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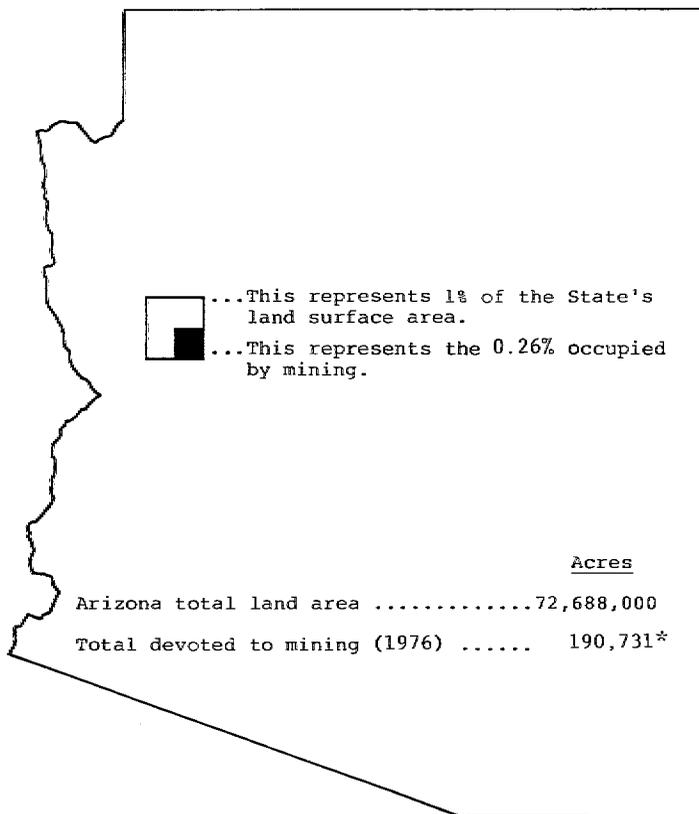
ARIZONA: COPPER CAPITAL, U.S.A.



1978

THIS IS COPPER COUNTRY

Over half of our nation's newly mined copper comes from Arizona. That's more than all the other states combined produce. And it all comes from just a little over one-quarter of one per cent of Arizona's land surface...or about the area represented by the little square on the map. If all the mining properties in Arizona were lumped together, that's about how much of the state they'd cover.



<u>Acres</u>	
Arizona total land area.....	72,688,000
Total devoted to mining (1976)..	190,731

* Approximately 0.26% (one-quarter of one per cent) of Arizona's land surface is occupied by mines, mills, smelters, waste disposal areas, roads, etc.

ARIZONA
COPPER CAPITAL, U.S.A.
1976

Facts about Arizona's
copper mining industry,
with latest statistics.

Prepared by
The Arizona Mining Association
Phoenix, Arizona

December 1977



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J. K. RICHARDSON
President

November 1, 1977

The American copper industry is far from being "alive and well." Perhaps it would be better described as being "barely alive!" The continuing circumstances which lead to this unsatisfactory situation are common, today, to almost all natural resource producers. At any rate, the cry heard from the farmer and the rancher has a most familiar ring. We continue to struggle to stay alive long enough to meet the next mortgage payment and keep the hired man from moving away.

It is hard to believe that our copper is selling for less today than it was three years ago! This "bounty" comes despite spiralling costs attributable to wage increases; inflated equipment prices; non-productive regulatory compliance costs; taxes, and even, perhaps, some inefficiencies. All in all, some correction must and will take place in this area. Possibly the single largest element in this unprofitable selling role is the effect of world-wide copper stocks overhanging the market. The best estimates available indicate copper stocks of 2.2 million tons are available. This is about twice the world's normal requirement. During 1976 and the first half of 1977, the domestic market has been in approximate balance -- consumption and supply in a standoff position. This situation just doesn't get rid of surpluses! The whole copper world would be better off if there were about a million tons less in these stocks.

This great surplus is, largely, foreign produced copper. Copper is an international commodity which can be readily shipped anywhere in the world for 5¢ a pound. U.S. producers, despite a strong domestic demand, have been unable to obtain a satisfactory price. The other copper producing countries, not enjoying an equally strong demand, continue to maximize their production, regardless of price levels, hoping to earn enough foreign exchange to pay for OPEC oil. Traditional markets just can't absorb this production, so they sell it in the U.S.A.

The results, in Arizona, are significant layoffs in the copper industry, as well as mine shutdowns. The solution may well lie in a workable tariff or in a resumption of government strategic stockpile purchases. This latter seems most probable and offers the most immediate promise of relief. The surplus stocks must be normalized before our Arizona industry can play its normal role in Arizona's economy.

Sincerely,

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ABOUT THE COVER

Firms manufacturing electrical products are among the biggest users of copper in America. Copper wire keeps them humming. This 1,000-foot reel of 10-gauge copper wire could be destined for any one of hundreds of domestic or industrial uses.

COPPER: BUILDING ARIZONA THROUGH THE YEARS

Miners were among the earliest builders of Arizona. The miners today are still helping build Arizona's future. In large towns and small, the copper industry makes major contributions to Arizona's economic health.

MAJOR SOURCES OF ARIZONA INCOME (BASIC INDUSTRIES)—1976

Tourism & Travel	\$2,625,647,000
Manufacturing Output (value added)	\$2,140,000,000
Mining Output	\$1,702,261,000
Agriculture (crops & livestock)	\$1,240,120,000

Source: Valley National Bank

COPPER'S CONTRIBUTION: \$5.5 BILLION *

The economic contribution of copper to Arizona's economy is measured in two ways: (1) Direct. Actual dollars paid by the industry for services and supplies. (2) Indirect. Additional dollars generated as those payroll and purchase dollars recirculate through the state's economy, buying more goods and services, with every dollar paying additional taxes right down the line.

The economic benefits add up. Directly and indirectly, in 1976, the State's copper industry provided Arizona more than \$5.5 billion in personal, business and government income.

*Source: Southwest Economic Information Center

76¢



Of every dollar, 76 cents remained in Arizona.*

Arizonans enjoy many benefits from the state's copper industry. Historically, dollars from copper have helped build towns, schools, hospitals, libraries and roads.

And in 1976, out of every dollar's worth of copper mined in Arizona, an estimated 76 cents remained in the state. It went for payrolls, pensions, taxes, purchases and permanent facilities.

(In addition, another \$299.3 million went out of state, in the form of federal taxes, equipment, services, out-of-state wages and salaries, debt service and dividends.)

PERSONAL INCOME: ONE OF EVERY EIGHT DOLLARS *

One out of every eight dollars of personal income received in Arizona in 1976 can be traced to the mines. During 1976, personal income from copper in Arizona totaled \$412.5 million, an increase of more than \$52 million over 1975.

This represented about three per cent of the total personal income of all Arizonans. But it formed nearly 12 per cent of the State's basic personal income (which comes from agriculture, mining, export, manufacturing, tourism and the Federal government.) Directly and indirectly, then, the copper industry was responsible for one out of every eight dollars of personal income received in Arizona in 1976.

* Source: Southwest Economic Information Center

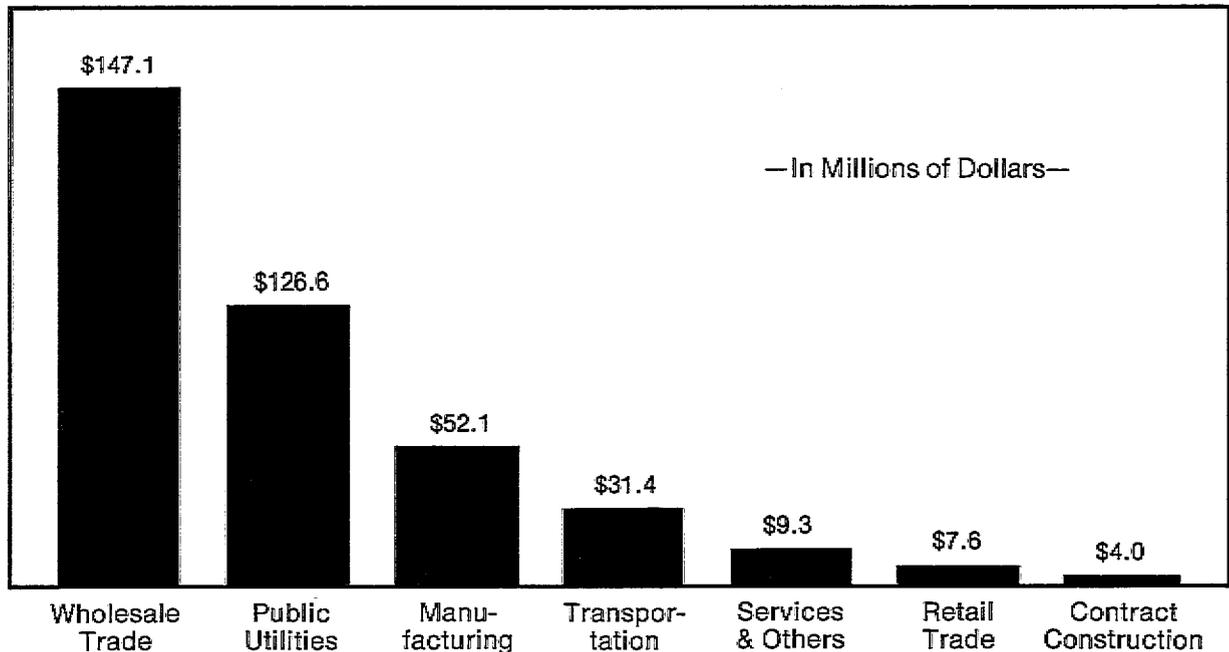
COPPER: A MAINSTAY IN ARIZONA'S ECONOMY *

Miners enjoy excellent pay. Combined wages and fringe benefits in 1976 amounted to \$462 million, or an annual average of \$17,980 for every employee. An additional \$12 million was spent for hospitals and recreational facilities in mining communities. These facilities are available to all residents of the mining community.

Over 70 per cent of the mines' equipment, fuel, supplies and other goods and services are purchased in Arizona.

Copper industry purchases in the state in 1976 totaled over \$379 million. Here's what that meant to other Arizona businesses:

Copper Mining Industry Purchases in Arizona — 1976



Source: Southwest Economic Information Center

Arizonans receiving these dollars in turn spent them with other Arizonans for goods and services they needed. Copper mining thus became directly and indirectly responsible in 1976 for more than \$3.5 billion in income to people working in other industries throughout Arizona. This was almost three times the value of its own sales!

*Source: Southwest Economic Information Center

ONE OUT OF EVERY FOUR TAX DOLLARS FROM COPPER *

State and local government revenues generated by the copper industry help lighten the tax burden for every Arizonan. During 1976, the Arizona copper industry paid over \$114 million to support state, county and municipal governments and school districts statewide. This was up \$11 million from the year before.

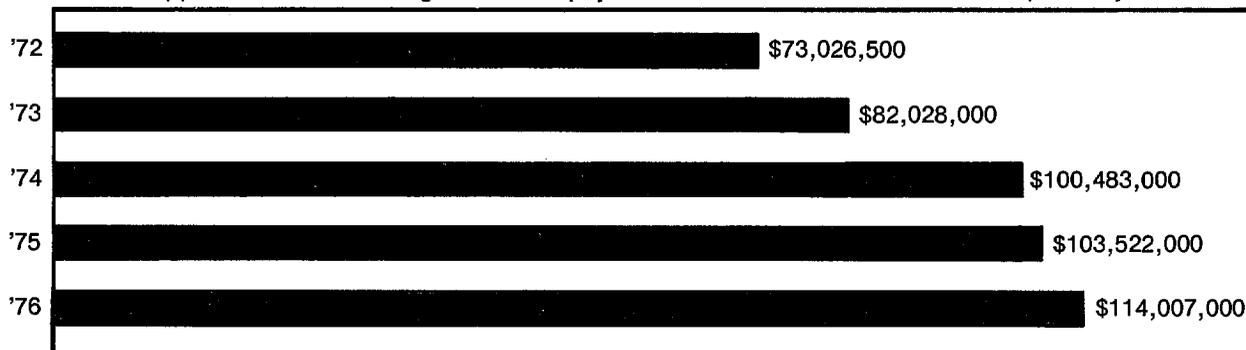
These taxes were paid in various forms: through mining property taxes, severance taxes, corporate income tax, payroll taxes and sales taxes on Arizona purchases. There were also motor vehicle licenses, miscellaneous taxes and fees, and rents and royalties for the use of state lands.

It all adds up. As direct and indirect tax revenues generated by the mines recirculate through the state's economy, the combined effect is more than \$440 million for 1976.* This was about one-quarter of all state and local tax revenues generated in Arizona.

Thus, although directly responsible for less than 10 per cent of state and local taxes in Arizona, the copper industry provided by direct and indirect means one of every four state and local tax dollars.

* Source: Southwest Economic Information Center

Copper's State & Local government payments increased over 56% in the past 5 years.



Source: Southwest Economic Information Center

TOTAL STATE & LOCAL GOVERNMENT REVENUES
 PROVIDED BY THE ARIZONA COPPER INDUSTRY
 1974 - 1976

Amount Paid -- (In Thousands of Dollars)

<u>Type of Revenue</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
Property Taxes	\$38,960	\$50,048	\$55,801
Severance Taxes ^a			
Privilege Sales Tax	12,105	9,808	12,050
Education Excise Tax	6,052	4,904	6,025
Special Excise Tax for Education	8,517	9,808	12,050
Corporate Income Tax	9,729	2,362	5,300
Payroll Taxes			
Unemployment Compensation	1,716	1,799	2,047
Workmen's Compensation	5,901	6,187	6,871
Miscellaneous Taxes ^b	11,445	13,037	11,636
Land Rentals and Royalties	<u>6,058</u>	<u>5,569</u>	<u>2,227</u>
Total	\$100,483	\$103,522	\$114,007

^aDefined in Arizona as taxes paid on the value of mineral products sold or exported from the State.

^bIncludes sales taxes paid on Arizona purchases as well as motor vehicle licenses and fees.

*Source: Southwest Economic Information Center

ARIZONA STATE GOVERNMENT REVENUES

PROVIDED BY THE COPPER INDUSTRY

1974 - 1976

<u>Source of Revenue</u>	<u>Amount of Revenue -- (Thousands of Dollars)</u>		
	<u>1974</u>	<u>1975</u>	<u>1976</u>
State Property Tax	\$ 7,693	\$10,350	\$11,168
Severance Taxes ^a			
Privilege Sales Tax	5,011 ^b	4,061 ^b	4,989 ^b
Education Excise Tax	c	c	c
Special Excise Tax for Education	c	c	c
Corporate Income Tax	8,247 ^b	18 ^b	3,486 ^b
Payroll Taxes			
Unemployment Compensation	1,716	1,799	2,047
Workmen's Compensation	5,901	6,187	6,871
Sales Taxes on Purchases			
Privilege Sales Tax	1,165 ^b	1,314 ^b	1,186 ^b
Education Excise Tax	c	c	c
Special Excise Tax for Education	c	c	c
Motor Vehicle Taxes and Fees	185	341	180
Land Rentals and Royalties	<u>6,058</u>	<u>5,569</u>	<u>2,227</u>
Total	\$35,976	\$29,639	\$32,154

^aDefined in Arizona as taxes paid on the value of mineral products sold or exported from the State.

^bExcludes amounts shared with county and municipal governments.

^cAlthough paid directly to the State general fund, all educational excise taxes are in fact distributed to the school districts.

*Source: Southwest Economic Information Center

COUNTY GOVERNMENT REVENUES
 PROVIDED BY THE ARIZONA COPPER INDUSTRY
 1974 - 1976

<u>County</u>	<u>Amount of Revenue^a -- (Thousands of Dollars)</u>		
	<u>1974</u>	<u>1975</u>	<u>1976</u>
Pima	\$ 8,388	\$ 9,185	\$ 9,362
Pinal	2,426	4,045	4,541
Gila	2,033	3,256	3,846
Maricopa	2,622	2,345	2,576
Yavapai	402	480	770
Cochise	452	372	736
Greenlee	279	703	616
Mohave	255	533	350
Coconino	182	144	209
Yuma	155	137	152
Navajo	93	79	116
Graham	45	40	40
Santa Cruz	38	33	40
Apache	<u>34</u>	<u>29</u>	<u>32</u>
Total	\$17,404	\$21,381	\$23,386

^aContributed directly through the property tax and the automatic apportionment of privilege sales taxes collected by the State.

Source: Southwest Economic Information Center

MUNICIPAL GOVERNMENT REVENUES
PROVIDED BY THE ARIZONA COPPER INDUSTRY

1974 - 1976

<u>Municipality</u>	<u>Amount of Revenue^a -- (Thousands of Dollars)</u>		
	<u>1974</u>	<u>1975</u>	<u>1976</u>
Phoenix	\$ 2,209	\$ 2,370	\$ 2,349
Tucson	1,030	1,105	1,014
Mesa	249	267	339
Tempe	241	258	316
Scottsdale	255	274	262
Glendale	136	146	226
Hayden	124	125	210
Flagstaff	98	105	105
Yuma	109	117	101
Sierra Vista	65	70	68
Chandler	54	58	67
Prescott	53	57	57
Casa Grande	40	43	46
Douglas	50	52	42
Bisbee	49	49	37
Paradise Valley	27	29	31
Nogales	34	36	30
Winslow	30	33	27
Peoria	-	-	26
Globe	28	30	25
Kingman	28	30	25
Miami	-	38	23
Coolidge	-	-	23
Avondale	25	27	22
All other municipalities	<u>428</u>	<u>435</u>	<u>309</u>
Total	\$5,362	\$5,754	\$5,780

^aContributed directly through the property tax and the automatic apportionment of privilege sales taxes and corporate income taxes collected by the state.

Source: Southwest Economic Information Center

SCHOOL DISTRICT REVENUES PROVIDED BY
THE ARIZONA COPPER INDUSTRY

1974 - 1976

<u>School District</u>	<u>Amount of Revenue^a -- (Thousands of Dollars)</u>		
	<u>1974</u>	<u>1975</u>	<u>1976</u>
Mammoth-San Manuel Combined	\$ 2,526	\$ 2,925	\$ 3,518
Tucson No. 1 Combined	2,900	3,006	3,293
Sahuarita Unified	3,565	3,510	3,181
Superior Combined	860	1,311	2,528
Miami Unified	1,419	2,368	2,213
Morenci Combined	1,715	1,897	2,117
Hayden-Winkelman Unified	1,222	1,210	1,734
Ajo Unified	1,359	1,534	1,730
Bagdad Unified	654	872	1,604
Mesa Combined	1,281	1,335	1,500
Phoenix Union High School	1,241	1,320	1,450
Scottsdale Unified	1,338	1,345	1,428
Ray Unified	1,168	1,280	1,370
Washington Elementary	1,176	1,210	1,310
Glendale Combined	696	1,109	1,256
Marana Combined	842	1,126	1,022
Tempe Combined	866	918	1,015
Casa Grande Combined	-	-	829
Paradise Valley Combined	524	608	703
Cartwright Elementary	604	617	658
Douglas Unified	-	-	604
Yuma Combined	490	504	545
Sunnyside Unified	-	-	533
Roosevelt (Phoenix) Elementary	509	497	505
All other school districts	<u>11,523</u>	<u>12,626</u>	<u>12,101</u>
Total	\$38,478	\$43,128	\$48,747

^aProvided directly through the property tax and the appointment of educational excise taxes.

^bCombined, in all cases, refers to combined high school and elementary school districts.

Source: Southwest Economic Information Center

COMMUNITY COLLEGE REVENUES
PROVIDED BY THE ARIZONA COPPER INDUSTRY
1976

<u>Community College District</u>	<u>Amount of Revenue^a</u>
Central Arizona	\$1,633,131
Pima	1,417,455
Yavapai	386,225
Cochise	198,547
Mohave	78,589
Eastern Arizona	2,333
	<hr/>
Total	\$3,716,280

^aContributed directly through the property tax.

Source: Southwest Economic Information Center

INCOME TO OTHER ARIZONA BUSINESSES
 PROVIDED BY THE ARIZONA COPPER INDUSTRY

1976

<u>Economic Sector</u>	<u>Goods and Services Purchased --</u> <u>(In Thousands of Dollars)</u>
Agriculture	\$ 292
Other Mineral Industries	402
Contract Construction	3,958
Manufacturing	52,077
Lumber and Wood Products	\$ 1,355
Paper and Paper Products	371
Printing and Publishing	375
Chemicals	11,574
Rubber and Plastics	385
Stone, Clay and Glass Products	7,159
Primary Metals (except copper)	18,712
Fabricated Metal Products	7,579
Non-Electrical Machinery	2,784
Electrical Machinery and Equipment	1,480
All Other Manufacturing	303
Transportation	31,426
Communications	1,848
Public Utilities	126,569
Wholesale Trade	147,107
Automotive Equipment	23,335
Drugs and Chemicals	5,293
Apparel	3,187
Electrical Goods	8,429
Hardware, Plumbing and Heating Supplies	32,642
Machinery and Equipment	41,115
Petroleum Products	25,676
All Other Wholesalers	7,430
Retail Trade	7,579
Building Materials and Supplies	1,476
General Merchandise	1,211
Food	1,325
Automobile Dealers and Service Stations	2,490
All Other Retailers	1,077

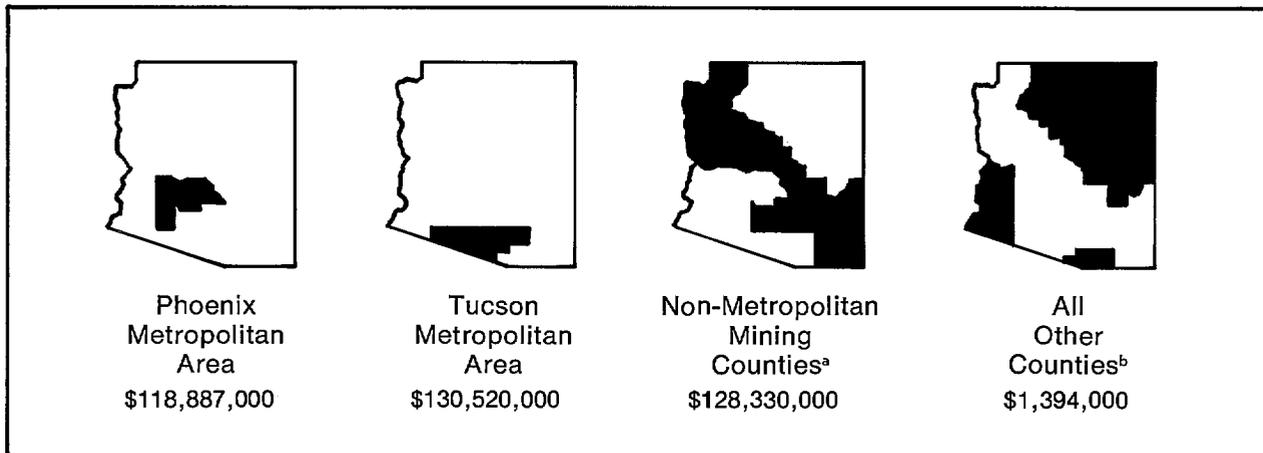
Economic Sector

Goods and Services Purchased --
(In Thousands of Dollars)

Finance, Insurance and Real Estate		\$ 2,654
Services		5,220
Personal Services	\$ 578	
Business Services	1,569	
Automotive Repair Services	490	
Other Repair Services	1,164	
Miscellaneous Professional Services	1,160	
All Other Services	259	
TOTAL ARIZONA PURCHASES		\$379,131

GEOGRAPHICAL DISTRIBUTION — 1976

All sectors of the State benefit from copper industry purchases.



a) Cochise, Gila, Graham, Greenlee, Mohave, Pinal, Yavapai Counties.

b) Apache, Coconino, Navajo, Santa Cruz, and Yuma Counties.

Source: Southwest Economic Information Center, based on data from the Arizona Department of Mineral Resources, the Arizona Mining Association, and individual copper producing firms.

COPPER: WHERE DOES IT COME FROM AND WHERE DOES IT GO?

Copper occurs and is mined in varying quantities throughout the world. In 1976, approximately 59 countries produced copper. World production of newly mined copper was 8,713,740 tons. The United States produced 1,611,341 tons or 18.5 per cent of the world production. Arizona, the largest producing copper state, accounted for 63 per cent of the newly mined U.S. production and 11.6 per cent of the world production. Arizona is truly "Copper Capital, U.S.A."

WORLD PRODUCTION OF COPPER BY REGION - 1976 *

	Production (short tons)	Per cent of total
North & South America	3,878,313	44.5
Europe	327,158	3.8
Asia	506,271	5.8
Africa	1,586,221	18.2
Australia/New Guinea	422,077	4.8
** Communist Block Nations (including Cuba & China)	<u>1,993,700</u>	<u>22.9</u>
	8,713,740	100%

UNITED STATES NEWLY MINED COPPER PRODUCTION BY STATE - 1976 *

	Production (short tons)	Per cent of Total
Arizona	1,012,660	63.0
Utah	185,760	11.5
New Mexico	175,245	10.9
Montana	105,525	6.5
Nevada	57,480	3.6
Michigan	45,230	2.8
Other	<u>29,441</u>	<u>1.7</u>
Total	1,611,341	100%

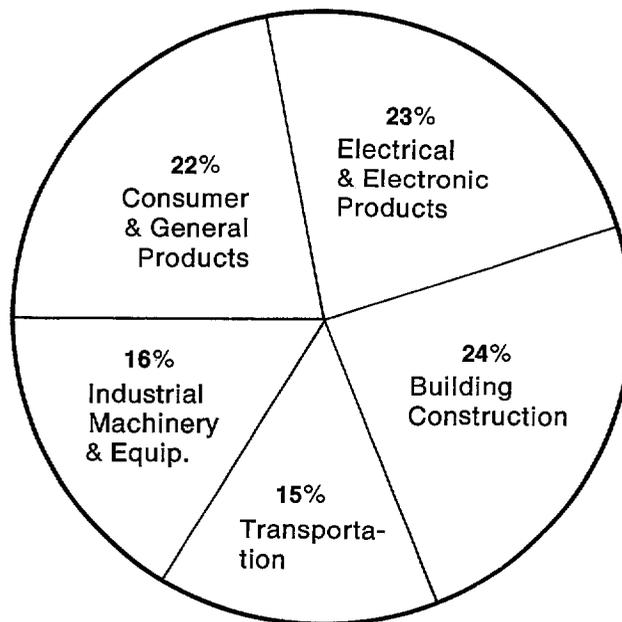
Copper is one of the basic metals that is used by most of us all the time. Not only is copper the best metal for the conduction of electricity, but it readily alloys with over 100 other metals, is easily worked, and hourly contributes to our living standard.

* Source: American Bureau of Metal Statistics

** Estimated

U.S. CONSUMPTION OF REFINED COPPER - 1976 - 1,988,200 TONS *

The United States, in 1976, used 1,988,200 tons of refined copper. Listed below are the broad industrial using groups.



Source: Copper Development Association

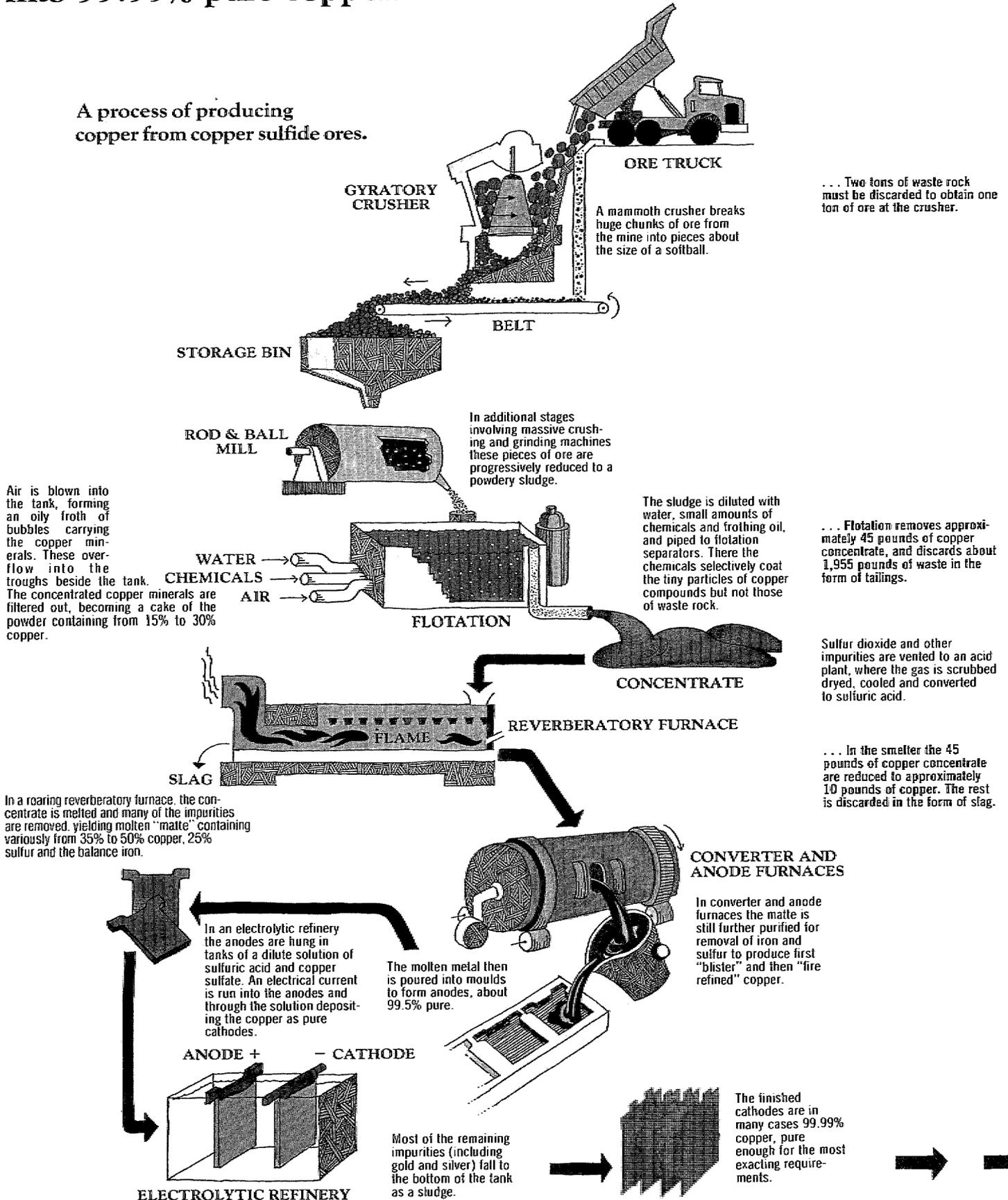
COPPER: HOW IS IT PRODUCED?

Many of the early copper ore bodies in this country contained from five to ten per cent copper. They were the "bonanzas." Their existence, however, was short-lived and the grade of mineable ore decreased as a result of economic and technical limitations. In contrast, today's modern mines in Arizona are processing ores that average six-tenths of one per cent (.6%) copper. Through the application of modern technology, coupled with vast sums of private capital, Arizona's low grade mines are making copper available, as a usable product, for every man, woman and child in this country.

This illustration of a production process will, perhaps, make more understandable why millions of dollars of capital investment are needed in order that a mine can produce copper from such low-grade ores.

Processing 0.6% low grade ore into 99.99% pure copper.

A process of producing copper from copper sulfide ores.



Note: Figures used are statewide industry averages and will vary at each operation.

A process of producing copper from copper oxide ores.

Copper is removed from oxide ore by leaching – using sulfuric acid solution to dissolve the copper from the ore – in place, in heaps or in large vats.

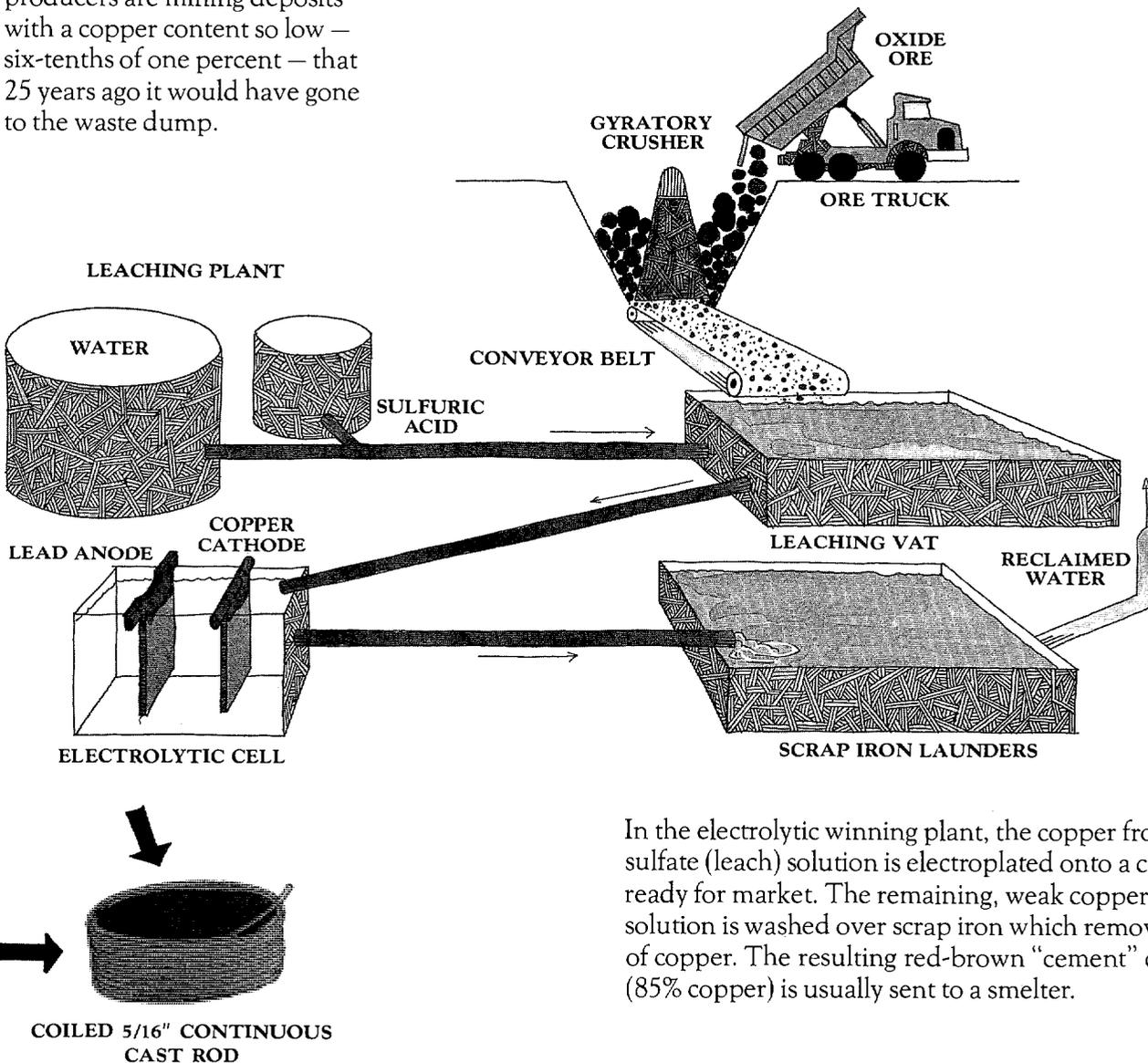
Working low grade ores once considered waste.

The “high grade” 5-10 percent copper ores of the early 1900s are nearly gone.

Today, Arizona copper producers are mining deposits with a copper content so low – six-tenths of one percent – that 25 years ago it would have gone to the waste dump.

The leaching process is being used at almost all Arizona copper mines to recover copper from low grade material, once considered too marginal to work. This is another conservation effort by the copper industry.

Year after year, Arizona’s copper industry continues to produce over half the nation’s new copper from low grade ores.



In the electrolytic winning plant, the copper from the copper sulfate (leach) solution is electroplated onto a cathode and is ready for market. The remaining, weak copper-bearing solution is washed over scrap iron which removes the last bit of copper. The resulting red-brown “cement” copper (85% copper) is usually sent to a smelter.

The copper mineralization in Arizona often contains other metals in varying quantities. If economically and technically feasible, these metals are separated from, refined, and sold as, by-products of copper. As a result of the huge tonnages of copper ore mined in Arizona, significant quantities of these other metals are also produced.

BY-PRODUCT PRODUCTION FROM ARIZONA COPPER OPERATIONS - 1976 *

<u>Metal</u>	<u>Production</u>	<u>% of U.S. Production</u>	<u>Rank by State</u>
Molybdenum	31,073,000 lbs.	27.1	2
Silver	7,297,280 Tr. Oz.	21.5	2
Gold *	101,122 Tr. Oz.	9.8	4
* Estimated			

COPPER: LAND USE AND THE ENVIRONMENT

For geological reasons, the western states, including Alaska, offer the best targets for future mineral discoveries. The federal government, however, controls approximately one-third of the 2.27 billion acres in the fifty states; 93.5% of which are located in the twelve western states. However, the piecemeal withdrawal by Congress of these public lands from mineral access over the years is now equivalent to all of the land east of the Mississippi, with exception of Maine. Our annual, rising, domestic consumption of all minerals forces new ore bodies be found and developed to replace those we are now using. Imports of foreign minerals (that could have been produced domestically) mean loss of jobs, tax revenues, purchases of domestic goods and services, and a continuing increase in our adverse balance of payments.

The mining industry has never opposed legitimate withdrawals. It has, however, contended that Americans should know what mineral resources are being locked up for future generations -- otherwise who will know where to look when an emergency must be confronted. Lands subject to mineral exploration can be returned to other multiple use purposes without adverse environmental impacts. Re-vegetation and reclamation projects have already returned to other uses 40 per cent of the approximate 3.65 million acres earlier used for mining. As noted elsewhere in this report, the total land used for mining activities in Arizona is equivalent to about one-quarter of one per cent of the total land mass of the State. Compare that with land devoted to highways, agriculture, cities, housing developments, etc. This land that gives each of us so much is here to be enjoyed and its careful and intelligent development today makes its benefits available for future generations.

* Source: U.S. Bureau of Mines

AIR QUALITY

In 1969, Congress passed the National Environmental Policy Act. This Act was the first major action by government establishing a national policy to deal with the protection, maintenance and understanding of our environment.

Two years later, Congress approved the creation of the Environmental Protection Agency (EPA). Its job was to develop air quality standards, regulations, and the enforcement means to carry out Congress' intent. The agency's original staff called for 2,694 positions and an annual budget of \$204 million. By 1977 the staff had grown to 10,150 and its annual budget to \$784 million. This shocking growth of bureaucracy and attendant cost reflects legislative concern over the environment -- and lack of it for the consuming public. The public must bear the ultimate cost of it all.

Each ore, as well as each smelter, has its own unique characteristics. The existing technology available for meeting EPA and State standards worked in some cases and failed miserably in others. This "cut and try" method is still going on and so far has resulted in some 15 out of 42 U.S. non-ferrous smelters closing as regulatory EPA expenditures made continued operation uneconomic. Original EPA cost projections to bring all the non-ferrous smelters in the United States into compliance approached \$60 million. Arizona's copper industry, alone, with only seven copper smelters, has spent almost \$500 million and the job is still far from complete. One recently built smelter reports that over \$100 million of its total cost is attributable to EPA regulatory compliance.

Such costs as these have made it so easy for foreign copper producers to flood Arizona's normal copper markets. When this occurs, it takes jobs away from Arizonans and, eventually, raises every homeowner's property tax. One Arizona Congressman recently reported that environmental costs amounted to 15¢ per pound of copper.

The Copper Industry of Arizona supports realistic, technical and economically achievable environmental goals. We all desire, as present custodians of this earth, to keep its quality intact for future generations to use and enjoy as we have done. To insure this ability, we need to reach a constructive balancing of goals between aesthetic and resource values.

COPPER: THE MARKET

Copper is an internationally traded metal. As earlier pointed out, approximately 59 countries produce copper which is sold and traded on three commodity exchanges. Most of the foreign copper is sold on the London Metal Exchange (LME). A similar market is the New York Commodity Exchange (COMEX) which serves interests in this country. However, most copper in this country is sold as a result of a U.S. "producers' price." This price is applicable to consumers who contract to purchase quantities of copper over a period of time.

"Scrap copper," usually produced from manufacturing processes, has always occupied a significant role in total copper production and is sold on an "over the counter" basis at quoted market prices.

The forms and purity of copper dictate prevailing price quotations. The most common are (1) Electrolytic refined wirebars and (2) Electrolytic refined cathode, both assaying not less than 99.90% copper, (3) Fire-refined copper in various classes, depending upon the degree of purity, and (4) Scrap copper either light or heavy.

Refined copper can be shipped here from almost anywhere in the world for about 5¢ per pound. Domestic prices must remain competitive with other markets. Prices react to many conditions, such as supply and demand, strikes, production costs, and political actions of various governments producing and marketing copper.

Although Arizona contributes significantly to this nation's copper supplies, its copper is not unique and must compete with copper produced elsewhere. Federal, State and local taxes, in addition to the cost of regulatory compliance, have a direct effect upon our ability to compete.

Property Tax

Private property in Arizona is assessed at varying percentages of its "full cash value." The percentage depends upon the classification assigned a property. For example, residential and agricultural property is assessed at 15 per cent and 18 per cent, respectively, of their "full cash value." Business property is assessed at 27 per cent and utilities at 50 per cent. Mines and railroads, however, are assessed at 60 per cent of "full cash value" -- the highest classification in the book! Congress, in recently passing PL 94-210, denied all states, effective in 1980, the right to discriminate against railroad property, insofar as taxation is concerned. Congress has, thus, recognized the need for tax equity if railroads are to provide viable, competitive, transportation for the nation's goods. Common sense should dictate that inequity, wherever found, must and should be eliminated.

Severance Tax

Arizona has a classic severance tax, even though it is called by another name. It is a tax upon the value of the mineral and forest products, sold or exported from the State. In the case of the mineral industry, it amounts to 2½ per cent of that value, regardless of the profitability of the operation. The severance tax is assessed, in addition to property, sales, income, payroll and miscellaneous taxes. Arizona's severance tax comes in three parts -- (1) Privilege Sales Tax; (2) Education Excise Tax; and (3) Special Excise Tax for Education. We have difficulty in seeing this as anything other than discriminatory taxation. There is no difference between our product and any other product sold and exported out of Arizona. Our State was most critical of New Mexico's tax upon power exported to Arizona -- no one liked paying New Mexico's "cost of government." Copper producers are unable to pass this severance tax on to the customer, for we must compete with other states as well as other nations -- so we must absorb such taxes. All if does is make Arizona's copper industry less viable than our neighbors or other lands which lack a similar tax.

Depletion Allowances

Any company may depreciate buildings and equipment in order to have assets available to replace them when they wear out. An ore body cannot be replaced as it is being drawn upon. This is the reason the law permits a "depletion allowance." With the funds so generated, a mining company looks for, and when found, develops new ore bodies as the old one is being mined. Only in this way can a mining company stay in business.

In its report accompanying the Tax Reform Bill of 1969, the U.S. House Ways and Means Committee stated that U.S. gold, silver, oil shale, copper and iron ore deposits must remain at the present 15 per cent depletion rate. The committee further stated that "present depletion rates appear to provide a proper balance between the need to encourage exploration and the discovery of new reserves on the one hand, and the revenue cost involved on the other hand." Projected future copper requirements make this conclusion equally sound today.

COPPER: THE FUTURE

There is throughout the copper industry, a prevailing optimism with regard to copper's long-range future. Most of us who have participated in its successes and failures recognize the industry's cyclical nature. We know of the peaks and valleys on any curve reflecting price. We also know that there is a general price up-trend.

The U.S. Bureau of Mines points out that as the world goes into the 21st Century, consumption of copper will rise at an annual rate of 3½% per year. This discounts substitutions and takes into consideration the national population and living standard growth. Nor is there any question that many areas of this world aspire to our American way of life -- which is impossible without copper!

The average American uses 20-25 pounds of copper per year in attaining our "good life." As less developed nations reach toward this lifestyle, it gives an almost infinite consumptive promise.

At this moment, the American market for Arizona's copper is weak. This does not say that American consumption of copper is weak, but merely that the American consumer is able to buy less expensive copper outside the United States. The European market for copper is less strong than ours and those materials normally sold in those markets are coming here instead.

The recession of 1976 led to an over-supply of copper throughout the world of about 2.2 million tons. This is about twice the normal working inventory in copper stocks. The surplus million tons of copper has depressed prices here, which has resulted in lay-offs and shutdowns. When these surpluses are gone, we expect, again, that copper will assume its normal, bright, role in Arizona's economic picture.

AN INVITATION

Visit an Arizona copper mine. Many copper mining companies offer public tours of their operations. The Arizona Mining Association has a free tour brochure listing the times and dates of tours, safety rules for visitors and whom to contact at the various companies. Just write or call us for it.

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MEMBER COMPANIES

AMAX ARIZONA, INC.

ASARCO

THE ANACONDA COMPANY

ANAMAX MINING CO.

CITIES SERVICE COMPANY

CYPRUS MINES CORPORATION

DUVAL CORPORATION

HECLA MINING COMPANY

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