



MICHIGAN AGGREGATE FACTS

- During 2009, over 44 million tons of mineral aggregates (crushed stone, sand and gravel) were sold from Michigan sources. Aggregate was produced from over 325 surface mines located throughout the State, with some aggregate mining in every County.
- About 80% of the aggregate mines operate with less than 20 people. The aggregate industry directly employs over 8000 people in the State, providing a wage rate that was 35% higher than the average wage for all industries.
- Over the next twenty years, primary sources of high quality sand and gravel reserves will be depleted, covered by urban sprawl development or prohibited from mining by zoning laws. This could severely crimp mineral aggregate supply and drive up the cost of construction in the future.
- Approximately 90% of all aggregate produced is moved by truck. The mine's location is often critical to the end user. For many shipments, the cost to haul the aggregate is greater than the cost of the aggregate itself. Thousands of trucks are engaged in hauling aggregate, creating many local jobs.
- An average of 11 tons of aggregate are required annually for each Michigan resident. A new home requires approximately 400 tons of aggregate. Approximately 95% of every ton of asphaltic concrete and 80% of each cubic yard of Portland cement concrete is made of aggregate. One mile of four-lane highway requires 20,000 tons of aggregate.
- More than half of all aggregate used is paid for with tax dollars. The largest users are the States, Counties, Townships and Municipalities in their road and infrastructure programs. Federal grant monies are also involved in the construction of airports, dams, locks, erosion control and waste treatment facilities.
- A number of lakes resulting from aggregate excavation have been reclaimed to excellent water recreation facilities. Lakes formed by aggregate extraction in Oakland County are now helping to recharge the groundwater aquifers that supply water locally.



CHELSEA MINE FACTS

- Aggregate Industries acquired the Chelsea mine in 1999 when the site was a small volume producer with several environmental concerns. Today, the site is one of the largest sand and gravel properties in the State and boasts an international certification (ISO 14001) for environmental compliance.
- The Chelsea mine is regulated by Federal, State and local agencies for compliance with Safety, Environmental and Land Use standards and permits.
- During the height of the economic boom, over 1 million tons of mineral aggregate were produced and sold annually at the Chelsea mine. This volume has been significantly reduced in recent years due to the slowing economy.
- At full production capacity, the Chelsea mine operated with seven full-time employees each year. Six of the positions were union scale with pay and benefits that exceeded \$35.00 per hour. A part-time crew of six union workers may also be employed at the mine for 8-10 weeks per year.
- The Chelsea mine has consistently generated over \$150,000 per year in State sales taxes.
- Real Estate and Personal Property Taxes generated by the Chelsea mine exceeded \$41,000 in 2009.
- The Chelsea mine has not required many services from Waterloo Township.
- The Chelsea mine pays annual fees exceeding \$5000 for services required to renew its Operating Permit.
- A Surety Bond exceeding \$900,000 is posted with Waterloo Township to insure that all land reclamation requirements are fulfilled under the Waterloo mine extraction ordinances.
- The Chelsea mine has been a key source of material for MDOT projects along Interstate 94 including a rest area and several overpass projects. Currently, the Chelsea mine is supplying aggregate materials to the I-94 lane reconstruction project near Grass Lake, MI.