

Analysis of Teachers' Wages

Workforce Research and
Analysis

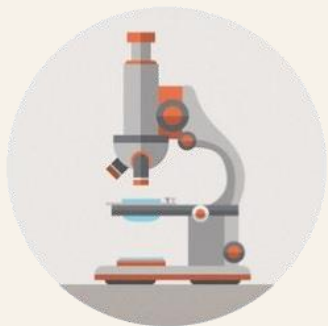
UTAH DEPARTMENT OF WORKFORCE SERVICES



Context

- In 2014 DWS was requested, by Utah Senate President Niederhauser, to analyze wage ratios, adjusted for cost-of-living differences, across a group of selected occupations (including education related occupations)
 - DWS was assigned task due to specialization in labor economics
- Expanded on original request by extending analysis to:
 - Intrastate wage analysis, controlling for education level
 - Teacher migrating to other occupations
 - Inter-county salary driven mobility
 - Teachers commuting to adjacent foreign counties
 - Interstate education occupation mobility
 - Teachers migrating to other states

Comparison Frames



Micro

Comparison of average starting wages for professions requiring bachelor's degrees in the state of Utah



Macro

Comparison of *average* wages of teachers across similar western state metropolitans

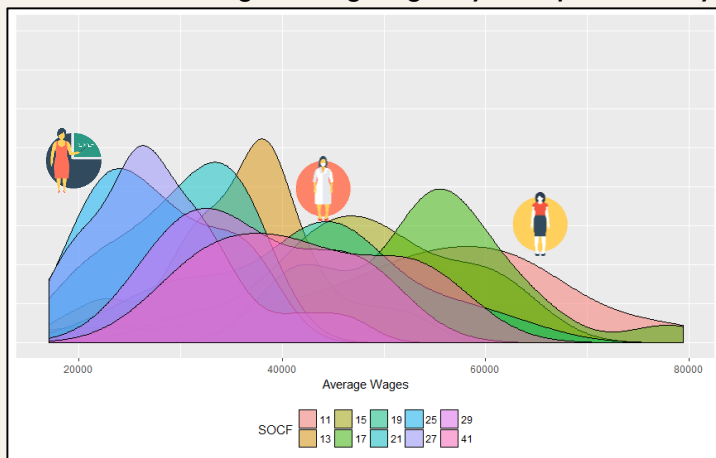
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Comparison of *salary schedules* across adjacent counties and Utah counties

Micro Comparison

Average starting wage data derived from OES are leveraged to compare occupations which require the exact same level of education (bachelor's degree). This elucidates on the possible economic incentive for future teachers to be dissuaded from acquiring a bachelor's degree in an education field; and for current teachers to re-enter college to gain a bachelor's degree in a field with higher average wages

Distribution of Average Starting Wages by Occupation Family



Elementary School Teacher
\$35,138



Registered Nurse
\$48,048



Industrial Production Manager
\$57,200

Micro Comparison Cont.

2016 salary schedules are compared for adjacent counties: Uinta, WY; Elko, NV; and Clark, NV. This is to explore the possibility of teachers commuting to adjacent counties for employment, whilst residing in the state of Utah.

1. Salary Schedule Comparison

Step	Washington	Clark	Diff.
1	\$32,361	\$40,900	-\$8,539
2	\$32,688	\$42,251	-\$9,563
3	\$32,853	\$43,601	-\$10,748
		:	
		:	
		:	
14	\$53,057	\$40,701	-\$12,356
15	\$53,057	\$41,468	-\$11,589
16	\$53,057	\$42,253	-\$10,804
Cumulative Difference:			-\$201,605

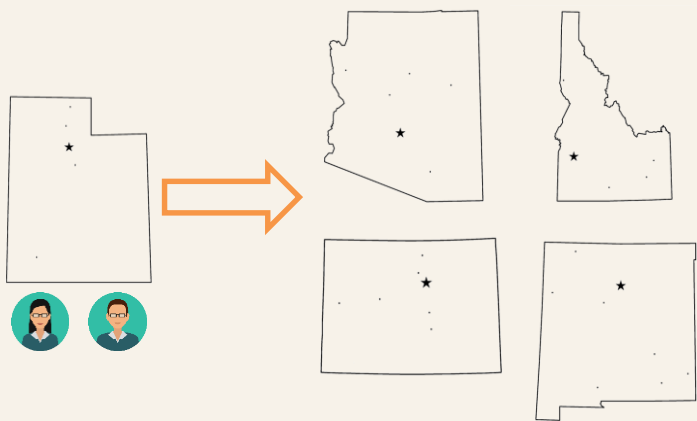
2. Cumulative Salary Difference*

Pair	Steps	Bachelors	Masters
Washington-Clark	16 & 22	-\$201,605	-\$148,648
Tooele-Elko	15	-\$105,514	-\$155,137
Rich-Uinta	11 & 30	-\$50,188	\$4,248
Salt Lake-Uinta	11 & 30	-\$2,987	\$60,495

*<https://jobs.utah.gov/wi/data/vizcentral/utahteachersalaries.html>

Macro Comparison

Average wages (2016 OES) are compared across similar western metropolitan centers. This ratio was adjusted for cost-of-living differentials (CCER 2016).



Occupation	Phoenix, AZ	Denver, CO	Boise, ID	Albuquerque, NM
Preschool	-10.93%	-5.93%	-10.19%	7.25%
Kindergarten	-10.08%	-4.63%	7.76%	18.37%
Elementary School	2.26%	.32%	-25.56%	-28.85%
Middle School	-21.18%	-8.64%	-10.66%	29.30%
Secondary School	56.35%	-1.11%	-16.23%	-12.09%

Summary

- Employing two methods to calculate wage differentials for education professions
 - Micro
 - Very strong evidence to suggest that average wages for the family of occupations which comprise the education occupation are lower than the “average” of all occupations
 - Very strong evidence to suggest that teachers residing near specific adjacent counties have tremendous economic incentive to reside in Utah and be employed across state lines
 - Macro
 - Compared to similar western metropolitan centers, with the exception of Albuquerque (three occupations) and secondary school teachers in Phoenix, Salt Lake City, as proxy for the state, has competitive pay

Appendix

City Pairs

Utah City	Utah County	Other City	Other County	Distance	Travel
St. George	Washington	Mesquite	Clark	39.2	41
Wendover	Tooele	W. Wendover	Elko	2.2	7
Randolph	Rich	Evanston	Uinta	32.6	40
Salt Lake	Salt Lake	Evanston	Uinta	83.4	79

Standard Occupation Classification Families

SOC	Occupations
11	Management
13	Business and Financial Operations
15	Computer and Mathematical
17	Architecture and Engineering
19	Life, Physical, and Social Sciences
21	Community and Social Services
25	Education, Training, and Library
27	Arts, Design, Entertainment, Sports, and Media
29	Healthcare Practitioners and Technical
41	Sales and Related Occupations