, and Inspectors	0	0.000	.
G	Transportations and Material Moving Occupations	0	0.000	72.43
H	Handlers, Equipment Cleaners, Helper, and Labors	0	0.000	.
K	Service Occupations, Expert Private Household	1,900	0.011	80.99
Overall	All Occupations	552,100	0.681	103.91

Figure 15

RESULTS							
Fail Criteria: Weighted employment in interval L \geq 1000 and							
Relative error on mean wages per hour \geq 10% for 2 or 3 years							
Occ Code	Title	Average Weighted employment in interval L	Average % employment in interval L	Current Method	Overall Mean Option I	Sales vs. Non-Sales Option III	Combination of Occupation Option IV
119	College & University, Teacher	6,000	45	Pass	Failed	Failed	Pass
127	College & University, Teacher	6,000	33	Pass	Failed	Borderline	Pass
179	Judges	3,000	30	Failed	Failed	Failed	Pass
226	Pilots	62,000	70	Failed	Failed	Failed	N/A
255	Financial Service Sales	19,000	12	Failed	Failed	Pass	Pass
166	Economists	4,000	6	Pass	Pass	Pass	Failed
186	Musicians & Composers	4,000	15	Pass	Pass	Pass	Failed
198	Announcers	6,000	10	Pass	Pass	Pass	Failed

Figure 16: Pilots Mean Wages

	NCS Published	NCS Calculated	OES Published	OES Calculated w/NCS Pilots yearly mean for interval L (Approximation)
2003	\$ 98.47 / hr	\$ 111,800 / yr	\$ 129,900 / yr	\$ 114,600 / yr
2004	113.82 / hr	121,100 / yr	129,600 / yr	114,300 / yr
2005	95.50 / hr	116,300 / yr	135,000 / yr	119,700 / yr