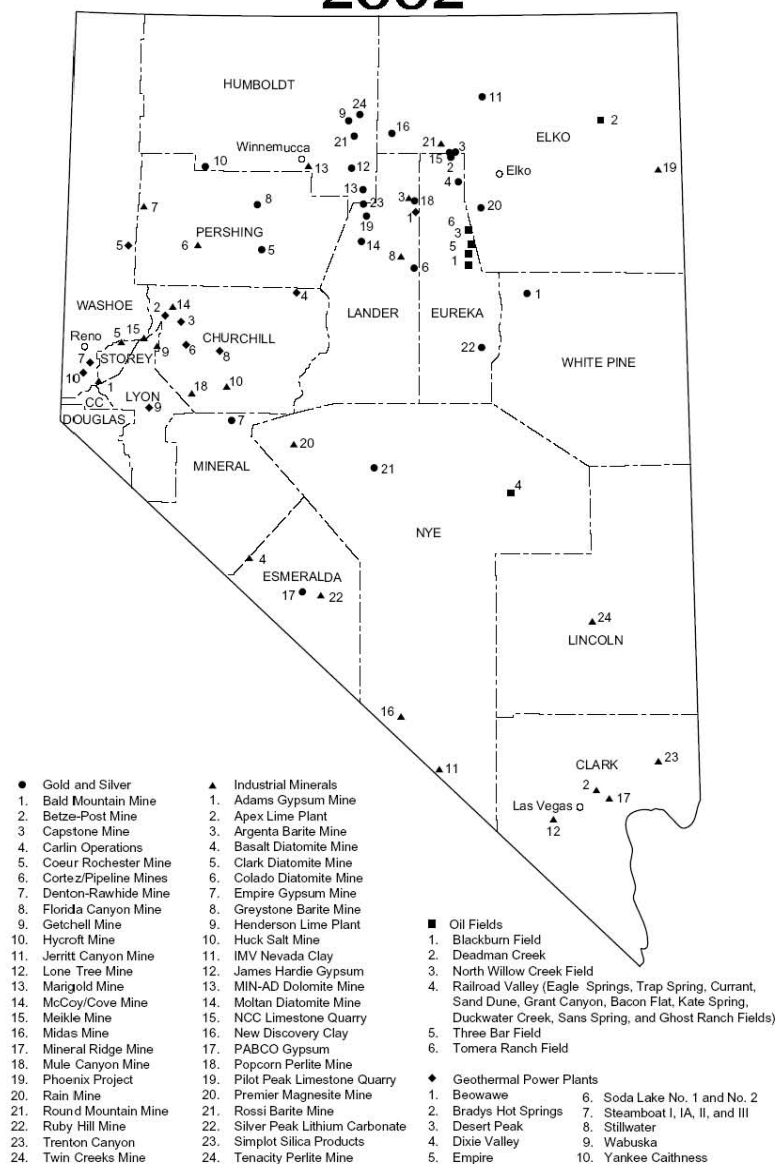


Economic Overview of the Nevada Mining Industry 2002



Major mines, oil fields, and geothermal plants, 2002.

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Executive Summary

2002 and the first half of 2003 were generally good for Nevada's mining industry if, for no other reason than for the first time in four years, the annual average price of gold started with a "3". After averaging in the \$270 per ounce range for the previous three years, gold averaged \$310 per ounce in 2002 and \$350 in the first half of 2003. This additional \$40 per ounce in 2002 and \$80 per ounce in the first half of 2003 makes an enormous difference in an industry producing around eight million ounces of gold per year. The higher price not only generates a significant amount of additional revenue, approximately \$309 million in additional gross proceeds in 2002 over what 2002 production would have yielded at the 2001 price of \$270 per ounce, but it is also responsible for a significant increase in exploration expenditures as companies seek to expand existing reserves and find new deposits.

Nevada gold mines produced 7.73 million ounces of gold in 2002, down slightly from 8.13 million ounces in 2001. Silver production was also down in 2002 at 13.6 million ounces from 17.5 million ounces in 2001 and over 23 million ounces in 2000. The declines in production of both metals were the result of declining ore grades and mine closures or temporary closures.

In spite of declining production, gross proceeds of Nevada mines (including geothermal and oil production) increased to \$2.7 billion in 2002 from \$2.5 billion in 2001. Approximately \$2.4 billion, or 89 percent, of these 2002 gross proceeds were generated by gold and silver production. Net proceeds of mines also increased in 2002 to \$533.7 million from \$438 million in 2001. This increase resulted in a corresponding increase in Net Proceeds of Minerals tax revenue from \$21.4 million in 2001 to \$25.6 million in 2002, a 20 percent increase. Gold price increases in the first half of 2002 offer the prospect that these revenues flowing to the local and state coffers as well as revenues from other taxes paid, especially sales and use tax and property tax, will reverse their recent course.

Other positive developments that are largely attributable to increasing gold prices are several expansions of operations that are currently in the permitting phase, that is, where operators are currently seeking operating permits from federal and State regulatory authorities. Glamis Gold is seeking permits to expand operations at its Marigold mine in Humboldt County; Newmont is seeking permits to develop its Phoenix deposit in Lander County as well as expanding its operations at Gold Quarry in Eureka County; and Cortez Gold Mines Joint Venture is seeking permits to expand its Pipeline operations in Lander County. In addition, Hecla Mining has entered into an agreement with Great Basin Gold Ltd. to develop Great Basin's Ivanhoe prospect at the north end of the Carlin Trend in Elko County; and Placer Dome has reopened its Getchell Mine in Humboldt County.

One disturbing trend in Nevada's gold industry in 2002 was the increase in operating costs. However, in spite of higher costs, the industry is currently much

healthier than in 2001 because of higher gold prices. The weighted average cash cost per ounce for mines in Nevada increased from \$179 per ounce in 2001 to \$206 per ounce in 2002, a \$27 or 15 percent increase. Gold Fields Mineral Services (GFMS) estimates that energy cost increases for diesel fuel and electricity alone account for between \$5 and \$10 per ounce of this increase.¹ Other factors raising Nevada producers' costs have been declining grades and the shift from open – pit surface mining to more costly underground mining. Approximately 27 percent of 2002 Nevada gold and silver production came from underground mining compared to 20 percent in 2001 and that trend will continue for the foreseeable future. All of these factors, as noted by GFMS, have resulted in U.S. and Nevada producers going from among the lowest cost producers to the highest cost producers in the world.

Nevada's gold producers face other challenges that have a bearing on production costs. One of these challenges is the rising cost of insurance for bonding for reclamation expenses. Recent changes in federal regulations have required cash bonds for reclamation for both exploration and operating permits. The problem of rising insurance costs is exacerbated by what some have called a "crisis" in the insurance industry as a result of insurance company stock market losses and the rising costs of lawsuits in various industries.

Another problem facing the industry is the rising costs of legal action in the permitting process for operators. Environmental groups are routinely challenging applications for virtually all permits in the administrative process and then, if permits are granted, suing the State and federal agencies responsible for issuing permits. These actions tie up development plans and, like insurance costs, add to operators' overhead costs.

The increase in Nevada operators' overhead costs in the past year has been as notable as the increase in cash operating costs noted above. In 2001 cash operating costs, as noted above, were \$179 per ounce, and total costs were \$226 per ounce, indicating non-cash costs of \$47 per ounce. In 2002, cash operating costs were \$206 per ounce and total costs were \$266 per ounce, indicating non-cash costs of \$60 per ounce, a significant 28 percent increase in non-cash costs.

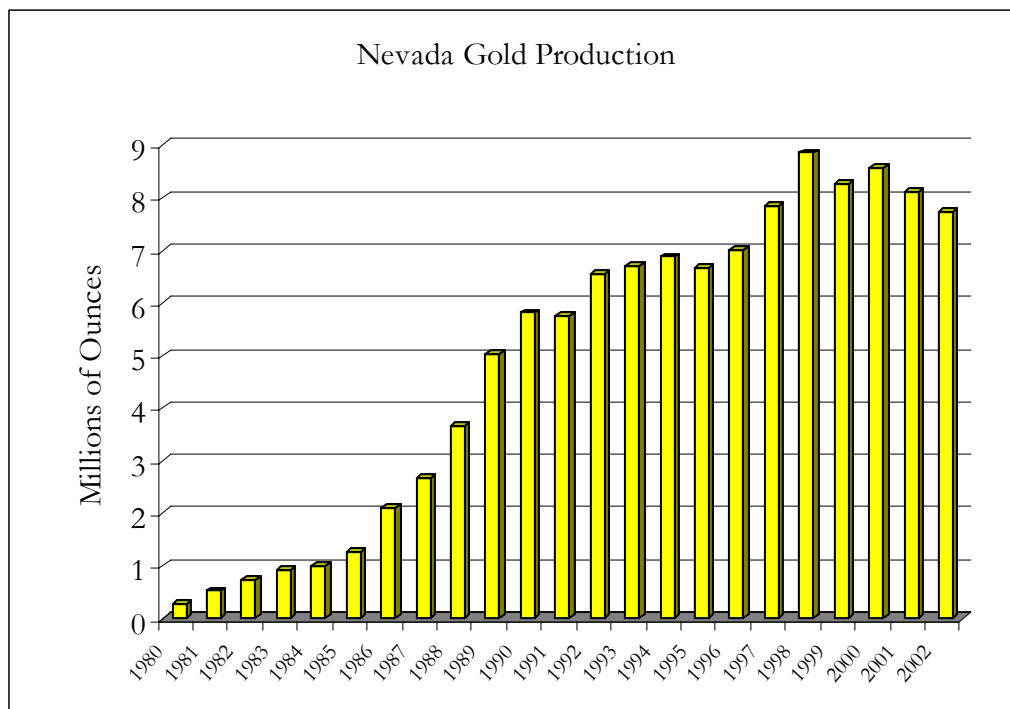
Finally, Nevada producers ended 2002 with approximately 69 million ounces of proven and probable gold reserves, which is gold contained in ore that can be mined at a profit. This is down slightly from year-end 2001 reserves of 72 million ounces but suggests that all but three million of the 7.73 million ounces produced in 2002 were replaced by exploration and discovery of new ores. The increase in exploration spending in the State reported by the Nevada Division of Minerals from \$51.2 million in 2001 to \$64.6 million in 2002 along with higher gold prices make it likely that Nevada's reserve base will increase in the future. Even if no new gold is found, however, which is highly unlikely, 2002 year end reserves are sufficient to maintain 2002 rates of production for almost nine years.

¹ Philip Klapwijk, et al., *Gold Survey 2003*, Gold Fields Mineral Services Ltd., London, April 2003, p. 45.

The industry developments described in this Economic Overview clearly show that Nevada's minerals industry is seeing a reversal of a downward trend over the last five years that has been an economic challenge. In general, the Nevada mining industry is realizing a healthier bottom line at many operations, especially for producers of precious metals. The North American precious metals industry has worked its way through the difficult period of the late 1990's and is in much healthier financial condition. Nevada remains a major player in the world gold industry. Moreover its large reserve base and existing capital investment make it likely that it will remain a major player for the foreseeable future.

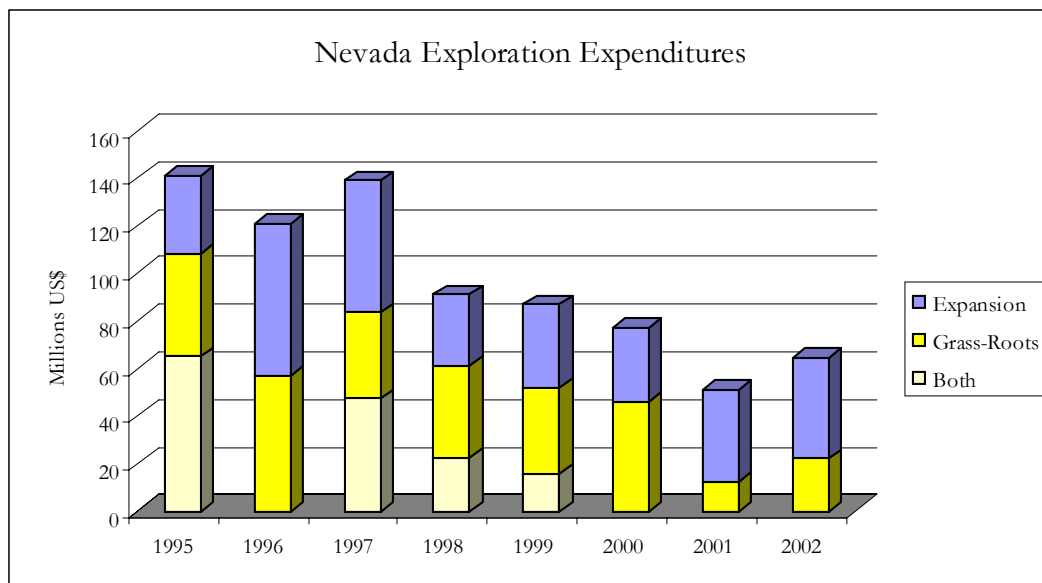
HIGHLIGHTS OF NEVADA MINERAL PRODUCTION

GOLD

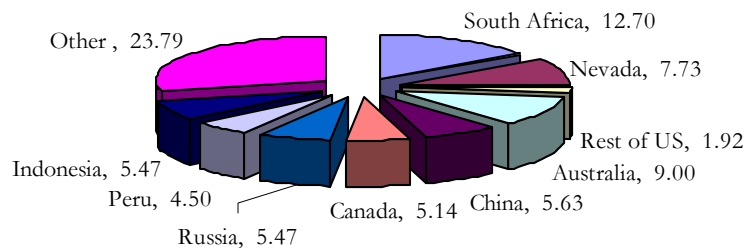


- Nevada operators produced 7.73 million ounces of gold in 2002 worth just under \$2.4 billion at the 2002 average price of \$310 per ounce. This compares with 8.13 million ounces worth \$2.2 billion in 2001.
- Nevada's production declined for the second straight year as a result of lower grades and several mine closures.

- Nevada gold production accounted for 80 percent of total US production and approximately 9.5 percent of world production.
- Nevada ranks as the third largest gold producer in the world behind South Africa and Australia, which produced 12.7 and 9.0 million ounces, respectively, in 2002.
- Nevada gold reserves represent just under 40 percent of total known U.S. reserves when by-product gold is considered and is a significant majority of U.S. primary reserves.
- The Nevada Division of Minerals reports over 20 major gold/silver mines in Nevada although several of these (e.g. Hycroft, McCoy/Cove, Mineral Ridge, and Ruby Hill) are closed or operating at reduced levels (e.g. the Rain Mine, Trenton Canyon Mine).
- Gold exploration expenditures reversed a four-year downward trend by increasing from \$51.2 million in 2001 to \$64.6 million in 2002.



World Gold Production, 2002 (Millions of Ounces)



OTHER 2002 MINERAL PRODUCTION

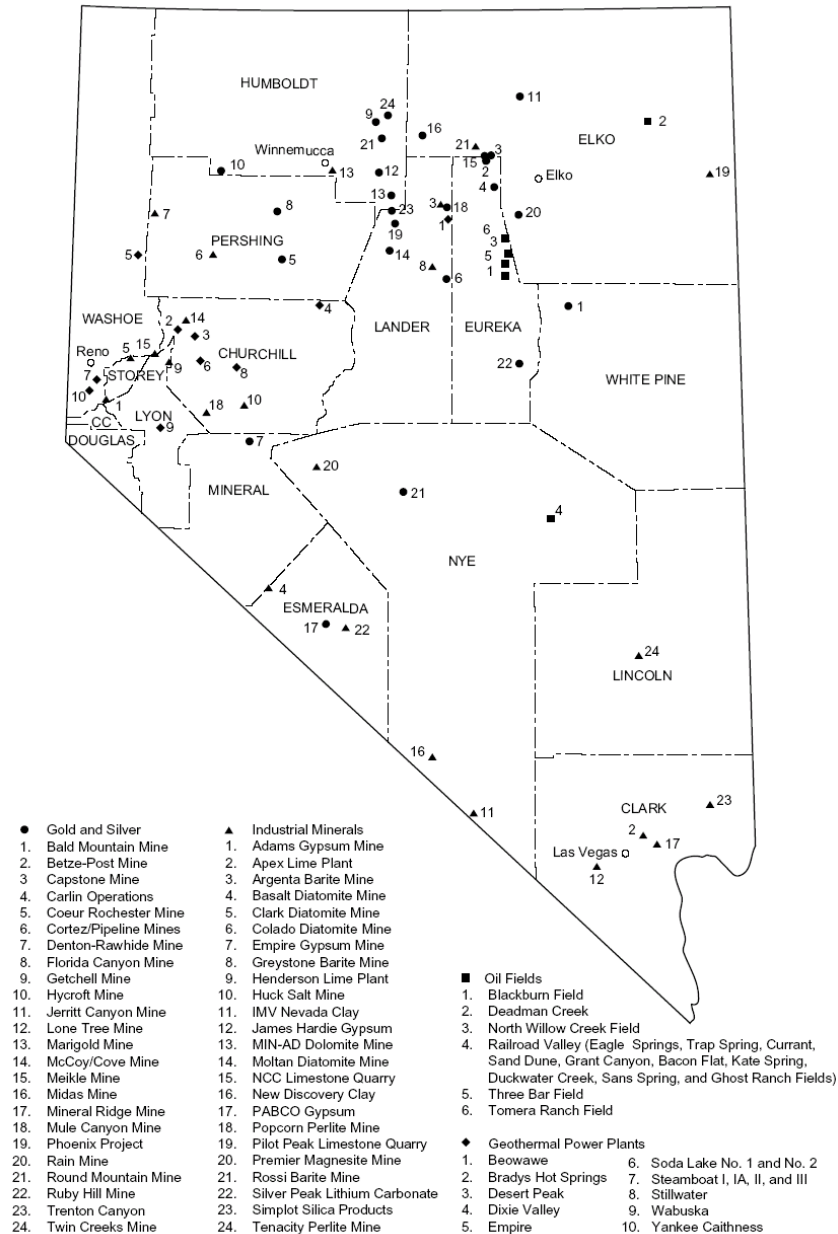
SILVER

- 13.6 million ounces of silver were produced in the “Silver State” in 2002 compared to 17.2 and 23.2 million in 2001 and 2000, respectively. The decrease in silver production in 2002 was primarily due to the closure of the McCoy/Cove Mine in Lander County. 2003 production will decline as well because of the closure of the Denton-Rawhide Mine in Mineral County in mid-2003.
- Silver prices averaged \$4.60 per ounce in 2002 compared to \$4.39 in 2001. Silver prices have increased during 2003, exceeding \$5.00 per ounce in July 2003.
- The value of silver production in Nevada in 2002 was \$62.4 million.
- Nevada produced approximately 29 percent of U.S. silver in 2002, but only 0.02 percent of world silver production.

OTHER MINERALS

- Nevada oil wells produced 553,428 barrels of oil in 2002 from over 100 producing wells at an average price per barrel of \$17.91 for an estimated value of \$9.9 million.

- Nevada geothermal wells produced 1.6 million megawatt hours of electricity as well as providing domestic, public and commercial heating in several parts of the state. Geothermal electric production came from 14 wells at 10 different sites, and is sufficient to provide electrical energy for approximately 80,000 typical homes.
- Nevada mines also produced numerous other minerals including aggregates, barite, diatomite, dolomite, gypsum, limestone, lithium carbonate, magnesium oxide, perlite, precious opal, salt, silica sand, and specialty clays.
- The total value of all mineral production in 2002 was \$2.7 billion.



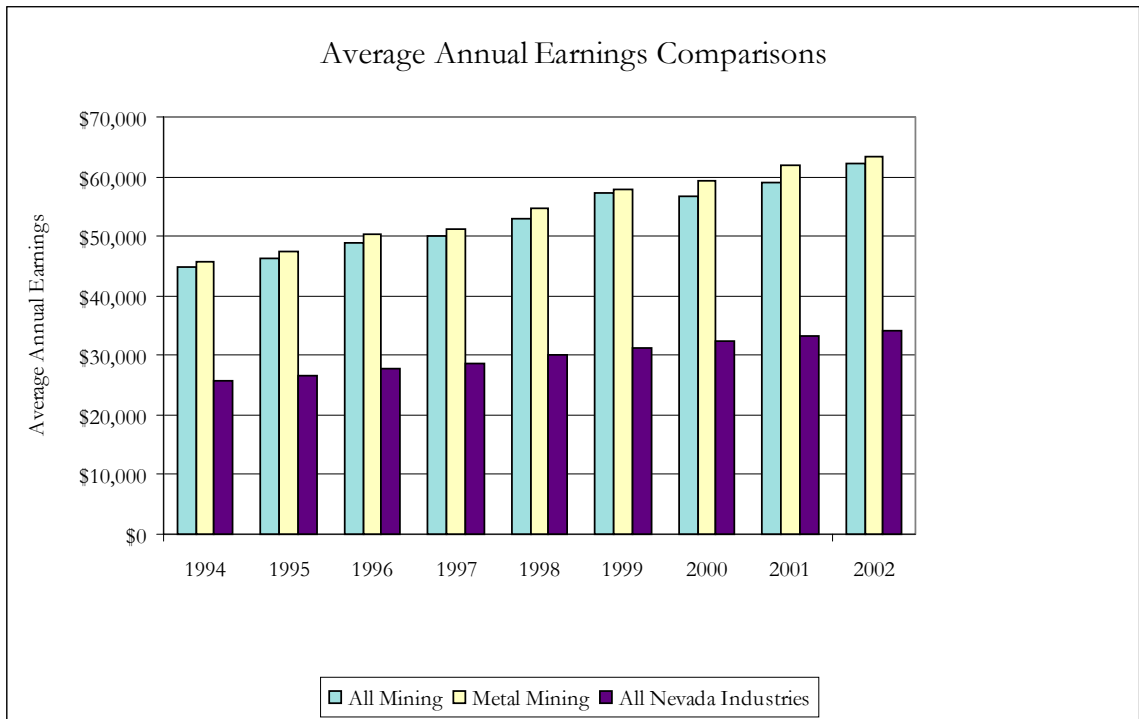
Major mines, oil fields, and geothermal plants, 2002.

(Source: Nevada Division of Minerals and the Nevada Bureau of Mines and Geology)

MINING EMPLOYMENT AND PAYROLLS

2002 Average Direct Employment	8,860 jobs
2001 Average	10,100
Total 2002 Direct Payroll	\$552,324,000
2001	\$591,461,000
2001 Average salary for metal mining in Nevada	\$63,238/year
2001	\$62,014
2002 Average earnings for all mining	\$62,334
2001 Average earnings in all industries Statewide	\$33,993

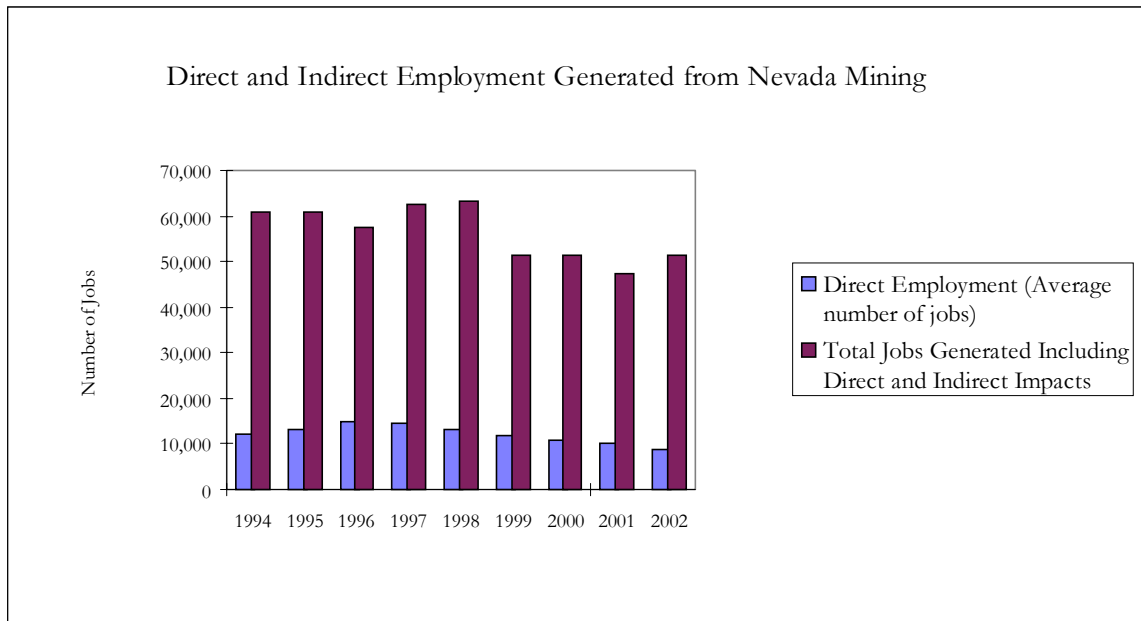
(Source: Nevada Department of Employment, Training and Rehabilitation)



ECONOMIC IMPACTS OF MINING

- Increased state output by \$4.8 billion in 2002 including both direct and indirect impacts, up from \$4.5 billion in 2001.
- Generated approximately 51,343 total jobs in Nevada in 2002 including both direct and indirect impacts compared to 47,500 in 2001.
- Contributed \$1.5 billion to Nevadans' personal incomes in 2002 compared to \$1.4 billion in 2001

(Source: U.S. Department of Commerce, Regional Multipliers (RIMS II), 1992)



TAXES PAID BY NEVADA MINING

Estimated Direct Taxes Paid by the Mining Industry 1998 - 2002 (\$1,000)

	1999	2000	2001	2002
Net Proceeds of Mines Tax				
County Portion	\$ 12,948	\$ 14,125	\$ 11,380	\$ 13,658
State General Fund	<u>\$ 11,996</u>	<u>\$ 15,476</u>	<u>\$ 9,974</u>	<u>\$ 11,987</u>
Total NPOM Tax	\$ 24,944	\$ 29,601	\$ 21,355	\$ 25,645
 Sales & Use Tax	 \$ 49,969	 \$ 39,847	 \$ 48,257	 \$ 37,615
Property Tax	\$ 26,372	\$ 25,272	\$ 21,762	\$ 22,000
Business License Tax	<u>\$ 1,000</u>	<u>\$ 1,000</u>	<u>\$ 900</u>	<u>\$ 800</u>
Total	\$ 102,285	\$ 95,720	\$ 91,719	\$ 86,185

(Source: Nevada Department of Taxation and industry surveys)

NEVADA MINING: A REVIEW AND OUTLOOK

As we have described in recent editions of this Overview, Nevada's mining industry is in what some have labeled as a "second renaissance." Its beginnings were in the Comstock Lode under Virginia City in the 1860-90 period. Its first renaissance occurred after the turn of the 20th century in silver and gold mining towns like Tonopah and Goldfield and with the beginning of copper mining near Ely. The 1980's, however, saw the development of numerous large-scale gold mining operations in central, northern, and eastern regions of the State that has vaulted Nevada into the position of a major world gold producer.

Although Nevada's mining industry faces a number of important technical and regulatory challenges, the industry has developed a large, efficient and economically viable capital base that is fundamentally sound and sustainable well into the next decade. This capital base has been built through the investment of over \$13 billion in exploration and expenditures on plant and equipment since 1980. This investment has primarily come from U.S. companies although, as the industry has attracted worldwide attention, it has attracted investment capital from all over the world, most notably Canadian companies.

As a result of the consolidation of the industry in the past two years, international participation in Nevada's gold mining industry is increasing as is the

international operations of companies with their base operations in Nevada like Barrick Gold and Newmont Mining. Included among the international producers that are in Nevada in 2002 were South Africa based AngloGold, and Kennecott, a subsidiary of Great Britain's Rio Tinto. During 2001 and early 2002 Australia's largest producer, Normandy Mining, also had a presence in Nevada by virtue of its purchase of the Midas mine in Elko County from Franco-Nevada. However, in a three way merger in early 2002, Normandy and Franco-Nevada merged into Newmont Mining turning Newmont into the world's largest gold producer with operations on five continents.

Similarly, the recent merger between Barrick Gold and Homestake Mining, one of the oldest U.S. gold mining companies, Barrick has emerged as a major world producer with operations in Nevada, Canada, South America and Africa. As a result of these activities, two companies that have long been associated with Nevada's gold boom of the 1980's and 1990's, Newmont and Barrick, and whose production was based primarily in Nevada ten years ago, now have vital interests all over the world. Although many tend to think of them as Nevada companies, Newmont and Barrick's Nevada reserves now only account for 37.5 and 25 percent, respectively, of their worldwide reserve base. The third large "Nevada" producer, Placer Dome, has only 21 percent of its reserves in Nevada.

Nonetheless, Nevada remains the third largest gold producer in the world behind South Africa and Australia, and accounts for about 80 percent of U.S. production and just under 10 percent of world mine production.

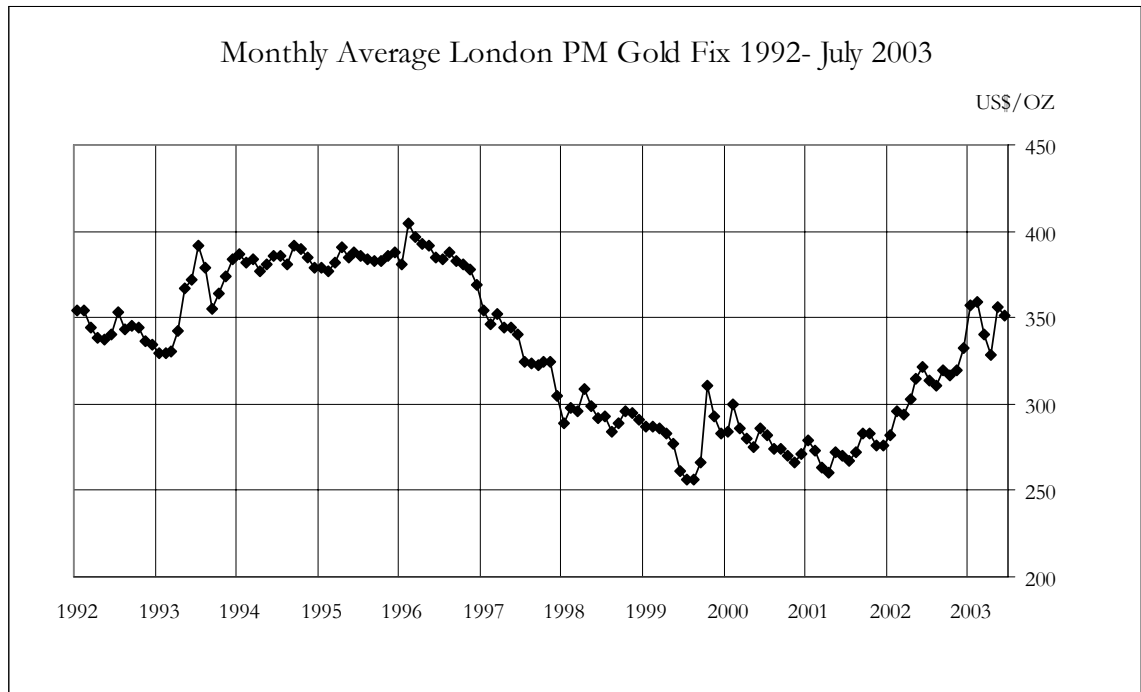
2002 INDUSTRY DEVELOPMENTS

Gold Prices

Clearly, the most significant industry development from late 1996 through the first half of 2003 has been the decline and the recent resurgence in gold prices. Gold prices declined from over \$400 per ounce in early 1996 to \$252 per ounce in July 1999. The price then rallied in September of 1999 on news of an agreement among European central banks to limit sales to 400 tonnes, or approximately 12.9 million ounces, per year through 2004. European central banks' role in gold markets have clearly diminished, however, as developments in gold prices in 2002 and 2003 have clearly been much more related to weakness in the U.S. dollar vs. the Euro and international events like the war in Iraq and terrorism around the world. It is likely that these trends will continue because the banks have announced an intention to renew their agreement limiting gold sales beyond 2004.

As the graph below indicates, gold prices reached their lowest level in mid-1999 at \$252 per ounce. In real, inflation adjusted terms, this was the lowest level since 1972 when the U.S. went off the gold standard. As noted above, prices rallied in late 1999 and again in early 2000. Prices spiked at over \$280 per ounce in early February 2003 on the threats of war with Iraq. However, as in the case of the 1991

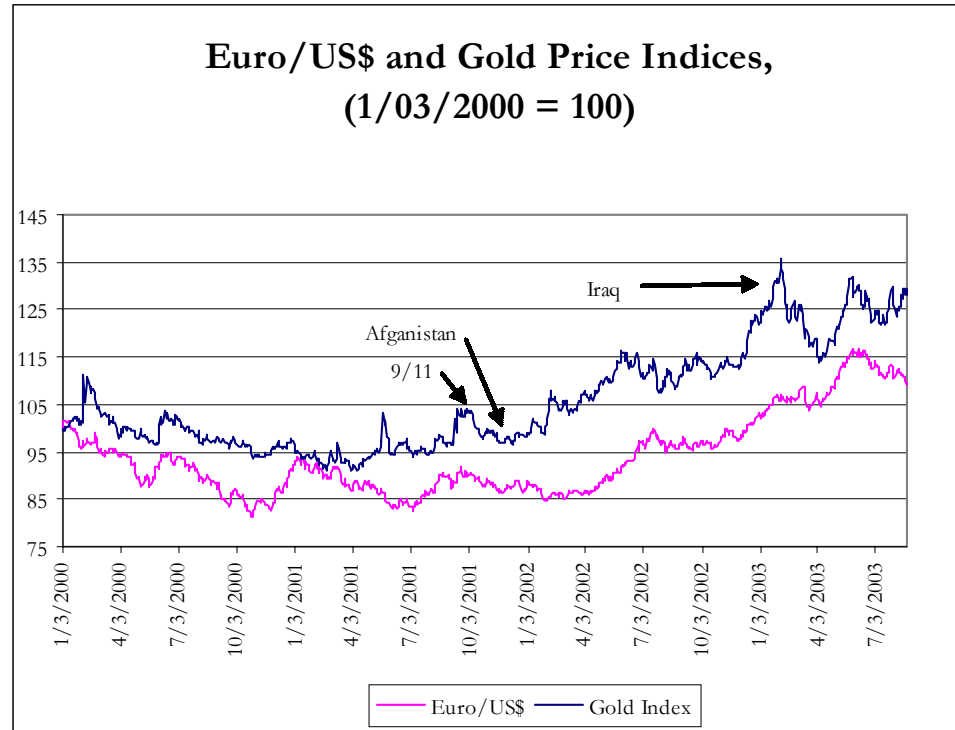
Persian Gulf War, prices quickly retreated after the beginning of hostilities although they have rallied back into the \$360 - \$370 range in August of 2003. This trend, quite naturally, has resulted in guarded optimism in the industry.



Over the past several years most analysts attributed the decline in gold prices to factors that have weakened demand and increased supply although, as noted, there are some indications of a reversal of fortune. Key factors in this reversal are:

- **A reduction in producer hedging**, that is, producers sought to sell gold in advance of production to guarantee a price. This practice involves borrowing gold from banks and selling it into the market before the gold being hedged is produced, thereby artificially increasing supply. The debate on hedging has raged for years in the industry. Some major producers like Barrick, the Australian gold industry, and some African producers have been heavily hedged while others, like Newmont, have been largely unhedged so that their shareholders can participate in a rally in the gold market. Since the price began to rise in 2001 producer hedging has diminished and contributed strength to the market.
- **A strong U.S. Dollar** compared the Euro and other major currencies in the late 1990's, led to lower dollar denominated gold prices. The Euro was inaugurated in January 1999 at \$US 1.10 and subsequently fell to US\$0.83 in October 2000. Since then, as the figure below shows, the Euro has gradually

gained against the dollar, climbing to US\$ 1.19 in early 2003. This has coincided with higher dollar denominated gold prices.



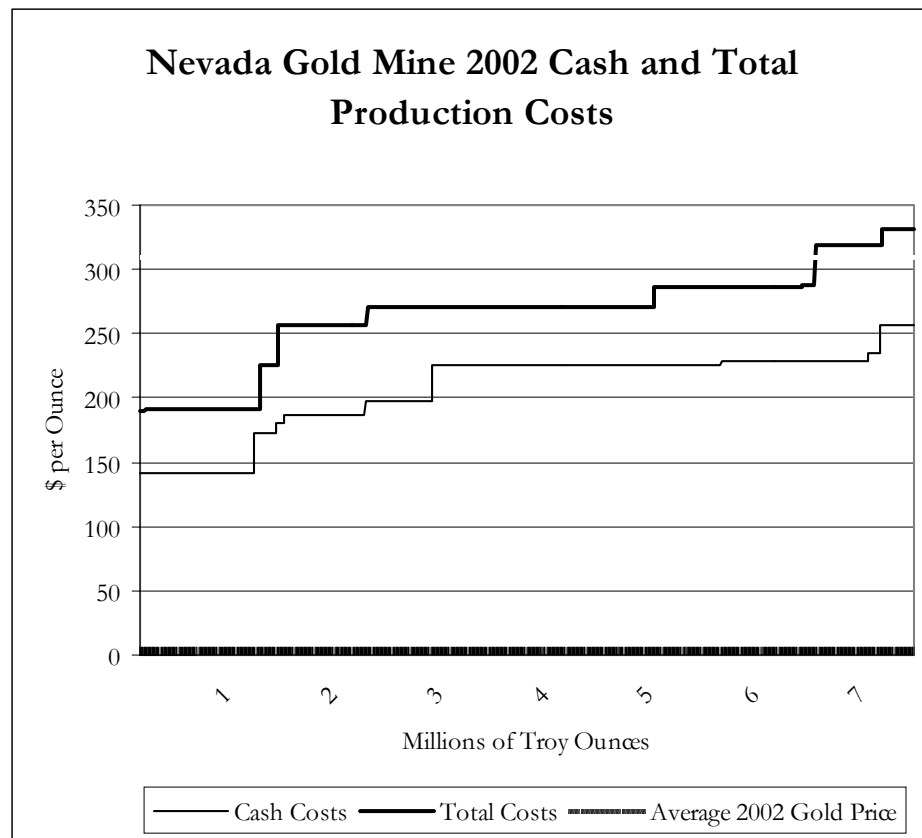
- **Strong U.S. stock markets** in the late 1990's were widely blamed for gold price declines because those strong markets increased the opportunity cost of holding gold as an investment asset. Weaker equity markets since early 2000 have reversed this influence on gold prices.

Operations

In the low price environment of the past few years the State has seen the cessation of mining and announced prospective cessation of mining at several mines. After the cessation of mining operators finish reclamation of sites and may have residual production, but the cessation of mining is often the prelude to closure. In previous editions of this publication we reported 35+ operating precious metals mines, i.e., where extraction of ores, or mining, was occurring. Based on the number of operations that stopped mining and have announced that they will stop by the end of 2002 the 35+ operating mines of several years ago will have been reduced to approximately 16. Currently, in mid 2003, there are 17 operating major precious metals mines in the State.

As a result of the cessation of mining at numerous sites, gold production declined in 2002 from 8.59 million ounces in 2000 to 7.73 million. The 2000 production level is slightly less than the 1998 record high of 8.86 million ounces.

Another consequence of low gold and silver prices over the past few years has been the concerted effort by producers to reduce their production costs. Mining costs are generally referred to as “total cash costs” and “total costs.” Total cash costs refer to costs that vary with production and include payrolls, electric power, fuel, chemicals, production taxes, etc. They are costs that producers must pay to stay in operation. Prices above a producer’s total cash costs, but below total production costs, merely allow the producer to maintain a positive cash flow, however, a price equal to a producer’s cash cost does not allow it to recover any of its investment or earn a profit. Total costs include total cash costs but also include non-cash costs such as depreciation of capital plant and equipment.



These costs are illustrated by the graph above, which shows the total cash costs and total costs for individual mines in 2002 along with the 2002 average gold price of \$310 per ounce. Because some of the State’s gold production is a by-product of silver mining and other production comes from rinsing residual metal

from heap-leach pads at non-operating mines, the graph only represents 7.34 of the 7.73 million ounces produced.

To construct this graph mines are ordered, from left to right, from the lowest to the highest cost producers. The cost of production is measured on the vertical axis. Hence, the length of each horizontal segment of each “curve” represents the output of one mine or group of mines operated as a unit, and the height of the segment represents its cash and total costs, respectively. Also shown on the graph is a horizontal line at \$310 to show the relationship between production costs and the 2002 average gold price.

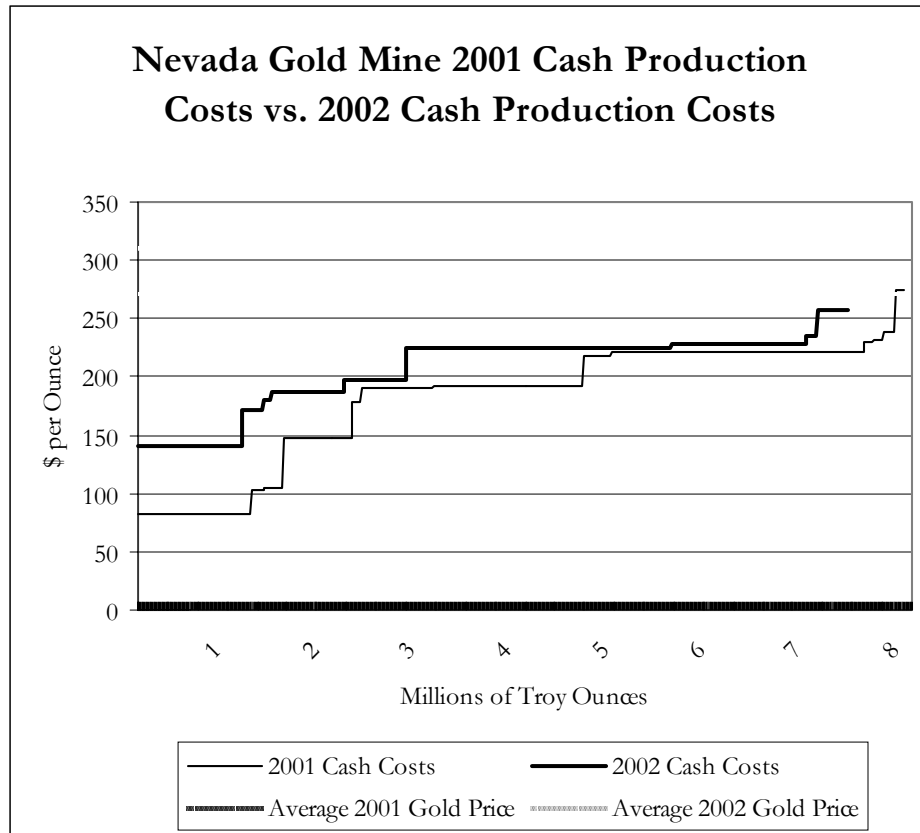
So, for example, the cash curve shows that the state’s lowest cost mine produced just over 1 million ounces of gold at a total cash cost of just under \$141 per ounce. In 2000, the lowest cost mine (same mine) produced 1.3 million ounces at \$48 per ounce. This upward shift in the low cost end of the curve is a factor contributing to the increased statewide average cash production cost in 2001 and 2002, and illustrates why the industry remains healthy in spite of this increase. At the high cost end of the curve no operations reported cash costs above the price line and only a couple had total costs above the price line.

The total cost curve indicates that approximately 6.5 million ounces were produced at an operating profit in 2002 by where the curve crosses through the \$310 line representing the average 2002 price. Emphasis is placed on operating profit because production costs do not include costs such as corporate overhead items, off – site exploration, and other items. Perhaps more significantly, however, the graph illustrates the importance of recent price increases to above \$300 per ounce to the industry.

Over the past four years cost cutting measures managed to reduce weighted average cash production costs in Nevada from \$229 per ounce in 1996 to \$168 in 1999, a decrease of 27 percent. Weighted average cash production costs, or total cash costs increased slightly in 2000 to \$170 per ounce. Costs increased again slightly in 2001 to \$179 per ounce and then to \$206 in 2002, a 22.6 percent increase over 1996 cost levels. As noted in the Executive Summary, a substantial part of the cash cost increases experienced in 2002 were a direct result of higher energy (electricity and diesel fuel) costs. Other factors contributing to higher cash operating costs in 2002 were higher unit labor costs and the shift to costlier underground mining. 27 percent of 2002 gold production came from underground mines compared to 20 percent in 2001, and this trend is expected to continue.

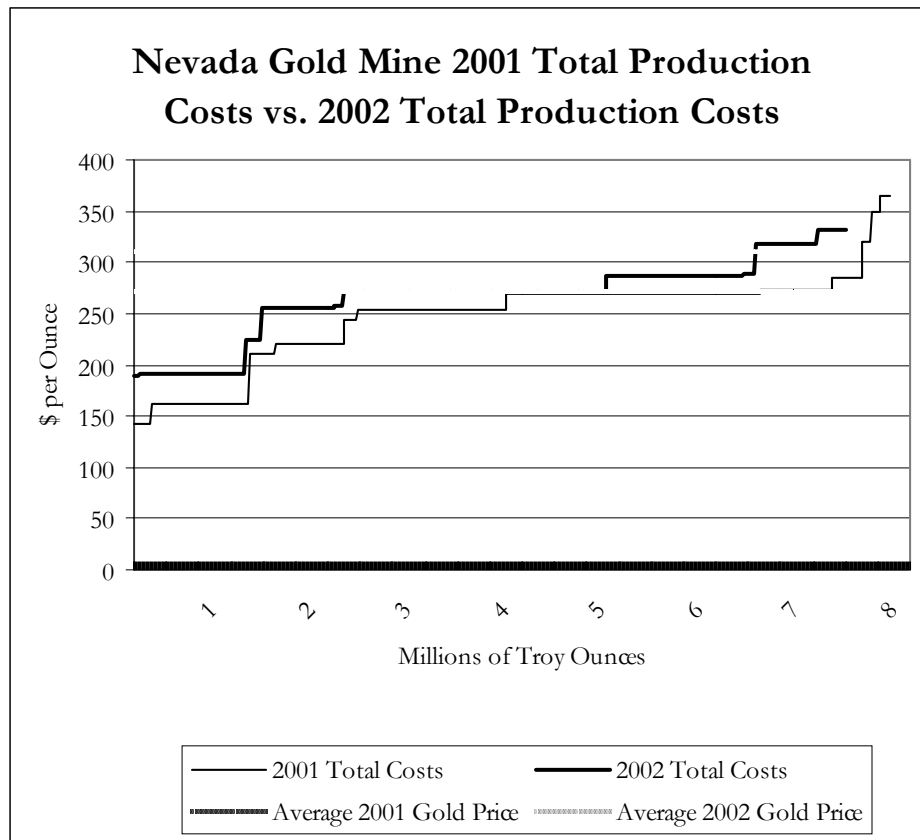
Another important factor in driving costs up was declining ore grades at numerous operations. Declining ore grades increase costs per ounce because more material has to be processed to get an ounce of gold. Ore grades declined in 2002 because of the depletion of higher grade ores and because of decreases in cut-off grades because of higher prices. That is, as prices rise, operators can process lower grade materials and still recover their operating costs. However, lowering the cut-off grade does increase cash operating costs.

The graph below shows a comparison of 2001 and 2002 cash production costs. The graph suggests that in spite of higher costs, the industry is currently much healthier than in the previous year because of higher gold prices.



Total cost increases in 2002 were also substantial, going from \$226 per ounce to \$266, a \$40 increase. Non-cash costs in 2001 of \$47 per ounce increased to \$60 per ounce in 2002, a significant 28 percent increase. Increases in non-cash costs reflect a variety of factors that generally include “overhead” costs such as depreciation of equipment, as well as other factors such as the costs of obtaining permits for exploration and operations. The several expansions of operations at Newmont’s Phoenix deposit in Lander County and Gold Quarry in Eureka County, at Barrick’s Meikle property in Elko County, and Glamis Gold’s expansion of its Marigold property in Humboldt County generally require increases in operators’ capital equipment and certainly require operating permits which add to these operators’ non-cash or “overhead” costs.

The graph below shows a comparison of 2001 and 2002 total production costs. As with the comparison of cash costs on the graph above, the industry is currently much healthier than in the previous year because of higher gold prices in spite of higher costs.



Merger and Acquisition Activities in 2002

As noted in the 2001 report, a typical result of hard times in any industry is consolidation of producers either as a result of producers exiting the market or mergers and acquisitions. Accordingly, 2001 saw a continuation of a flurry of merger and acquisition that started in the late 1990's. This activity has slowed considerably in 2002 and the first half of 2003.

In early 2002 the three-way merger between Newmont, Normandy and Franco-Nevada that was negotiated in 2001 was finalized. Another three-way merger between Echo Bay, Kinross Gold, and TVX Gold was announced in mid – 2002. However, since these mergers the only significant change in ownership in the State's gold mining industry involved the mid – 2003 sale of Anglo Gold's and Meridian Gold's Jerritt Canyon property in Elko County to Queenstake Mining of Canada, a relatively new and small company.

Exploration Activities in 2002

As noted above, exploration activity in Nevada reversed a 5-year trend and increased from \$51.2 million spent on exploration in 2001 to \$64.6 million in 2002.

This increase is clearly a welcome sign but even at \$64.4 million, exploration expenditures are still well below the levels spent in the mid – 1990's when expenditures routinely surpassed \$100 million per year.

Nonetheless, the industry ended 2002 with approximately 69 million ounces of proven and probable gold reserves that have been identified through exploration. Proven and probable reserves represent gold in the ground that can be mined profitably at current prices. While 69 million ounces is slightly less than the 72 million ounces of reserves reported at year-end 2001, reserve levels at year end 2002 suggest that the industry was successful in replacing over half of the 7.73 million ounces mined in 2002 through exploration.

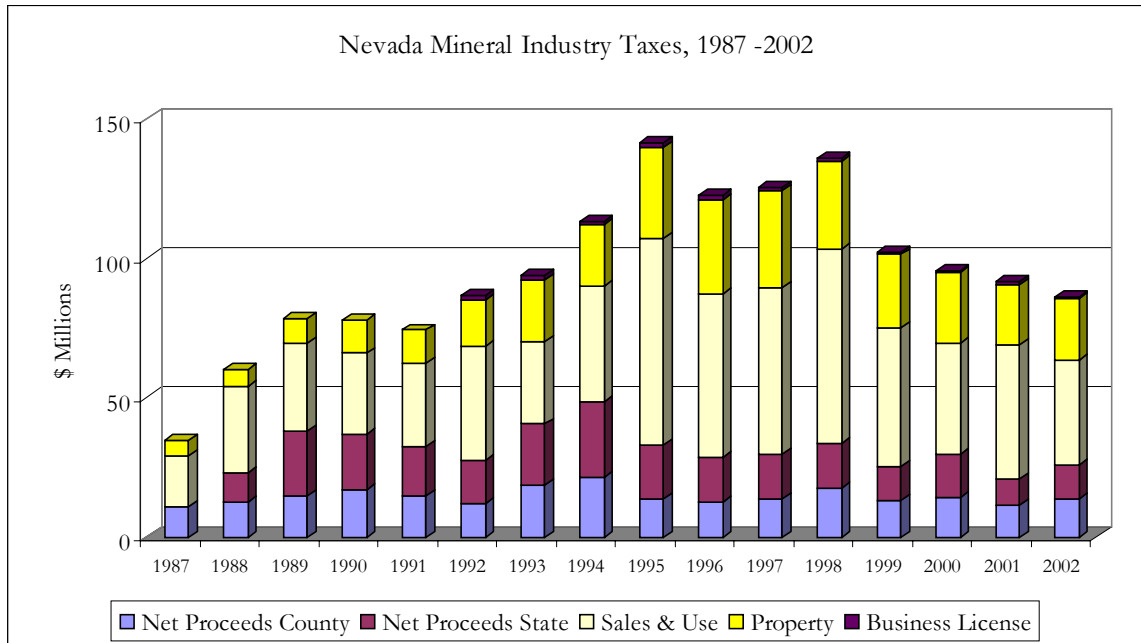
Exploration efforts have also been affected by changes in federal surface management regulations codified under 43 C.F.R § 3809, or so called “3809” regulations. Although these regulations do not drastically affect exploration activities themselves, they create uncertainties over whether a mine could be developed within a reasonable time frame if an economic ore body were discovered. In so doing, these regulatory changes create incentives for companies to explore outside of the U.S. or, at least, on private property. Since relatively little land in the part of Nevada where gold mineralization has occurred is private, this creates incentives to explore elsewhere.

One change in the surface management regulations that has been maintained is the requirement that small exploration projects (and small mining operations) must now post cash reclamation bonds. While bonding in itself is neither a problem nor unreasonable, the new requirement for these small disturbances has created bottlenecks in federal agencies that must approve bonding amounts making the permitting process even more time and resource consuming.

The effects of changes in 3809 regulations on exploration are downplayed by environmental groups who have pointed to low gold prices as the cause of declining exploration expenditures in the industry. Low gold prices are clearly a factor in the decline in exploration expenditures because, as noted above, more industry resources are devoted to acquiring reserves through acquisitions. However, the telling point is that while North American based gold producers have continued their exploration programs and are finding reserves in Nevada, many have shifted their focus outside of Nevada.

STATE AND LOCAL TAXES PAID IN 2002

Total state and local taxes paid by the mining industry in 2002 totaled \$86.2 million, down from \$91.7 million in 2001. The decline was expected as a result of lower capital spending, resulting in lower sales tax payments. 2003 marks the third year since 1993 that taxes paid were less than \$100 million. Note that this figure includes taxes paid by operators and does not include taxes paid by industry employees. The figure below shows taxes paid by the industry in Nevada since 1987.



As the table on page 10 indicates and the above figure illustrates, total taxes paid in 2001 and 2002 were down significantly from 1995 when the industry benefited from annual average gold prices of \$384 per ounce. The decline in 2002 reflects several offsetting factors.

First, the largest tax paid by the industry are sales and use taxes, which largely come from purchases of supplies and equipment associated with capital development expenditures made as the industry expands capacity. During 2002, sales and use tax collections declined significantly (\$10.6 million, or over 22 percent) compared to 2001.

The second major tax paid by the industry, the property tax on plant and equipment, remained about the same in 2002. In the past, property taxes have increased as mines were developed and plants were constructed and equipment purchased. The closure of several mines in the past few years and the slowdown in development noted above, has slowed the process of adding to the tax base.

The third major tax paid by the industry is the Net Proceeds of Minerals Tax which is a property tax paid on the value of the mineral less certain costs of producing it. In 2002, Net Proceeds of Minerals Taxes increased by \$4.3 million, or 20 percent over 2001 collections. This increase was the result of higher gold prices, but the impact of higher prices was partially offset by increasing costs and lower production.

Because of the way the three major taxes paid by mining are allocated, approximately 2/3 of the total tax payments stay with local government as opposed to the state general fund. These tax dollars are available for city and county operations, and local education expenditures in the areas where mining takes place.

It is widely recognized that Net Proceeds of Minerals Tax revenues are highly leveraged to gold prices, however, it should be pointed out that Net Proceeds are equally leveraged by production costs and production levels. In 2002 the last two of these factors worked against gold price increases. Gold price increases in the first half of 2002 offer some hope that these revenues as well as revenues from other taxes paid will reverse their recent course.

As always, the key to sustaining tax revenues from Nevada's minerals industry is maintaining capital investment in the industry's production capacity and investment in mineral exploration. Nevada's unique geology is clearly the most important factor in attracting capital investments and exploration expenditures. However, Nevada's tax and regulatory environments also play a key role in industry investment decisions. Through the cooperation of the industry, the State of Nevada has developed reasonable tax and regulatory environments and, with its unique geology, a world class minerals industry capable of sustaining production well into the next century.

PRECIOUS METALS INDUSTRY PROFITABILITY

An issue that is frequently raised in public policy debates at both the state and national level concern the imposition of taxes and royalties on the minerals industry. There are two common misconceptions about the minerals industry that frequently arise in these discussions: First, there is the misconception that since the mining company cannot move the mineral deposit, mines are immobile sources of wealth that can be taxed without consequence. While it may be true that a mineral deposit is immobile, there is ample evidence and numerous examples that will attest to the fact that **mining capital**, which includes both technical expertise and investment funds, **is highly mobile**. Hence, this rationale for mineral taxation and the imposition of royalties is myopic at best. The failure of exploration spending in Nevada to rebound to mid – 1990's levels in spite of a rebound in gold prices because of the uncertain regulatory environment is an indicator of just how mobile mining investment can be.

A second common misconception is that mining, and precious metals mining in particular, is an enormously profitable venture. If this were true, according to conventional wisdom and common sense, we would all become gold miners. Nonetheless, the misconception is difficult to dispel. Indeed, the term "gold mine" is commonly used in the English language to mean anything highly profitable. Precious metals mining can be very profitable and producers invest in production capacity in hopes of earning profits, but industry profits are highly leveraged by metals prices and operating costs.

One reason that the misconception about the profitability of the precious metals industry is difficult to dispel is that, indeed, some gold mines are very profitable and, as the discussion of production costs above indicates, some Nevada mines are quite profitable. It is even fair to say that most mines in Nevada would be highly profitable if prices and costs were at levels anticipated by developers. Hence, the first point to be made with respect to precious metals industry profitability is that, as noted above, the industry consists of mines with a range of costs and the profitability of companies operating the mines varies accordingly.

In an effort to more accurately characterize the profitability of Nevada's precious metals industry, the annual financial reports of 10 Nevada precious metals producers and companies with interests in Nevada were compiled and consolidated. Standard financial ratios such as profit margins, return on investment and return on equity were then computed for each company and for the 10 companies in aggregate. These companies range in size from Newmont with a market capitalization of \$10.6 billion at year end 2002 to Coeur d'Alene Mines with a market capitalization of \$343.7 million.²

The 10 companies listed below are public companies with publicly available financial reports. Producers' operations outside Nevada and the U.S. are included in the financial results discussed below because annual corporate reports generally do not differentiate certain financial data by state or nation.

The following list shows the companies included in the analysis:

AngloGold	Hecla Mining
Apollo Gold	Kinross Gold
Barrick Gold	Meridian
Coeur d'Alene Mines	Newmont Mining
Glamis Gold	Placer Dome

As noted in the discussion of merger and acquisition activities in the industry in the past two and one half years, a significant development in the world gold industry in the past several years was the trend toward consolidation through mergers and acquisitions. Nevada producers have been active participants in this trend and, consequently, the corporate entities listed above have changed significantly over the past several years and will likely change further in the future. For example, with AngloGold's sale of its Jerritt Canyon operations, AngloGold will not be on next year's list unless they acquire new interests in Nevada.

² Note that Apollo Gold is actually smaller than Coeur d'Alene Mines but their year end market capitalization is not available.

Also, note that the 2000 list included 16 companies while the 2001 list included 13. The companies from last year's list are missing from this year's edition are Echo Bay Mines (merged with Kinross) and Canyon Resources and Vista Gold, which have no active interests in Nevada.

The ten companies listed produced a total of 24.6 million ounces of gold in 2002, 31.4 percent of which were produced in Nevada. As noted above, this stands in stark contrast to the situation 10 years ago when the vast majority of gold produced by "Nevada producers" was produced in Nevada.

A common measure used to compare the profitability of different industries is return on shareholders' or owners' equity (ROE). This measure has been widely used by publications such as Business Week, Standard & Poor's Industry Reports and Value Line because it accounts for factors such as corporate debt in measuring profitability. ROE measures profitability by showing net income as a percentage of the assets shareholders actually own, as opposed to measures like return on assets and profit margins (net income as a percent of total revenues), which ignore corporate debt.

North American Gold Industry Financial Indicators 1999-2002

	1999	2000	2001	2002
Gold Price	\$ 279	\$ 279	\$271	\$310
Gold Production (1,000 Ozs.)*	24,244	24,609	24,156	24,609
Sales**	\$ 8,671.7	\$ 8,794.3	\$ 7,933.0	\$8,430.6
Assets**	\$22,137.6	\$ 19,870.2	\$ 16,904.5	\$ 22,707.1
Equity**	\$11,986.1	\$ 9,995.6	\$ 9,218.8	\$ 14,831.9
Net Income**	\$ 243.1	\$ (989.7)	\$ 351.4	\$ 912.7
ROE (%)	2.03%	-9.90%	3.81%	5.62%
NIBTWD** ***	\$ 911.7	\$ 862.4	\$ 737.3	\$ 833.6
ROE (%)****	7.61%	8.63%	8.00%	6.15%
Market Capitalization**	\$24,035.8	\$ 19,727.1	\$ 24,080.7	\$ 37,655.6

* Reflects world-wide production

** In millions of U.S. Dollars

*** Net Income before federal taxes and asset write downs

****Return on Equity before federal taxes and write downs

The table below shows ROE for North American precious metals producers in two ways. ROE is first calculated on net income (NI) and second, on net income before federal taxes and asset write-downs (NIBTWD). The difference between the

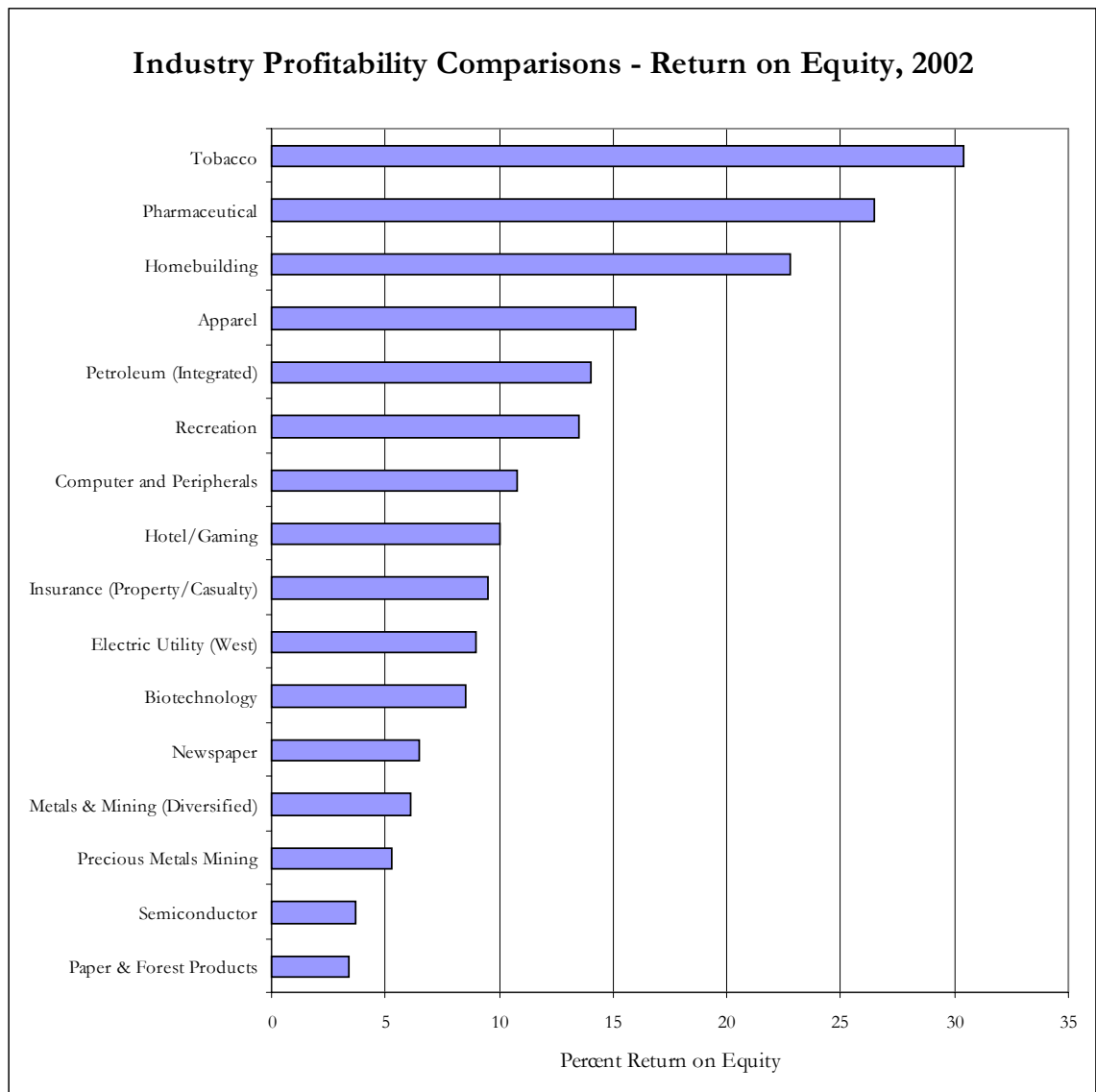
two is that the latter (NIBTWD) ignores accounting losses associated with the abandonment of investments made in previous years. In profitable industries the differences between NI and NIBTWD are not generally significant. Note that in the 1999 – 2001 period the difference between Net Income and NIBTWD has been significantly greater than in 2002. Also note that Net Income in 2002 is roughly two and one half times Net Income in 2001. This suggests that the North American precious metals industry has worked its way through the difficult period of the late 1990's and is in much healthier financial condition.

Also indicative of the improving state of the industry's finances, the industry's market capitalization, the value of its outstanding shares of stocks, increased substantially in 2002. Market capitalization at year end 2002, an indicator of market confidence in the industry, stood at \$37.7 billion, an increase of \$18 billion, or 91 percent, over year end 2000, a year in which the industry suffered substantial losses.

Aggregate ROE after taxes and asset write-downs in 2002 also indicates significant improvement in the industry's financial health. In 2001, despite the fact that ROE had rebounded from – 9.9 percent to 3.8 percent, only six of the 13 companies had positive earnings after taxes and writedowns in 2001 as opposed to eight out of ten in 2002.

Another basis for comparing precious metals industry profitability to other industries comes from Value Line's Investment Survey, which reports on the profitability of various industry groups using companies selected by Value Line. Value Line's precious metals category includes a smaller group overall and includes one U.S. platinum group metals producer but does include the larger companies in the group listed above. Value Line's group of precious metals producers had a weighted average rate of ROE before write-downs of 5.3 percent in comparison to the 5.6 percent for the group of Nevada producers represented on the table above.

For comparison purposes 16 of the 83 industry groups tracked by Value Line were selected more or less at random to compare with Value Line's precious metals producers and Nevada's other major industry Hotel/Gaming. These industry groups' ROE are shown in the figure below. As indicated, using either Value Line's gold and silver industry group, or the group of 10 Nevada producers, precious metals mining remains near the bottom of the list.



NEVADA'S MINERALS INDUSTRY OUTLOOK

The industry developments described above clearly show that Nevada's minerals industry remains a major player in the world gold industry. Moreover its large reserve base and existing capital investment make it likely that it will remain a major player for the foreseeable future. Notwithstanding this point, the industry faces numerous technical, environmental and regulatory challenges in the years ahead.

From a technical perspective, as indicated above, increasing proportions of Nevada's production is coming from underground operations. This trend will clearly continue as the industry matures and will require different production techniques.

On the environmental front, the industry must continue to work with federal and state regulators and citizen groups to ensure that mining activities continue to have negligible environmental impacts and, when possible, improve environmental conditions for wildlife and other land users. These improved environmental conditions can come from improved reclamation techniques, reclamation of abandoned mines, and other on-going efforts.

Another challenge facing the industry is increases in electricity prices. As noted above, mines are large consumers of electricity for operating milling equipment, pumping water, and other purposes. Increases in rates in early 2001 caused base rates paid by mine to increase from \$45 per megawatt hour to over \$60. These rate increases have added between \$5 and \$10 per ounce to production costs. Various producers are looking into means of both conserving power and generating power through co-generation and construction of new generating facilities to serve the industry's needs.

Regulatory actions by the federal government in 2000 included major changes in federal Surface Mining Regulations (43 CFR § 3809) that went into effect in January 2001. Both proponents and opponents of the regulatory changes believe that the new regulations will limit access to federally owned lands for mineral exploration and mine development. Some of the changes in the regulations were suspended for further review by the new administration in Washington, D.C.; however, in the closely contested political environment major changes are not likely.

A significant regulatory issue is the changes in the market place for bonding for reclamation for both exploration and operations. While bonding in itself is neither a problem nor unreasonable, problems arise because the insurance industry that underwrites operators' reclamation bonds has withdrawn from the reclamation bonding business altogether. As noted above, insurers have been hard hit by recent events. This has required the industry and regulators to seek alternative means of assuring that reclamation will occur in the event mines are forced to close by adverse economic circumstances and the operator is unable to complete its obligations. In addition, requirements for bonding small, previously exempt exploration projects has created bottlenecks in federal agencies that must approve bonding amounts making the permitting process even more time and resource consuming.

While the last four years have been challenging for the Nevada mining industry, the state continues to offer a number of positive characteristics which should bode well for mining, especially gold mining, even with a modest rebound in commodity prices. Nevada has geologic conditions that are favorable for the occurrence of outstanding mineral deposits; the industry has developed a skilled workforce; infrastructure and support services are in place, and; the state has maintained a reasonable business environment in which responsible mining can take place.