

ARIZONA WAGE STATISTICS AND COPPER OUTPUT

BASE PERIOD (1947-1949) COMPARED WITH PERIOD (1961-1963)

COMPILED BY

ARIZONA DEPARTMENT OF MINERAL RESOURCES

FAIRGROUNDS, PHOENIX ARIZONA

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Source: Arizona Employment Security Commission
U. S. Department of Labor
U. S. Bureau of Mines

MAY, 1964

WAGE STATISTICS AND COPPER OUTPUT
ARIZONA AND UNITED STATES COPPER MINES

Base Period (1947-1949) Compared with 1961-1963 Period

Source: Arizona Employment Security Commission; U. S. Dept. of Labor;
U. S. Bureau of Mines

The Arizona Department of Mineral Resources has recently compiled several tables of wage statistics and copper output of Arizona copper mines, comparing them with wages paid in other major industries in Arizona and the United States.

The base period of 1947-1949 has been used in making the comparison because that is the period used by the U. S. Department of Labor in determining the Consumer Price Index (or Cost of Living). At the present time, the base period of 1957-1959 is being used by the Department of Labor, but this study has retained the old base period for comparison purposes.

As in the previous reports, this Department has shown that hourly wage-rates in the copper mining industry have been increased annually at a much greater rate than the Consumer Price Index. For example, the Hourly Earnings Index in Arizona copper mining for 1963 has increased 109.7 per cent over the base period, while the Consumer Price Index has increased only 31.0 per cent. During the same period the Hourly Earnings Index in U. S. copper mining has increased 102.0 per cent.

Incidentally, it might be noted that the hourly earnings in copper mining in Arizona for the base period were reported to be \$1.432 as compared with \$1.431 for U. S. copper mining, as reported by the U. S. Department of Labor "Employment and Earnings." For the year 1963, comparative figures \$3.003 for Arizona and \$2.891 for the United States. This is cited because of the general belief that there has been a wage differential in favor of the Northern States over Arizona.

In the copper mining industry, productivity would be based on the total output of copper and the measure of it would be pounds of copper produced per man-hour of labor. Responsibility for any change in productivity need not be the miner's labor alone. Improvements in technology and mechanical equipment are probably more important factors. The only reason the man-hour unit is used is because labor is the biggest factor in the cost of producing copper, and it is therefore a good practical measure, serving to indicate whether productivity is keeping up with rising costs, thus checking inflationary tendencies.

As mentioned in previous reports, it has been generally believed that real wages of labor cannot rise faster than real output. In other words, we cannot get more out of the economy than we produce. It has been shown that since World War II, real output, or productivity, in general has been growing at an average of only 2 to 3 per cent a year - while wages, on the average, have been climbing 6 to 7 per cent a year.

In this year's study of the copper mining industry, a comparison was made between the three-year base period (1947-1949) and the latest three-year period (1961-1963). Because the by-products of gold and silver, produced with the copper,

are factors in determining the miner's output, the total value of metal produced has been converted into pounds of copper at the average copper price. Preliminary figures for the 1963 production of copper, gold and silver from copper ores in Arizona and the United States were used in obtaining the three year averages for the 1961-1963 period.

The study shows that in Arizona the pounds of equivalent copper produced per man-hour was 29.9901 in the base period, as compared with 40.0834 pounds in the 1961-1963 period, or a total increase in productivity of 33.65% for the 14-year period or 2.40% per year. The hourly earnings for the base period were \$1.432, and for the 1961-1963 period were \$2.914, or a total increase of 103.49% or 7.39% per year.

Corresponding figures for the United States copper mining industry were 26,1639 pounds of equivalent copper produced per man-hour in the base period, as compared with 32.9439 pounds in the 1961-1963 period, or a total increase of 41.59% an average of 2.97% per year. The hourly earnings were \$1.431 in the base period, and \$2.813 in the 1961-1963 period, a total increase of 96.58% or 6.90% per year.

The total covered employment in copper mining in Arizona in 1963, according to the Employment Security Commission, amounted to 14,303 employees with wages amounting to \$104,291,588. This item included the employees at Kennecott's copper smelter at Hayden. Additional copper smelter employees at seven other copper smelters averaged 1817 employees in 1963, and were classified under "Manufacturing." Their wages in 1963 amounted to \$12,144,000. This makes a grand total, for copper mining, milling and smelting of 16,120 covered employees and \$116,435,588 covered wages in the copper industry of Arizona.

This report does not include fringe benefits, which, in another study by this Department in 1959, were estimated to average 25% of the payroll. It has undoubtedly been higher in 1963. With a copper industry payroll of \$116,435,588 in 1963, fringe benefits would add more than \$29 million to labor costs for the year.

TABLE I

ESTIMATED HOURS AND EARNINGS IN SELECTED INDUSTRIES IN ARIZONA

YEAR 1963

Source: "Arizona Current Employment" Employment Security Commission

These estimates are based upon a sample of full and part-time production and related employees whose payroll and hours are reported for the pay period ending the 15th of the month.

<u>1963</u>	<u>Average Employment</u>	<u>Average Weekly Earnings</u>	<u>Average Weekly Hours <u>1/</u></u>	<u>Average Hourly Earnings <u>2/</u></u>	<u>Base Hourly Rate <u>3/</u></u>
Copper Mining <u>4/</u>	13,393	133.81	44.56	\$ 3.003	\$ 2.857
Manufacturing (total)	57,183	108.06	40.44	2.672	2.658
Copper Smelting <u>5/</u>	1,817	128.53	44.73	2.874	2.729
Excl. Smelting	55,366	107.19	40.30	2.665	2.656
Contract Construction	28,508	151.75	36.94	4.108	4.108
Utilities	24,975	110.68	41.13	2.691	2.655
Retail Trade	72,383	75.08	39.56	1.897	1.897
Wholesale Trade	17,575	105.95	41.38	2.532	2.519

1/ Actual hours worked.

2/ Includes overtime earnings.

3/ Base hourly rate is a straight time rate, and is obtained by dividing the "Weekly Earnings" by the "Weekly Hours" plus 50% of the excess hours over 40 hours.

4/ Includes smelter employees at Kennecott's Hayden smelter.

5/ Includes smelter employees at all smelters except Kennecott's.

OTHER NON-AGRICULTURE EMPLOYMENT *

	<u>Average Employment</u>
Mining & Quarrying (Excl. copper mining)	1,758
Finance, Insurance, Real Estate	19,517
Services and Miscellaneous	58,767
Federal Government	23,675
State and Local Gov't. (Incl. Education)	57,983
Education	31,017
GRAND TOTAL NON-AGRICULTURE EMPLOYMENT	<u>375,717</u>

* Hourly

TABLE II
MONTHLY STATISTICS IN 1963 OF EMPLOYMENT, WEEKLY EARNINGS, WEEKLY HOURS
AND HOURLY EARNINGS IN COPPER MINING, COPPER SMELTING, MANUFACTURING,
CONTRACT CONSTRUCTION, UTILITIES, WHOLESALE AND RETAIL TRADE

Source: Arizona Employment Security Commission

1963	Employment	Avg. Weekly Earnings	Avg. Weekly Hours	Avg. Hourly Earnings
COPPER MINING: (Includes Kennecott's Copper Smelting)				
January	13,400	\$ 128.48	44.0	\$ 2.92
February	13,400	130.83	44.5	2.94
March	13,500	138.30	46.1	3.00
April	13,500	135.43	45.6	2.97
May	13,500	131.28	44.5	2.95
June	13,600	130.83	44.2	2.96
July	13,300	128.77	43.8	2.94
August	13,200	135.28	44.5	3.04
September	13,400	133.32	44.0	3.03
October	13,300	141.50	45.5	3.11
November	13,200	139.64	44.9	3.11
December	13,400	132.32	43.1	3.07
AVERAGE	13,393	\$ 133.81	44.56	\$ 3.003
COPPER SMELTING (Included under Manufacturing) All copper smelters except Kennecott's				
January	1,841	\$ 125.04	44.5	\$ 2.81
February	1,827	124.32	44.4	2.80
March	1,824	133.85	46.8	2.86
April	1,834	129.96	45.6	2.85
May	1,823	129.50	45.6	2.84
June	1,850	129.68	45.5	2.85
July	1,839	130.37	44.8	2.91
August	1,789	127.75	43.9	2.91
September	1,819	125.13	43.0	2.91
October	1,786	130.97	44.7	2.93
November	1,790	128.63	43.9	2.93
December	1,785	127.16	44.0	2.89
AVERAGE	1,817	\$ 128.53	44.73	\$ 2.874
TOTAL MANUFACTURING (Includes all copper smelters except Kennecott's)				
January	56,000	\$ 105.86	40.1	2.64
February	56,100	105.85	40.4	2.62
March	57,100	105.85	40.4	2.62
April	57,300	104.80	40.0	2.62
May	57,700	105.32	40.2	2.62
June	58,000	106.00	40.0	2.65
July	57,300	106.93	40.2	2.66
August	57,300	109.48	40.7	2.69
September	56,800	111.52	40.7	2.74
October	57,100	112.34	41.0	2.74
November	57,600	111.24	40.6	2.74
December	57,900	111.52	41.0	2.72
AVERAGE	57,183	108.06	40.44	2.672

1/ Excludes all smelters except Kennecott's Hayden smelter

2/ Including under Manufacturing - all smelters except Kennecott's.

TABLE II (Continued) MONTHLY LABOR STATISTICS

1963

CONTRACT CONSTRUCTION:	Employment	Avg. Weekly Earnings	Avg. Weekly Hours	Avg. Hourly Earnings
January	29,800	\$ 150.47	36.7	\$ 4.10
February	29,300	151.11	36.5	4.14
March	29,900	153.22	37.1	4.13
April	29,800	153.38	37.5	4.09
May	29,200	152.76	38.0	4.02
June	28,700	157.54	38.9	4.05
July	28,900	152.93	37.3	4.10
August	27,000	158.88	38.1	4.17
September	27,400	153.26	37.2	4.12
October	27,400	151.94	36.7	4.14
November	27,300	133.40	32.3	4.13
December	27,400	152.07	37.0	4.11
AVERAGE	28,508	\$ 151.75	36.94	\$ 4.108

UTILITIES:				
January	24,500	\$ 109.71	41.4	\$ 2.65
February	24,500	108.26	40.7	2.66
March	24,400	109.59	41.2	2.66
April	24,600	108.92	41.1	2.65
May	24,800	108.94	40.8	2.67
June	25,300	109.20	40.9	2.67
July	25,300	110.12	41.4	2.66
August	25,500	110.15	41.1	2.68
September	24,900	112.19	41.4	2.71
October	25,100	113.16	41.0	2.76
November	25,300	115.23	41.9	2.75
December	25,500	112.74	40.7	2.77
AVERAGE	24,975	\$ 110.68	41.13	\$ 2.691

TRADE:	EMPLOYMENT		AVG. WKLY EARN'GS		AVG. WKLY HRS.		AVG. HRLY EARN'GS	
	Retail	Whole-sale	Retail	Whole-sale	Retail	Whole-sale	Retail	Whole-sale
January	70,400	17,600	\$ 72.25	\$ 104.24	39.7	41.2	\$ 1.82	\$ 2.53
February	69,800	17,400	73.08	104.74	39.5	41.4	1.85	2.53
March	70,100	17,500	73.28	103.82	39.4	41.2	1.86	2.52
April	70,900	17,500	73.88	103.16	39.3	41.1	1.88	2.51
May	70,900	17,400	75.05	106.81	39.5	41.4	1.90	2.58
June	70,800	17,400	76.80	108.94	40.0	41.9	1.92	2.60
July	70,700	17,400	77.95	105.22	40.6	41.1	1.92	2.56
August	71,100	17,400	77.99	105.57	40.2	41.4	1.94	2.55
September	73,200	17,600	76.03	105.98	39.6	41.4	1.92	2.56
October	74,400	17,800	75.26	103.32	39.2	41.0	1.92	2.52
November	76,000	17,900	75.27	103.32	39.0	41.0	1.93	2.52
December	80,300	18,000	74.50	109.20	38.8	42.0	1.92	2.60
AVERAGE	72,383	17,575	\$ 75.11	\$ 105.36	39.57	41.34	\$ 1.898	\$ 2.548
	89,958		81.02		39.92		2.025	

TABLE III

ESTIMATED HOURS AND EARNINGS IN SELECTED INDUSTRIES IN ARIZONA

These estimates are based upon a sample of full and part-time production and related employees whose payroll and hours are reported for the pay period ending nearest the 15th of the month.

Prepared by Arizona Employment Security Commission in co-operation with the U. S. Bureau of Labor Statistics.

	1947-49	1951	1956	1961	1962	1963
<u>Average Hourly Earnings:</u>						
Manufacturing <u>1/</u>	\$ 1.345	\$ 1.55	\$ 2.144	\$ 2.517	\$ 2.571	\$ 2.672
Copper Mining <u>2/</u>	1.432	1.74	2.377	2.817	2.920	3.003
Contract Construction	1.787	2.15	2.810	3.819	4.048	4.108
Utilities	1.369	1.54	1.929	2.493	2.600	2.691
Trade	1.090	1.32	1.618	1.853	1.944	2.025
<u>Average Weekly Hours:</u>						
Manufacturing	41.60	43.1	42.27	40.36	39.96	40.44
Copper Mining	44.83	47.7	47.15	44.83	44.28	44.56
Contract Construction	37.10	38.0	37.39	37.20	37.70	36.94
Utilities	41.39	40.1	40.78	40.68	41.03	41.13
Trade	41.98	42.8	41.37	40.78	39.88	39.92
<u>Average Weekly Earnings:</u>						
Manufacturing	\$ 55.95	\$ 66.81	\$ 90.63	\$ 101.57	\$ 102.73	\$ 108.06
Copper Mining	64.20	83.01	112.07	126.29	129.29	133.81
Contract Construction	66.30	81.70	105.09	142.07	152.62	151.75
Utilities	56.66	61.75	78.66	101.44	106.69	110.68
Trade	45.76	56.50	66.94	75.57	77.63	81.02
<u>Hourly Earnings Index (1947-1949 = 100):</u>						
Manufacturing	100.0	115.2	159.4	187.1	191.2	198.7
Copper Mining	100.0	121.5	166.0	196.7	203.9	209.7
Contract Construction	100.0	120.3	157.3	213.7	226.5	224.4
Utilities	100.0	112.5	140.9	182.1	189.9	196.6
Trade	100.0	121.1	148.4	170.0	178.4	185.8
<u>Consumer Price Index:</u>	100.0	111.0	116.2	127.85	129.3	131.0
<u>E. & M.J. Copper Price:</u>	20.818¢	24.200¢	41.818¢	29.920¢	30.600¢	30.600¢
<u>Copper Price Index:</u>	100.0	116.2	200.8	143.7	147.0	147.0

1/ Beginning July 1952, Manufacturing includes aircraft modification operations. Manufacturing includes copper smelting at all copper smelters except Kennecott's.

2/ Copper Mining includes copper smelting at Kennecott's Hayden smelter.

TABLE IV

COMPARISON OF AVERAGE NUMBER OF EMPLOYEES - WEEKLY EARNINGS
WEEKLY HOURS AND HOURLY EARNINGS OF EMPLOYEES IN SELECTED
INDUSTRIES OF THE UNITED STATES AND STATE OF ARIZONA

YEAR 1963

Source: Arizona Employment Security Commission.
U. S. Department of Labor "Employment and Earnings,"
February, 1963.

Year 1963	Number Employees	Avg. Weekly Earnings	Avg. Weekly Hours	Avg. Hourly Earnings
Copper Mining - United States	27,800	\$ 124.48	43.06	\$ 2.891
" " - Arizona	13,393	133.81	44.56	3.003
Manufacturing - United States	16,962,000	99.40	40.44	2.458
" " - Arizona	57,183	108.06	40.44	2.672
Contract Construction - United States	2,901,000	127.67	37.22	3.408
" " - Arizona	28,508	151.75	36.92	4.108
Retail Trade - United States	8,652,500	68.15	37.8	1.8025
" " - Arizona	72,383	75.08	39.57	1.898
Wholesale Trade - United States	3,137,600	99.49	40.50	2.4525
" " - Arizona	17,575	105.36	41.34	2.548

TABLE V

AVERAGE NUMBER OF COVERED EMPLOYEES, TOTAL WAGES, AVERAGE ANNUAL WAGE, AND
AVERAGE WEEKLY WAGE

Base Period 1947-1949 and Period Calendar Year 1963

ARIZONA INDUSTRIES COVERED BY SOCIAL SECURITY

Compiled by Arizona Department of Mineral Resources
Source: Arizona Employment Security Commission

	Average No. of 1/ Employees	Total Wages	Average Annual Wage	Average Weekly Wage
	Base Period 1947-1949			
Copper Mining Only 2/	11,278	\$ 39,432,008	\$ 3,496	\$ 67.23
Copper Smelting 3/	1,500	5,175,000	3,450	66.35
All Copper Mining & Smelting	12,778	44,607,008	3,491	67.13
Other Mining & Quarrying	1,592	4,913,010	3,085	59.33
All Mining, Quarrying & Smelting	14,370	49,520,018	3,446	66.27
Manufacturing (Excl. Smelting)	12,639	36,910,624	2,920	56.15
Construction	10,844	35,424,826	3,267	62.83
Trans. & Utilities (Excl. R.R.s)	10,530	29,948,944	2,844	54.69
Wholesale - Retail Trade	36,213	91,916,860	2,538	48.81
Services - Misc. (Incl. Agri.)	18,643	43,103,526	2,312	44.46
Totals and Averages	103,239	\$ 286,824,898	\$ 2,778	\$ 53.42
YEAR 1961				
Copper Mining Only 2/	14,275	\$ 97,271,286	\$ 6,814	\$ 131.04
Copper Smelting 3/	1,578	9,968,163	6,317	121.48
All Copper Mining & Smelting	15,853	107,239,449	6,765	130.10
Other Mining & Quarrying	1,903	10,542,501	5,540	106.54
All Mining, Quarrying & Smelting	17,756	\$ 117,781,950	\$ 6,634	\$ 127.57
YEAR 1962				
Copper Mining Only 2/	14,408	\$ 101,920,108	\$ 7,074	\$ 136.04
Copper Smelting 3/	1,868	12,216,000	6,540	125.76
All Copper Mining & Smelting	16,276	114,136,108	7,013	134.86
Other Mining & Quarrying	1,580	8,727,313	5,524	106.24
All Mining, Quarrying & Smelting	17,856	\$ 122,863,421	\$ 6,881	\$ 132.33
YEAR 1963				
Copper Mining Only 2/	14,303	\$ 104,291,588	\$ 7,292	\$ 140.23
Copper Smelting 3/	1,817	12,144,000	6,684	128.53
All Copper Mining & Smelting	16,120	116,435,588	7,223	138.90
Other Mining & Quarrying	1,591	9,299,379	5,845	112.40
All Mining, Quarrying & Smelting	17,711	125,734,967	7,099	136.52
Manufacturing (Excl. Smelting)	55,084	348,296,033	6,323	121.60
Construction	28,310	197,866,002	6,954	133.73
Trans. & Utilities (Excl. R.R.s)	20,948	125,961,223	6,013	115.63
Wholesale - Retail Trade	85,687	360,110,834	4,203	80.83
Services & Misc. (Incl. Agri.)	60,387	262,362,190	4,345	83.56
TOTALS - Averages	268,127	\$ 1,420,331,249	\$ 5,297	\$ 101.87

1/ This number includes all covered employees on payroll, and is not restricted to production workers only, on which the average hourly and weekly earnings are reported. 2/ This number includes all copper mining and milling employees and some copper smelting employees not reported under Manufacturing by the Employment Security Commission. 3/ Smelting Employment has been segregated from Manufacturing as reported by the Employment Security Commission.

TABLE VI

ESTIMATED EMPLOYMENT, WEEKLY HOURS, HOURLY AND WEEKLY
EARNINGS IN ARIZONA COPPER MINING BY YEARS FROM 1947 to 1963 INCL.

Source: Arizona Employment Security Commission

These estimates are based upon a sample of full and part-time production and related employees whose payroll and hours are reported for the pay period nearest the 15th of each month.

COPPER MINING

	Employment	Weekly Hours 1/	Hourly Earnings 2/		Base Hourly Rate 3/	Weekly Earnings	Con sumer Price Index
1947-1949 Base	10,700	44.83	\$ 1.432	4	1.359	\$ 64.20	100.0
1950 Year	9,500	46.5	1.63		1.524	75.80	102.8
1951 April	10,400	47.2	1.71		1.589	80.71	110.4
1951 Year	10,100	47.7	1.74		1.61	83.00	111.0
1952 Year	10,700	47.1	1.92		1.785	90.43	113.5
1953 Year	11,400	46.7	2.05		1.896	95.73	114.4
1954 Year	11,600	45.3	2.13		2.012	96.49	114.8
1955 Year	11,700	47.0	2.23		2.075	104.81	114.5
1956 Year	13,200	47.0	2.38		2.215	111.86	116.1
1957 Year	14,000	43.74	2.42		2.324	106.00	120.2
1958 Year	13,533	39.80	2.399		2.399	95.49	123.5
1959 Year	11,100	42,816	2.526		2.446	108.15	124.6
1960 Year	12,733	43.69	2.674		2.566	116.83	126.5
1961 Year	13,117	44.83	2.817		2.673	126.29	127.85
1962 Year	13,350	44.28	2.920		2.785	129.29	129.3
1963 Year	13,393	44.56	3.003		2.857	133.81	131.0

1/ Actual hours worked.

2/ Includes overtime earnings.

3/ Base Hourly Rate is a straight time rate, and is obtained by dividing the Weekly Earnings by the Weekly Hours plus 50% of the excess hours over 40 hours.

TABLE VII

COPPER MINING EMPLOYMENT, WAGES AND HOURS IN U. S. AND ARIZONA

Base Period (1947-1949) compared with Three-Year Period (1961-1963)

Source: "Employment Earnings," U. S. Dept. of Labor
 U.S.B.M. Mineral Yearbooks "Arizona's Current
 Employment Development." Arizona Employment
 Security Commission.

	"A" Number Of all Employees		"B" Weekly Earnings		"C" Weekly Hours		"D" Hourly Earnings	
	ARIZONA	U.S.	ARIZONA	U.S.	ARIZONA	U.S.	ARIZONA	U.S.
Base Period 1947-49 Avg.	10,700	27,100	\$ 64.20	\$ 63.11	44.83	44.10	\$ 1.432	\$ 1.431
Last Three Yrs.								
1961	13,117	29,000	\$126.29	\$119.03	44.8	43.6	\$ 2.817	\$ 2.73
1962	13,350	28,500	129.29	120.98	44.28	42.9	2.92	2.82
1963	13,393	27,800	133.81	124.48	44.56	43.06	3.003	2.891
1961-63 Avg.	13,287	28,433	\$129.82	\$121.46	44.55	43.19	\$ 2.914	\$ 2.813
	"E" Annual Man-Hours "A" x "C" X 52		"F" Annual Earnings "E" x "D"		Per Man Annual Earnings "F" ÷ "A"			
	ARIZONA	U.S.	Arizona	U.S.	ARIZONA	U.S.		
Base Period 1947-49 Avg.	24,943,412	62,145,720	\$35,718,966	\$ 88,930,525	\$3,338	\$ 3,282		
Last Three Years								
1961	30,557,363	65,748,800	\$86,080,092	\$ 179,494,224	\$6,562	\$ 6,189		
1962	30,753,060	63,577,800	89,798,935	179,289,396	6,726	6,291		
1963	31,033,188	62,247,536	93,192,664	179,957,627	6,958	6,473		
1961-63 Avg.	30,777,870	63,858,045	\$89,690,564	\$ 179,580,416	\$6,750	\$ 6,316		

Continued

TABLE VII (Continued)

	"G" Tons Copper Ores	"H" Pounds Equiv. Copper Produced From Copper
	ARIZONA	ARIZONA
Base Period 1947-49 Avg.	38,082,754	748,056,267
Last Three Years		
1961	71,918,991	1,121,030,000
1962	78,868,147	1,230,386,000
1963 P	80,853,000	1,349,630,000
1961-1963 Avg.	77,213,379	1,233,682,000

P = Preliminary

	Tons Copper Ore Produced Per Man-Hour "G" ÷ "E"	Lbs. Equiv. Copper Produced Per Man-Hour "H" ÷ "E"	Earnings Per Man-Hour "D"
	ARIZONA	ARIZONA	ARIZONA
Base Period 1947-49 Avg.	1.5268	29.9901	\$ 1.432
1961-63 Avg.	2.5088	40.0834	\$ 2.914
% Incr. in 14 Yrs. Per Year	64.32 4.59	33.65 2.40	103.49 7.39

TABLE VIII

SUMMARY OF ESTIMATED* COPPER MINING EMPLOYMENT, WEEKLY EARNINGS,
WEEKLY HOURS, HOURLY EARNINGS, IN ARIZONA AND UNITED STATES,
BY YEARS, 1947 to 1963 INCLUSIVE

Source: "Employment and Earnings" - U. S. Dept. of Labor.
"Arizona's Current Employment Developments" -
Arizona Employment Security Commission.

	ALL EMPLOYEES		WEEKLY EARNINGS		WEEKLY HOURS		HOURLY EARNINGS	
	Arizona	U.S.	Arizona	U.S.	Arizona	U. S.	Arizona	U.S.
1947	10,700	25,700	\$ 59.40	\$ 59.27	45.0	44.8	\$ 1.32	\$ 1.32
1948	10,900	27,800	65.99	65.81	45.2	45.2	1.46	1.46
1949	10,500	27,300	66.98	63.96	44.3	42.3	1.512	1.512
Avg. 1947-1949	10,700	27,100	\$ 64.20	\$ 63.11	44.83	44.1	\$ 1.432	\$ 1.431
1950	9,500	25,800	\$ 75.80	\$ 72.05	44.5	45.0	\$ 1.63	\$ 1.601
1951	10,100	25,900	83.01	78.37	47.7	46.1	1.74	1.70
1952	10,700	26,500	90.31	85.73	47.06	45.6	1.92	1.88
1953	11,400	28,600	96.03	91.60	46.73	45.8	2.055	2.00
1954	11,900	27,400	96.60	87.33	45.31	42.6	2.132	2.05
1955	11,800	27,200	104.90	95.70	47.0	44.1	2.232	2.17
1956	13,300	34,400	112.07	100.95	47.1	43.7	2.377	2.31
1957	14,000	32,500	106.22	98.23	43.8	41.1	2.425	2.39
1958	13,500	28,400	95.40	94.62	39.8	39.1	2.399	2.42
1959	11,100	22,400	108.15	106.25	42.8	42.5	2.526	2.50
1960	12,733	29,600	116.83	114.75	43.7	43.3	2.674	2.65
1961	13,117	27,000	126.29	119.03	44.8	43.6	2.817	2.73
1962	13,350	28,500	129.29	120.98	44.3	42.9	2.920	2.82
1963	13,393	27,800	133.81	124.48	44.6	43.1	3.003	2.89

* These estimates include all full and part-time wage and salary workers who worked or received pay during the pay period ending nearest the 15th of the month.

TABLE IX

ARIZONA COPPER MINING - OUTPUT IN TONS COPPER ORE,
VALUE OF COPPER, GOLD, SILVER PRODUCED

Source: U. S. Bureau of Mines

	Tons Copper Ore Annual Rate	Gold Ounces & Value	Silver Ounces & Value	Copper Pounds & Value	Lbs. Cu Recov Per Ton & Copper Price	Value of Copper, Gold & Silver	Lbs. Copper Equiv. to Total Val. Cu, Gold & Silver
1947-1949	38,082,754	79,612 \$2,786,420	2,603,485 \$2,356,154	723,353,767 \$ 150,588,843	19.0 Lbs/ton 20.818¢	\$155,731,417	748,056,267
1950	41,757,037	79,562 \$2,784,670	2,853,375 \$2,582,304	765,334,514 \$ 162,250,916	18.3 lbs/ton 21.2¢	\$167,617,890	767,000,000
1951	42,784,388	83,521 \$2,923,235	3,087,865 \$2,794,518	775,609,514 \$ 187,697,501	18.1 lbs/ton 24.2¢	\$193,415,254	799,236,600
1956	60,468,580	119,435 \$4,180,225	3,963,579 \$3,587,039	935,039,400 \$ 390,846,469	15.5 lbs/ton 41.8¢	\$398,613,733	953,621,100
1960	66,032,439	115,602 \$4,046,070	3,689,622 \$3,339,108	993,370,700 \$ 317,878,624	15.0 lbs/ton 32.0¢	\$325,263,802	1,016,449,300
1961	71,918,991	129,184 \$ 4,521,440	4,380,458 \$4,049,690	1,092,360,900 326,845,395	14.6 lbs/ton 29.9¢	\$335,416,435	1,121,007,000
1962	78,868,147	117,362 \$ 4,107,670	4,571,370 \$4,959,936	1,200,945,700 \$ 369,891,276	15.2 lbs/ton 30.8¢	\$378,958,882	1,230,386,000
1963 P	80,853,000	120,000 \$ 4,200,000	5,000,000 \$6,395,000	1,315,000,000 \$ 402,390,000	30.6¢	\$412,985,000	1,349,630,000

P = Preliminary

TABLE X

SUMMARY OF TOTAL COVERED EMPLOYMENT & WAGES IN ARIZONA COPPER MINING
1947-1963 INCLUSIVE

Source: Arizona Employment Security Commission
United States Bureau of Mines

COPPER MINING	No. Covered Employees	Covered Wages	Average Annual Wage	Tons Copper Ores	Average Weekly Wage
1947	11,340	\$ 36,365,277	\$ 3,207	37,810,448	\$ 61.67
1948	11,493	41,318,524	3,595	39,072,204	69.13
1949	11,001	40,612,224	3,692	37,365,611	71.00
1950	10,181	41,994,321	4,125	41,757,273	79.33
1951	10,754	47,825,698	4,447	42,784,388	85.52
1952	11,365	54,950,235	4,835	44,472,522	93.14
1953	12,068	62,742,982	5,199	45,187,838	99.98
1954	12,502	65,518,853	5,241	43,072,894	100.79
1955	12,399	71,293,263	5,750	52,189,728	110.58
1956	14,008	83,568,996	5,966	60,468,580	114.73
1957	14,652	85,125,320	5,809	59,571,834	111.71
1958	14,100	74,726,972	5,300	56,255,809	101.93
1959	11,568	72,095,130	6,232	53,121,545	119.85
1960	13,764	90,312,848	6,562	66,032,439	126.19
1961	14,275,	97,271,286	6,814	71,918,991	131.04
1962	14,408	101,920,108	7,074	78,868,147	136.04
1963	14,303	104,291,588	7,292	80,853,000P	140.23

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