## The Mineral Industry of Massachusetts

This chapter has been prepared under a Memorandum of Understanding between the U.S. Bureau of Mines, U.S. Department of the Interior, and the Commonwealth of Massachusetts, Executive Office of Environmental Affairs, for collecting information on all nonfuel minerals.

Massachusetts ranked 40th in the Nation in total nonfuel mineral value ${ }^{1}$ in 1994, down from 39th in 1993, according to the U.S. Bureau of Mines (USBM). The estimated value for 1994 was $\$ 157$ million, about a $2 \%$ decrease from that of 1993. This followed a nearly $9 \%$ increase in 1993 compared with that of 1992. The State accounted for about $0.5 \%$ of the U.S. total value. The leading and second-leading mineral commodities in the State, based both on quantities produced and value, were crushed stone and construction sand and gravel, respectively. In 1994, increased values for construction sand and gravel and lime did not quite compensate for decreases in the values of crushed stone and dimension stone, resulting in a net decrease for the year. The increase in the value of dimension stone in 1993 was mostly responsible for the notable increase in value as measured against that of 1992, while a smaller increase in
construction sand and gravel contributed to the State's rising mineral value that year.

Based on USBM estimates of the quantities produced in the United States during 1994, Massachusetts dropped from third to fourth in the production of dimension stone. While not ranking among the top 10 States, Massachusetts' quarries produced significant quantities of crushed stone and construction sand and gravel, while similar production of lime was achieved in manufacturing plants within the State. No metal mining occurred in the State of Massachusetts.

[^0]TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN MASSACHUSETTS ${ }^{1}$

| Mineral | 1992 |  | 1993 |  | 1994 ${ }^{\text {p }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Value (thousands) | Quantity | Value (thousands) | Quantity | Value (thousands) |
| Gemstones | NA | \$1 | NA | W | NA | W |
| $\underline{\text { Sand and gravel: }}$ |  |  |  |  |  |  |
| Construction thousand metric tons | 10,916 | 48,671 | ${ }^{\mathrm{e}} 10,800$ | ${ }^{\text {e }} 51,300$ | 11,600 | \$56,000 |
| Industrial do. | 8 | 151 | 2 | 42 | W | W |
| Stone: |  |  |  |  |  |  |
| Crushed do. | ${ }^{\text {e }} 9,435$ | ${ }^{\text {e7 }} 77,200$ | ${ }^{2} 9,455$ | ${ }^{2} 76,267$ | ${ }^{\text {e } 28,500 ~}$ | ${ }^{\text {e 2 }}$ 2 69,000 |
| Dimension metric tons | ${ }^{\text {e } 59,725 ~}$ | ${ }^{\text {e9 }}$,292 | 152,536 | 21,323 | W | W |
| Combined value of clays (common), lime, peat, stone [crushed dolomite and miscellaneous (1993-94)], and values indicated by symbol W |  |  |  |  | XX |  |
| Total | XX | $\frac{12,086}{147,401}$ | XX | $\frac{11,280}{160,212}$ | XX | $\frac{32,000}{{ }^{3} 157,000}$ |

[^1]
## TABLE 2

MASSACHUSETTS ${ }^{1}$ : CRUSHED STONE ${ }^{2}$ SOLD OR USED BY PRODUCERS IN 1993, BY USE

| Use | Quantity <br> (thousand metric tons) | Value (thousands) | Unit value |
| :---: | :---: | :---: | :---: |
| Coarse aggregate (+1 1/2 inch): Riprap and jetty stone ${ }^{3}$ | 915 | \$8,720 | \$9.53 |
| Coarse aggregate, graded: |  |  |  |
| Bituminous aggregate, coarse | 1,716 | 12,107 | 7.06 |
| Other graded coarse aggregate ${ }^{4}$ | 3,790 | 28,572 | 7.54 |
| Fine aggregate ( $-3 / 8$ inch): Stone sand, concrete ${ }^{5}$ | 802 | 6,597 | 8.23 |
| Coarse and fine aggregates: |  |  |  |
| Crusher run or fill or waste | 207 | 1,777 | 8.58 |
| Other construction materials ${ }^{6}$ | 711 | 4,648 | 6.54 |
| Agricultural: |  |  |  |
| Agricultural limestone | W | W | 17.56 |
| Poultry grit and mineral food | W | W | 17.56 |
| Chemical and metallurgical: |  |  |  |
| Lime manufacture | W | W | 7.15 |
| Special: |  |  |  |
| Other fillers or extenders | W | W | 55.22 |
| Other specified uses not listed | W | W | 7.64 |
| Unspecified: ${ }^{\text {? }}$ |  |  |  |
| Actual | W | W | 10.20 |
| Estimated | W | W | 7.04 |
| Total ${ }^{8}$ | 9,455 | 76,267 | 8.07 |
| Total ${ }^{90}$ | 10,422 | 76,267 | 7.32 |

W Withheld to avoid disclosing company proprietary data; included with "Total."
${ }^{1}$ To avoid disclosing company proprietary data; "District tables were not produced for 1993."
${ }^{2}$ Includes granite, limestone, and traprock; excludes dolomite and miscellaneous stone from State total to avoid disclosing company proprietary data.
${ }^{3}$ Includes macadam, filter stone, and other coarse aggregate.
${ }^{4}$ Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, and railroad ballast.
${ }^{5}$ Includes stone sand (bituminous mix or seal), screening (undesignated), and other fine aggregates.
${ }^{6}$ Includes graded road base or subbase, terrazzo and exposed aggregates and other coarse and fine aggregates.
${ }^{7}$ Includes production reported without a breakdown by use and estimates for nonrespondents.
${ }^{8}$ Data may not add to totals shown because of independent rounding.
${ }^{9}$ One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185 .
${ }^{10}$ Total shown in thousand short tons and thousand dollars.

TABLE 3
MASSACHUSETTS: CRUSHED STONE SOLD OR USED, BY KIND

| Kind | 1991 |  |  |  | 1993 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of quarries | Quantity (thousand metric tons) | Value (thousands) | Unit value | Number of quarries | Quantity (thousand metric tons) | Value (thousands) | Unit value |
| Limestone | 2 | W | W | \$13.23 | 4 | 795 | \$10,479 | \$13.18 |
| Dolomite | 1 | W | W | 13.41 | ${ }^{1}$ ) | ${ }^{1}$ ) | $\left({ }^{1}\right)$ | ( ${ }^{1}$ ) |
| Granite | ${ }^{\text {r }} 4$ | ${ }^{\mathrm{r}} 1,614$ | ${ }^{\text {r }}$ \$14,245 | ${ }^{\text {r }} 8.83$ | 3 | 940 | 9,887 | 10.52 |
| Traprock | ${ }^{\text {r }} 18$ | '3,622 | '20,881 | ${ }^{\text {r }} 5.77$ | 20 | 7,719 | 55,902 | 7.24 |
| Miscellaneous stone | 1 | W | W | 5.39 | ${ }^{1}$ ) | ${ }^{1}$ ) | ( ${ }^{1}$ ) | ${ }^{1}$ ) |
| Total ${ }^{2}$ | XX | 6,469 | 51,362 | 7.94 | XX | 9,455 | 76,267 | 8.07 |
| Total ${ }^{34}$ | XX | 7,131 | 51,362 | 7.20 | XX | 10,422 | 76,267 | 7.32 |

'Revised. W Withheld to avoid disclosing company proprietary data; included with "Total." XX Not applicable.
${ }^{1}$ Excludes dolomite and miscellaneous stone from State total to avoid disclosing company proprietary data.
${ }^{2}$ Data may not add to totals shown because of independent rounding.
${ }^{3}$ One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185 .
${ }^{4}$ Total shown in thousand short tons and thousand dollars.


[^0]:    ${ }^{1}$ The term value in this document refers to the monetary value of nonfuel minerals as represented by either mine shipments, mineral commodity sales, or marketable production as is applicable to the individual minerd commodities.

[^1]:    ${ }^{\mathrm{e}}$ Estimated. ${ }^{\mathrm{p}}$ Preliminary. NA Not available. W Withheld to avoid disclosing company proprietary data; value included with "Combined value" data.
    XX Not applicable.
    ${ }^{1}$ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
    ${ }^{2}$ Excludes certain stones; kind and value included with "Combined value" data.
    ${ }^{3}$ Data do not add to total shown because of independent rounding.

