mined is determined by wage rates and by the unit of labor required per ton of ore mined and milled. For 1952, for example, wages and salaries represented 44.2 percent of the mine value of all lead and zinc products; supplies and materials accounted for 20.7 percent, fuel for 0.5 percent, and purchased electric energy for 3.4 percent. And whereas the combined price of lead and zinc per pound has fallen from 32.7 cents in 1952 to 26.1 cents in 1957, average hourly wages paid to production and related workers have increased from \$1.95 to \$2.27 in these 5 years. 18

Low prices and high labor costs have had an adverse effect on employment. Employment in lead and zinc mining and milling has decreased substantially in recent years. In 1952, the mining and milling segment of the industry employed on the average 24,279 workers, divided roughly in a 1-to-2 proportion between lead and zinc. That average dropped to 19,771 for the first 10 months of 1953, to 17,016 for 1954, 16,845 for 1956, and to 15,563 for the first 10 months of 1957.20

Between 1952 and 1953, the drop in employment was greater at operations producing principally zinc than at those producing principally lead. The latter decreased by 37.6 percent, as against a decrease

of only 21.5 percent for zinc.21

Employment declined most sharply in the Western States. The decline for the nine Western States averaged 38 percent, and ranged from 26 percent for Idaho to 88 percent for New Mexico. In the West Central States, the decline was about 28 percent; in the predominantly zinc-producing tristate district, 64 percent; in the predominantly lead-producing southeast Missouri district, however, it was

only 5 percent.

Many of the lead and zinc mines, particularly in the western States, are located in areas where other means of livelihood are limited or nonexistent. Mine or mill shutdowns in such areas present a difficult problem both to the worker and his family, and to the supporting service industries. In some areas, the situation, if long continued, gives rise to so-called ghost towns, with a consequent severe depreciation or total loss of realty holdings, in addition to the loss of income to the workers. The mine operator, on the other hand, loses skilled workmen who may not be easily replaced, should economic conditions permit resumptions of operations at a later time.

The cessation of production at lead and zinc mines, however, does not eliminate the cost of maintenance and upkeep. Large expenditures for pumping, retimbering, and other maintenance are needed to prevent excessive damage to mine equipment and installations and underground workings from flooding and cave-ins. These maintenance costs are frequently the only alternative to permanent closure of the mines and the loss of ore reserves, because of the high costs that would otherwise be involved in restoring the mines to production.

Virtually all the decline in total employment in the lead and zinc industries between 1952 and 1953, as well as in subsequent years was

¹⁷ U.S. Tariff Commission, "Lead and Zinc Industries" (1954), p. 49.

¹⁸ U.S. Tariff Commission, "Lead and Zinc" (1958), statistical appendix, table 23.

¹⁹ U.S. Tariff Commission, "Lead and Zinc Industries," (1954), p. 31. Mines and mills producing predominantly and chiefly lead accounted for 8,373; those producing predominantly and chiefly zinc, 15,906.

²⁰ U.S. Tariff Commission, "Lead and Zinc," (1958), statistical appendix, table 35. Detailed figures equivalent to those for 1952 are not available for later years.

²¹ U.S. Tariff Commission, "Lead and Zinc Industries," (1954), p. 36.