

# Michigan's Aggregate Resources Report

Assessing Transportation Costs Statewide

09.30.19



Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>



**PUBLIC SECTOR  
CONSULTANTS**

*Prepared by*

Public Sector Consultants  
Lansing, Michigan  
[www.publicsectorconsultants.com](http://www.publicsectorconsultants.com)

*In collaboration with*

SME  
Detroit, Michigan  
[www.sme-usa.com](http://www.sme-usa.com)

*Prepared for*

Michigan Department of Transportation  
Lansing, Michigan  
[www.michigan.gov/mdot](http://www.michigan.gov/mdot)

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## Table of Contents

<b>EXECUTIVE SUMMARY</b> .....	4
Summary of Findings and Recommendations .....	5
<b>BACKGROUND</b> .....	7
Task One—Economic Assessment .....	8
Task Two—Stakeholder Engagement.....	8
Task Three—Michigan Aggregates Resources Report .....	8
<b>METHODOLOGY AND ANALYSIS</b> .....	9
Route Calculation.....	10
Assumptions.....	10
Limitations .....	15
<b>MINING AND THE CONSTRUCTION MATERIALS INDUSTRY</b> .....	16
Sand and Gravel Mining for Aggregate.....	16
Regulatory Overview.....	18
The Role of the Michigan Geological Survey.....	20
Potential for Modal Shift to The Great Lakes St. Lawrence Seaway System .....	22
<b>STAKEHOLDER ENGAGEMENT</b> .....	23
Industry Representatives.....	23
Municipal Representatives .....	24
<b>SUMMARY AND CONCLUSION</b> .....	26
<b>REFERENCES</b> .....	27
<b>APPENDIX A: STAKEHOLDER ORGANIZATIONS</b> .....	30
<b>APPENDIX B: COST TABLE</b> .....	31

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## Executive Summary

Aggregate materials (e.g., sand, gravel and limestone) are crucial resources to activities such as road building and concrete production. These materials, extracted from beneath the Earth's surface, were naturally deposited across Michigan during the glacial retreat approximately 10,000 years ago.

Unfortunately, these materials do not always occur in proximity to construction sites where they are needed. In Michigan, the aggregate industry has a large footprint—a 2017 study conducted by the Phoenix Center for Advanced Legal and Economic Public Policy Studies estimated state-level impacts of approximately \$566 million in direct sales, with a total impact of \$988 million (Ford and Spiwak 2017).

The study also suggests that current imports and exports are only about 1 percent of production and consumption in the state, which confirms that the aggregates industry is primarily made up of local business and driven largely by high transportation costs—historically, 90 percent of aggregates are consumed within 50 miles of the place of extraction for various projects, including road and building construction. These projects represent significant volumes of aggregate, for example, according to project research, one mile of freeway—four lanes wide, using aggregates for subbase, base, and pavement—shipped from the mine to the construction site can be approximately 30 percent of total project costs.

Despite a 2015 road funding package designed to add \$1.2 billion in new revenue to state transportation budgets and despite the knowledge that it is less expensive to maintain a road in good condition than it is to repair it once it's in poor condition, further decline of the condition of Michigan's roadways is forecasted due to decades of deferred maintenance. As more and more of Michigan's roads deteriorate, the cost for fixing them will continue to rise, and it is estimated that Michigan's roads now require an additional \$2 billion dollars annually to fix because there are 20 percent more roads in poor condition today than there were in 2015 (Syracuse and Zin 2019). In addition to delays in carrying out road construction projects, which add to overall costs, a recent surge in costs for both labor and materials as well as inflationary pressures exacerbates the problem. More recent information suggests that the number is as high as \$2.5 billion annually.

In 2016, the Michigan Department of Transportation (MDOT) embarked on a research process in an attempt to better understand how aggregate materials may impact road building activities across Michigan. The first study resulted in the production of the *Michigan Aggregates Market Study* report, completed by FMI in October 2016, which estimated the supply of aggregates and time horizons for depletion based upon current demand and use rates for construction projects in regions across Michigan. The purpose of the project was to assess Michigan's currently permitted supplies of aggregate materials for road and bridge construction and determine the rate at which these materials are projected to supply current and future demand.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

In late 2018, against the backdrop of the FMI report, which projected diminishing aggregate supplies over time, MDOT hired Public Sector Consultants (PSC) to assess the transportation costs and potential economic implications of hauling aggregates from more-distant locations to satisfy demand for road construction projects. PSC hired SME, a materials and transportation engineering firm based in Southeast Michigan, to assist with the project. This assessment focuses primarily on the potential transportation costs associated with aggregate hauling statewide and how those costs may be impacted as hauling distances increase.

An additional component of PSC's work was a series of structured interviews and meetings with stakeholders (industry representatives, association members and staff, consultants, township and county representatives, etc.) to gain a better understanding of their key issues and perspectives relative to current aggregate supplies, the potential for higher transportation costs, and other factors (e.g., zoning, public safety, increased traffic and noise, air pollution).

When considering these discussions, it became clear that rising road building costs has called into question how mining permits are issued at the local level and whether a bias exists locally to minimize the number of permits, given the potential impacts of mining operations (e.g., pollution, noise, traffic). But municipal stakeholders do not believe that removing local control for the permitting of aggregate mines will effectively address the problem of diminishing supplies in either the short or long term. They also believe that a local municipality's authority to regulate land use is currently subject to certain limitations. For example, Michigan's current Zoning Enabling Act provides assurances that applications for mining permits are to be issued unless "very serious consequences" will result, though these same stakeholders also indicate that this phrase is subject to interpretation, and additional clarification through amendments to the act may be prudent.

Stakeholders note the existence of several highly visible mining applications that are controversial, and that it is a relatively limited number of these that has negatively impacted the local permitting process. These stakeholders suggest that legislative attempts to affect local control and change long-established zoning processes could have negative consequences for counties and townships. Another concern identified during stakeholder discussions was that Michigan may already be producing aggregate at or near maximum capacity, and if this is the case, any investments in road building are likely to increase demand without increasing supply, driving prices up for aggregate commodities and road construction.

Perhaps most importantly, results from this study underscore the need for renewed efforts to map and collect better data with respect to known and unknown aggregate supplies throughout the state with stronger engagement of local municipal planning entities. By documenting and understanding the full scope of the potential availability of these aggregate deposits, Michigan can become more proactive in managing these underground resources for the future while minimizing costs and conflicts on the landscape.

## Summary of Findings and Recommendations

While PSC's work focused on developing a transportation cost model to better understand the incremental costs of transporting aggregate materials, the research also led to several summary findings and recommendations listed below:

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

- **Michigan should attempt to avoid escalating land use conflicts by collaborating with the Transportation Asset Management Council (TAMC); Michigan Geological Survey (MGS); Michigan Department of Environment, Great Lakes, and Energy (EGLE); and local planning authorities.** While much of Michigan’s bedrock and surficial geology has been mapped over the last several decades, Michigan has done an inadequate job identifying and inventorying its aggregate resources in a comprehensive manner. Lacking this information, local planning activities often allow for residential and commercial development that may unknowingly cover and render aggregate supplies inaccessible for the foreseeable future. The TAMC, alongside MDOT, the MGS, and the EGLE, should prioritize 18–25 specific counties for mapping and conduct comprehensive aggregate inventories with support from local planning authorities. This information can then be used as a basis for future planning and protection efforts while taking into consideration the geographic proximity of aggregate deposits throughout the state where highway construction is anticipated.
- **The State and the industry should consider establishing a more robust reporting system for aggregate mines to report to the State their current and future reserves and annual extraction rates.** Currently, Michigan has no aggregate industry reporting requirements related to better understanding of material availability, information that is crucial to planning and decision making. This type of information would help inform policy and regulatory discussions to provide enhanced certainty regarding available supply and potential shortages of aggregates.
- **Aggregates are high-weight and low-value commodities. Transportation costs are high. Michigan’s deep-water ports are currently underutilized and may be positioned to accommodate expanded imports of aggregate products (more so than railroads).** Michigan is uniquely positioned within the Great Lakes region to take advantage of waterborne commerce—a potentially more cost-effective manner for moving large quantities of aggregate material. Several deep-water ports may be attractive options when discussing the movement of aggregate supplies, especially in Southeast Michigan (e.g., Monroe). Additional research should be conducted to determine which ports offer the best opportunities for enhancing aggregate movement in a cost-effective manner. These expanded markets need to be identified and developed.
- **The State should consider engaging in a broader community conversation to discuss challenges and work toward consensus solutions that ensure Michigan has access to an adequate aggregate supply while also ensuring that facilities operate in a manner that is in the best interest of Michigan’s residents.** Considering the complexity of the issues presented in this study and the perspectives from all parties, a paradox emerges—as the state and individual communities seek to decrease and manage costs of road construction by ensuring adequate supply of aggregates, there exists simultaneous resistance to efforts to expand operations of new or existing mining operations. Michigan will need to find better ways to balance the costs of aggregate extraction and transportation for road construction activities against the need for effective land-use planning that considers all Michigan communities and their interests.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## Background

In 2016 the Michigan Department of Transportation contracted with FMI, a transportation industry consulting firm, to evaluate the adequacy of construction aggregate reserves that are known to be approved for extraction to supply Michigan's long-term infrastructure needs. FMI also examined industry forces at work (i.e., quality, location, mixtures, and preferences) impacting aggregate supplies that exist in the six regions covering the state (MDOT 2016). FMI's goal was to develop estimates of how many tons per year of aggregates are or can be produced in each region, how much is consumed, how much is transported to other regions or states, and how long these estimated reserves can be expected to last based upon the current rate of depletion.

The FMI study concluded that with current rates of depletion and the specific aggregate type in question (e.g., limestone, sand, and gravel), the six regions that comprise Michigan contain anywhere from six to more than 50 years of supply depending on the specific region. The report shows that Southeast Michigan (Wayne, Oakland, and Macomb Counties) currently faces a 9.1 million-ton-per-year shortfall that is likely to be addressed with materials transported from outside the region. In addition, at current use rates, permitted supplies of sand and gravel are estimated to last 12.7 years in the region. Given the current conditions of Michigan's economy and need for road rebuilding, road reconstruction activities and large-scale infrastructure investment may accelerate depletion of the state's resources.

In evaluating the adequacy of local reserves in a region, FMI considered the difficulty of permitting new reserves. For example, resource extraction that may be considered desirable in a rural area may not be in a large metro area where permits can be much more difficult to obtain due to environmental concerns or community opposition to industry and truck traffic. The FMI study concluded that based upon current rates of depletion, and the specific aggregate type in question (e.g., limestone, sand, or gravel), these six regions will contain anywhere from six to more than 50 years of supply depending upon the specific region. For example, while there may be more than 50 years' worth of limestone in the Upper Peninsula region, FMI estimates that only six years of supply remains in the south-central region. FMI's analysis makes clear that aggregate supplies appear plentiful for the foreseeable future in some regions, while these supplies in other regions are experiencing rapid depletion and may need to be transported longer distances, resulting in higher construction costs for road building unless additional reserves are identified and utilized closer to project sites.

In December 2018, MDOT contracted with Public Sector Consultants, a Lansing-based research and project management firm, in partnership with SME in Detroit, to consider the work already completed by MDOT in the initial study and to begin a second study with an assessment of the potential cost implications of hauling aggregate materials from more distant locations. PSC also engaged key stakeholders to assess the potential implications of rising transportation costs given that local supplies are projected to diminish over time in some regions of the state. This study, as part of MDOT's research process, only assesses the cost of moving aggregates greater distances and does not assess changing prices of aggregates and impacts to MDOT's road and bridge budget based on relative supply and FMI's projections. This is due to the inherent difficulty and uncertainty in establishing the actual volume of aggregates that will be needed for these construction projects over time. The research does, however, provide a basis for MDOT to assess relative cost implications to those budgets if transportation costs for aggregates continue to increase.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

It should be noted that the FMI study has been closely scrutinized and some stakeholders have disagreed with its projections of aggregate supplies. When undertaking this study, PSC structured the research to focus on transportation costs alone, concluding that these supplies are finite and diminishing based upon currently permitted supplies, whether through ongoing extraction or through the conversion of land to residential and commercial uses.

Specifically, for this study, PSC and SME conducted the following tasks:

### **Task One—Economic Assessment**

The project team, consisting of PSC and SME, assessed the potential economic implications of transporting aggregate from more-distant locations to supply anticipated road and bridge projects. Specifically, this analysis discusses the impacts of different scenarios in which aggregate products are transported to project sites from further and further distances.

### **Task Two—Stakeholder Engagement**

Over the course of the project the team consulted key stakeholders from the aggregate industry, engineers, consultants, and municipal and township representatives. These individuals were asked a series of questions about aggregate availability, permitting, and regulatory issues, as well as how best to address projected diminishing supplies in Michigan. The stakeholder summary highlights views and perceptions regarding barriers and opportunities for expanding locally permitted aggregate supplies.

### **Task Three—Michigan Aggregates Resources Report**

PSC compiled all the information gathered from the economic assessment and the stakeholder engagement to develop the *Michigan Aggregates Resources Report: Assessing Transportation Costs Statewide*. This final report includes an evaluation of the potential cost implications related to the transport of aggregate materials if shortfalls of locally permitted aggregate supplies must be supplanted from out-of-state markets.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## Methodology and Analysis

PSC developed a model to calculate transportation costs for aggregates across the state from data supplied by SME based upon their estimations of the cost of aggregates per mile of roadway. These numbers were further confirmed by making contacts with additional aggregate hauling companies. SME's data also included aggregate costs for construction of one-mile road sections with hot mix asphalt (HMA) and Portland cement concrete (PCC) pavements based upon MDOT specifications for interstates, noninterstate freeways, and surface routes where base and subbase types and thicknesses differ. SME obtained the typical pavement sections used in MDOT's metro region (Wayne, Oakland, and Macomb Counties) and in regions covering Michigan's remaining 79 counties, referred to as outstate regions. The research suggests that one mile of freeway—four lanes wide, using pure aggregates for subbase, base, and pavement—shipped from the mine to the construction site can be approximately 30 percent of project costs.

SME computed the cost of aggregates delivered to a worksite or pavement plant. This cost assumes a 12-foot wide lane and includes the cost of the material as well as the transportation cost to deliver the aggregates to the site. The analysis assumes that the material will be delivered to the sites using gravel haulers that can carry 50 tons of material. PSC received estimates from SME that shippers generally charge \$0.20 cents per ton/mile except in Metro Detroit, where costs are closer to \$0.24 cents per ton/mile. This increased cost is driven mostly by additional time spent in traffic. When gathering additional sources for these numbers, PSC was informed that costs can be as low as \$0.16 cents per ton/mile in outstate areas. For this reason, this cost model uses a range of \$0.16 to \$0.20 cents per ton/mile for shipping in outstate regions and a range of \$0.20 to \$0.24 cents per ton/mile for shipping in Metro Detroit. Where a single estimate is provided in Exhibits 1—3, \$0.18 cents per ton/mile was used for outstate regions and \$0.22 cents per ton/mile was used for Metro Detroit.

Typical pavement cost sections were supplied by MDOT, and aggregate and shipping costs were provided by an aggregate supplier and reflect typical pricing for April 2019.

The primary variable in the model between the metro region and outstate regions is how much time a truck spends in a high-traffic scenario versus a low-traffic scenario. This is because trucks travel at different speeds in these two scenarios. PSC considered all highways and freeways to be low traffic for the purpose of this analysis, with the exception of highways and freeways in Wayne, Oakland, and Macomb Counties.

For example, a truck travelling from an aggregate supplier in Ingham County to Wayne County would:

- a. Travel approximately six miles until it reaches I-96 E. All these miles are in a low-traffic scenario.
- b. The truck travels on I-96 E for about 45 miles, after which it merges onto I-275 S. In this model, all of the miles on I-96 E are low-traffic miles.
- c. The truck travels about 15 miles on I-275 S, after which it travels about three additional miles on surface roads to its destination. The model considers these 18 miles to be high-traffic miles (incurring a higher cost because more time is spent on the roads at slower speeds).

In this scenario, the truck spends 18 miles in a high-traffic scenario and 51 miles in a low-traffic scenario. The model then applies the appropriate shipping rates to these mileage numbers to identify a cost.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## Route Calculation

The model uses a popular online route calculator similar to Google Maps for general real-world routes and mileage between the geographic center of each county. The geographic center was chosen because it represents the average distance to every point within the county.

## Assumptions

Metro region rates are assumed to be between \$0.20 and \$0.24 per ton/mile. Outstate rates are assumed to be between \$0.16 and \$0.20 per ton/mile. These rates change slightly depending on who is estimating them (the lowest estimate was \$0.16 per ton/mile) and many aspects may be included in these prices. For example, shippers include the risk of unforeseen traffic delays, return hauls, gasoline prices, and other factors.

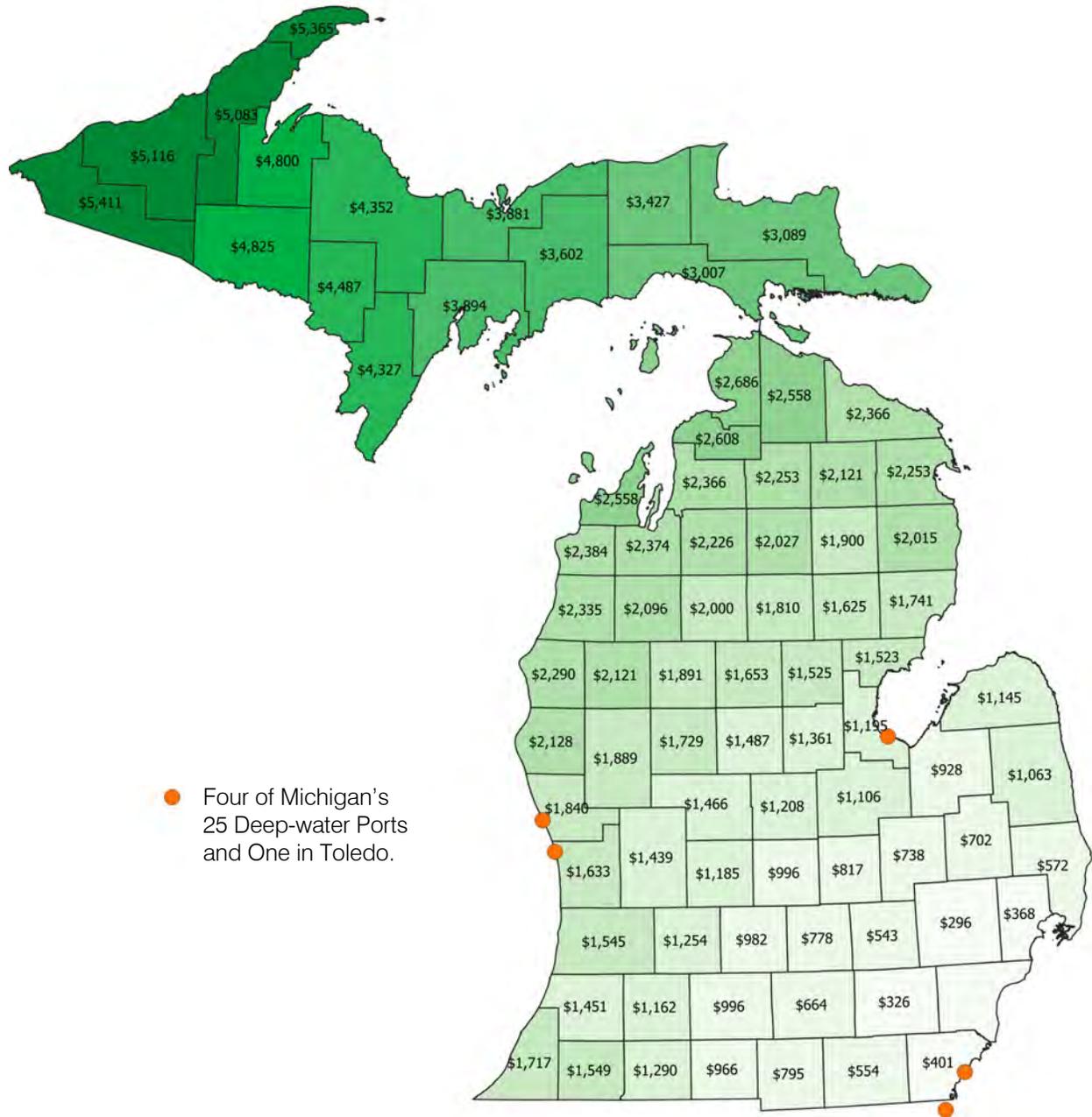
To simplify the graphical representation of these rates, Exhibits 1 through 3 highlight an average cost of \$0.18 per ton/mile per 50-ton truck between Michigan counties to and from three key destinations: Wayne, Kent, and Marquette Counties. For routes that include Wayne, Oakland, and Macomb counties a rate of \$0.22 per ton/mile per 50-ton truck mile is used for a portion of miles traveled within those counties in order to reflect the higher cost in Metro areas. Four of Michigan's 25 deep-water ports and one port in Toledo, Ohio are also displayed, which are positioned strategically in the Lower Peninsula and northern Ohio to handle bulk aggregate supplies if markets are developed. The rate of \$0.22 per ton/mile is supported by additional research that indicates transportation costs would average out to this cost across a wide range of distances, even when following a nonlinear path (Bhagwat 2014).

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

**EXHIBIT 1. Average Estimated Aggregate Shipping Costs to/from Wayne County, 50-ton Assumed Load per Truck**



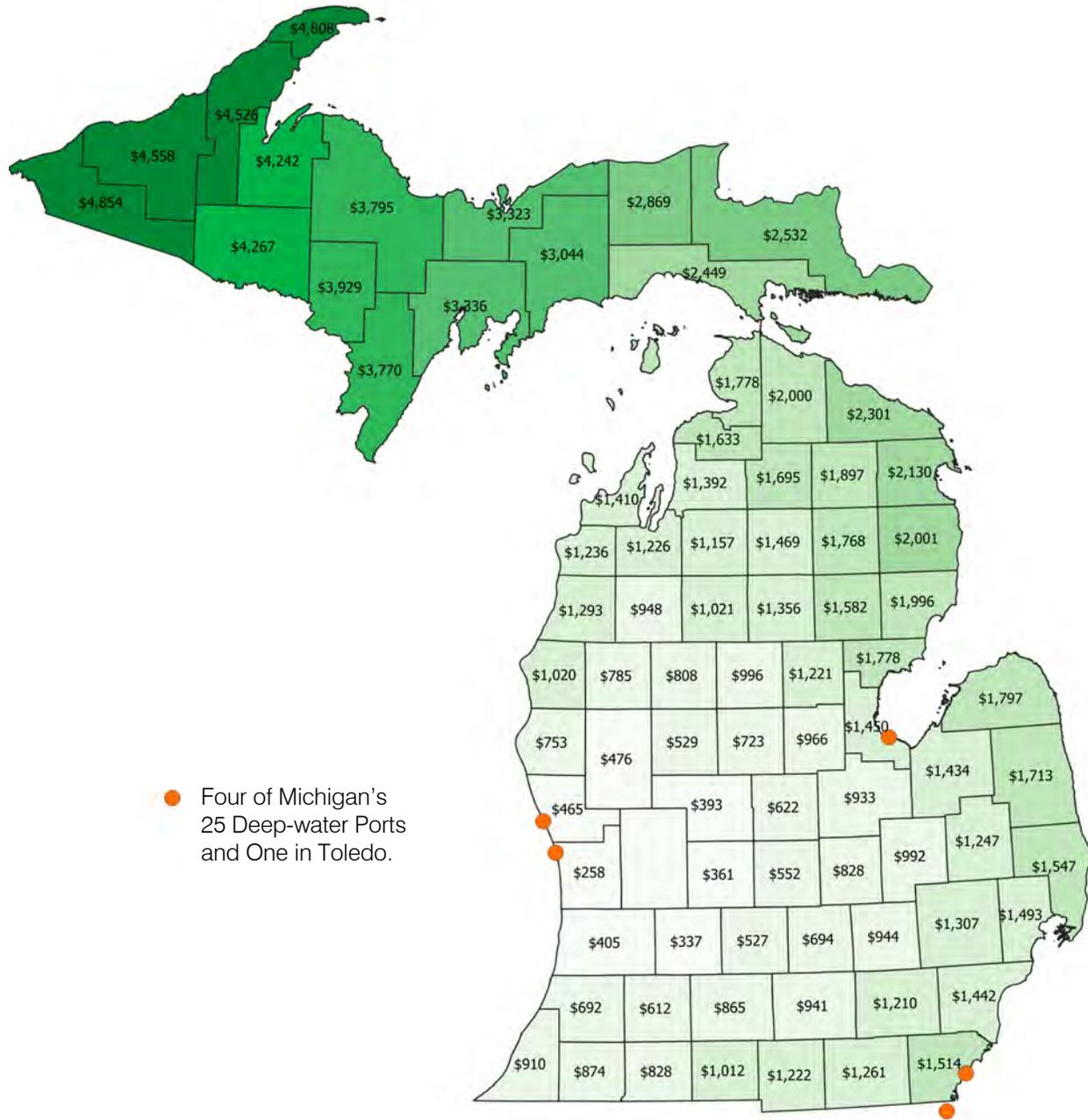
Source: Public Sector Consultants analysis.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

**EXHIBIT 2. Average Estimated Aggregate Shipping Costs to/from Kent County, 50-ton Assumed Load per Truck**



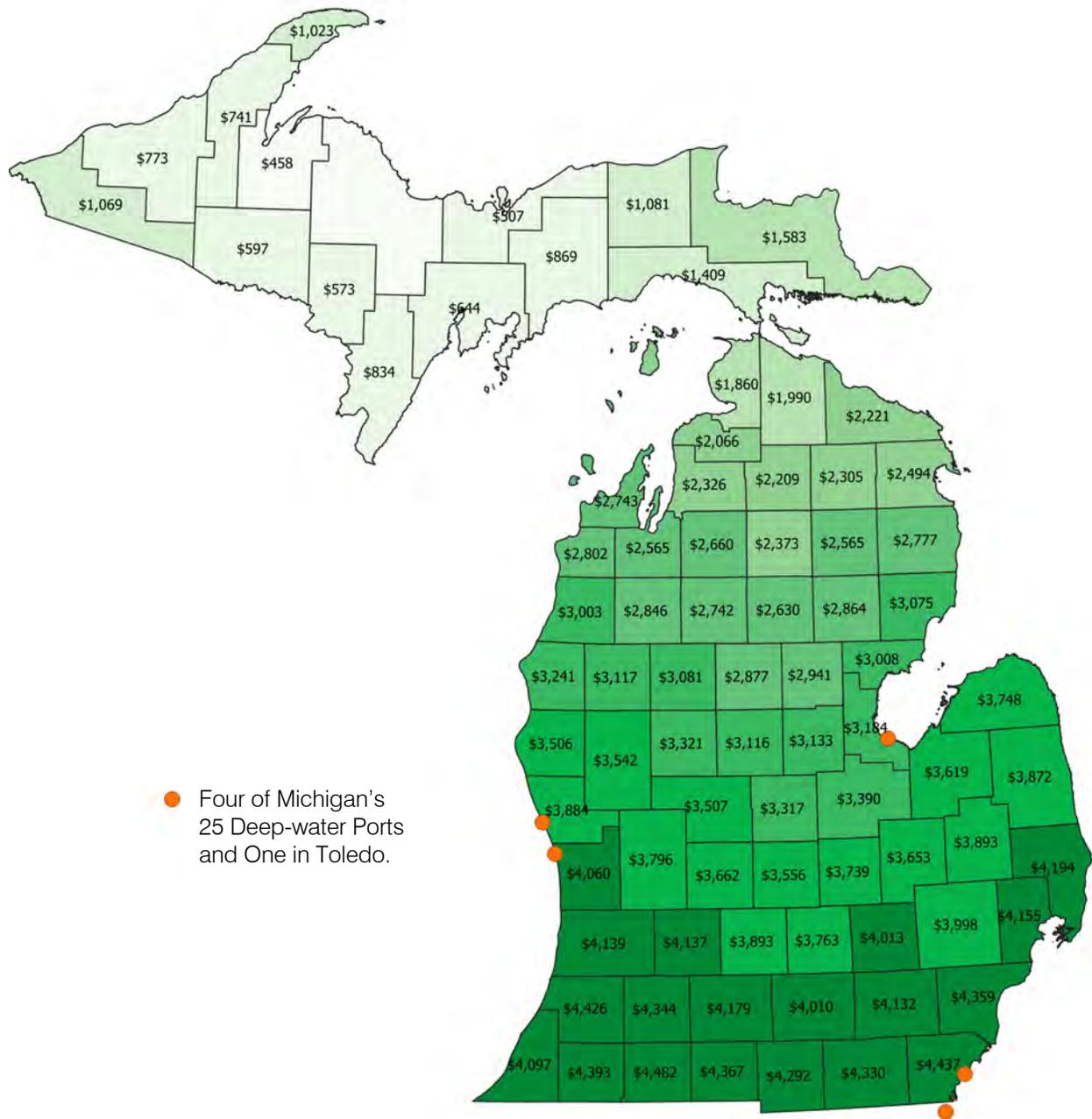
Source: Public Sector Consultants analysis.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

**EXHIBIT 3. Average Estimated Aggregate Shipping Costs to/From Marquette County, 50-ton Assumed Load per Truck**



Source: Public Sector Consultants analysis.

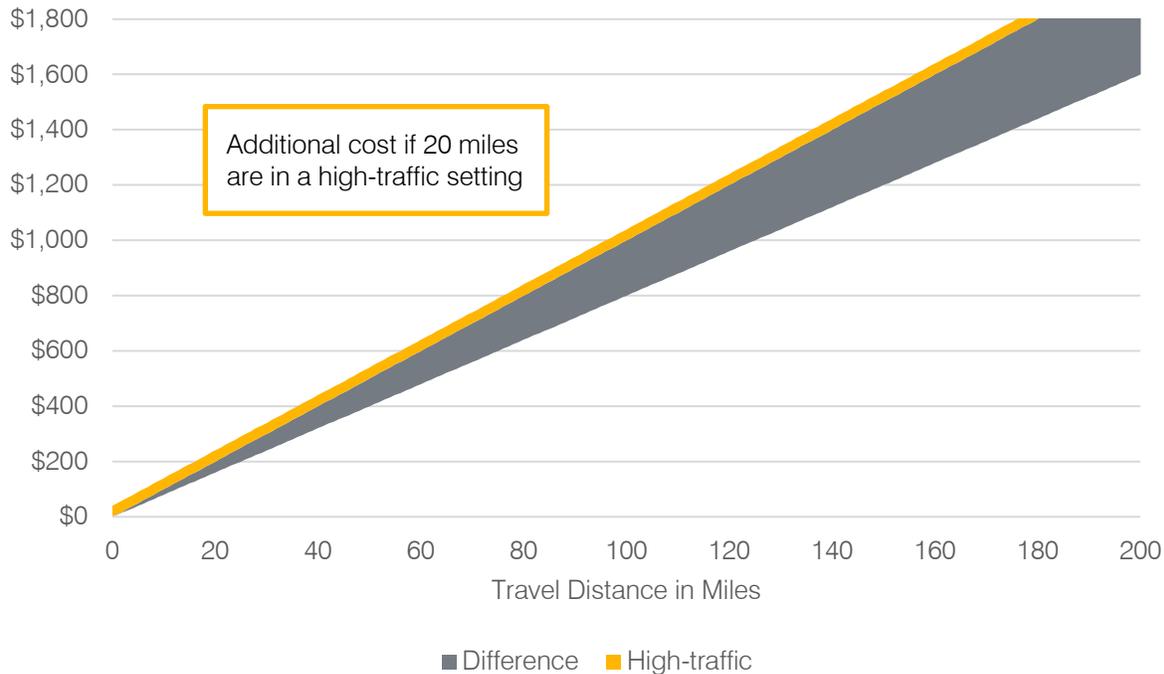
Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

The costs displayed in Exhibits 1 through 3 are further represented in a cost curve in Exhibit 4 compared to distance in miles. The exhibit displays the range of cost estimates for moving aggregate anywhere outside of the metro region (although these conclusions still hold for routes that include the metro region).

#### EXHIBIT 4. Shipping Costs in Relation to Travel Distance



Source: Public Sector Consultants analysis.

Note that these costs are estimates and aggregate shippers generally calculate costs based on time rather than distance. Despite this, the following two observations can be drawn.

Cost uncertainty grows with distance. The cost estimate range is represented by the thickness of the gray and yellow bars. This means that the further a loading site is from a construction site, the more uncertainty there is in the cost of shipping aggregate to that site. For example, the cost estimate range for a 40-mile trip in a low-traffic setting is \$320 to \$400, with a range of \$80 compared with the cost estimate range of a 120-mile trip, which is \$960 to \$1,200, with a range of \$240.

Distance is a limiting factor for competition. Loading sites that are closer to the construction site are much more cost competitive overall given their proximate location to a construction site. For example, the highest cost estimate for a loading site 40 miles from a construction site is lower than the lowest cost estimate for a loading site 60 miles from the construction site given the incremental cost per mile of transportation.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## Limitations

A limitation of the model is the use of a per-mile cost figure. In interviews with suppliers and shippers, their real-world behavior is based on time instead of mileage. More specifically, shippers assign a revenue target for each truck (typically around \$150 per hour) and price accordingly. While mileage and time are correlated, this disconnect creates limitations for the cost model. For example, there is a fixed-time cost in loading and unloading trucks. This process generally takes about 30 minutes per route and was considered in the per-mile estimates provided to PSC. However, for very long routes, this process makes up a smaller proportion and for very short routes this process makes up a larger proportion of the truck's time. Due to this and other factors, the model loses accuracy for very short (less than approximately five miles) and very long routes (over approximately 100 miles). The reason that PSC chose to use a mileage-based calculation instead of a time-based calculation is due to the research question being examined of how transportation costs change the further a loading site is from a construction site.

A second limitation is that the routes used in the model are computer generated. Haulers may have knowledge of quicker routes for their unique locales that could be more cost-efficient. In cases like this, the model would overestimate transportation costs. This likely would only effect short routes and very rural routes and would be a marginal effect.

Third, the model does not consider ultra-long distances that may trigger additional costs. For example, a Gogebic-to-Monroe route would trigger regulations requiring a driver to stop and rest, which would incur additional labor costs. For these cases, the model underestimates the costs, in some cases dramatically. In any event, very long routes generally do not exist in the market for aggregates because suppliers that are further from the construction site are priced out by suppliers who are closer.

A fourth limitation is that the model does not consider any restricted roads, tolls, weight-limited bridges, etc. that a truck may have to avoid or pay an additional fee for (the Mackinac Bridge is one example). For these cases, the model underestimates the costs, which are relatively small.

In addition, based upon stakeholder interviews (highlighted later in the report), it was also suggested that, as a general rule of thumb, 50- to 60-mile trips for aggregates by truck would generally be considered a local market. That range, however, cannot be drawn and defined within a radius due to the direction of the demand for the product from the source, which is generally toward populated areas where construction projects are more numerous. Because freight is such a significant component of the total cost, the market for a source can also be skewed by the location of alternative suppliers, and the location and availability of class-A haul routes and expressways, which are necessary to move large quantities of aggregate most efficiently. In most cases, the logical local market for an aggregate source is not a straight line from the project site location given varied transportation routes.

Outside of limitations to the model, there are also limitations stemming from the nature of aggregate as a high-weight, low-value commodity that come in at the point of existing infrastructure along which loads of aggregate travel. If the aggregate source is located on or near efficient haul routes (e.g., class-A roadways) the distance can be expanded beyond 50 miles but trucking beyond 100-miles ties up a significant number of trucks to supply the project. When trucking exceeds 70-miles on a regular basis, alternative forms of transportation, such as rail, may be more efficient. Great Lakes shipping can also be

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

an effective form of transportation to transport large shipments to a distribution yard, but it is limited to fixed areas that can accommodate a shipping port. Depending upon the type of aggregate being hauled, in cases when truck distances exceed 50 to 70 miles, the cost of shipping many times will exceed the cost of the cargo.

Finally, researchers note that deliveries must be made on class-A haul routes in order to allow the hauler to deliver full loads to any project. Many urban routes picked out by mapping programs do not fit this description, and most mapping systems do not map class-A routes when setting the route, meaning the shortest route is not always available to truck traffic.

## Mining and the Construction Materials Industry

Michigan is fortunate to have an abundance of metallic and nonmetallic resources distributed throughout the state, including clay, industrial sand, limestone, marl, gravel, stone, zinc, gypsum, copper, iron, and nickel and has been an important contributor to Michigan's economy. A key challenge when considering mineral production is that these resources are not uniformly distributed across the state, which is a result of the regional geology and, to a lesser extent, demand. Extraction of nonmetallic minerals takes place in all 83 of Michigan's counties (Office of Minerals Management 2017). Two distinct types of sand and gravel operations are recognized in Michigan: construction sand and gravel and industrial sand. Both are important nonmetallic mineral commodities in Michigan, though most operations in the state consist of construction sand and gravel producers (Office of Minerals Management 2017).

### Sand and Gravel Mining for Aggregate

Sand, gravel, and crushed stone are the primary types of natural aggregate used in Michigan and around the United States. Aggregate is used in most public-works projects, such as roads and highways, bridges, railroad beds, dams, airports, water and sewer systems, and tunnels. Many states rely on crushed rock for road and cement aggregate, and Michigan's geology offers the luxury of simply mining existing supplies of gravel within its boundaries and generally within proximity to construction activities. Many of these prime sources of sand and gravel, however, are being depleted, and other known deposits are being covered by housing and commercial developments or lie beneath productive farmland, rendering them inaccessible for the foreseeable future.

Aggregate is the most widely used mineral commodity in the United States, derived from natural deposits of sand and gravel or from crushing of quarry rock. The dominant use of sand and gravel is as construction aggregate in Portland cement concrete and asphalt concrete. Most building and bridge foundations, many modern commercial buildings, most new interstate highways, and sidewalks are made of Portland-cement concrete. Construction of one mile of four-lane interstate highway requires 85,000 tons of aggregate; the average six-room house requires 90 tons (Langer and Glanzman 1993). Other construction uses of sand and gravel include fill material, drainage media, and filtration beds for water-treatment facilities. Industrial and other uses of Michigan sand include molding sand in foundry operations, sandblasting abrasive, and enhancement of traction on ice-covered highways and sidewalks.

Most crushed stone in Michigan is mined in open quarries and drilling and blasting is necessary. Crushing is done at the quarry and the crushed rock is screened. Most of the larger stone quarries are located near the connection of Lakes Huron and Michigan, in the northern Lower Peninsula and the Upper Peninsula.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

Given Michigan's unique geography, some Great Lakes ports are uniquely positioned to facilitate shipping of the stone, since it is a high-weight and low-value commodity.

The cost of transporting aggregates mined around the state is high. The delivered price of a metric ton of sand and gravel doubles at about 23 miles and doubles for crushed rock at about 45 miles (Ford and Spiwak 2017). Given these high transportation costs, it is little surprise that 90 percent of aggregates are consumed within 50 miles of the place of extraction and that imports and exports are near nonexistent, amounting to only about 1 percent of production and consumption in Michigan (Ford and Spiwak 2017). Most of the imports and exports nationally are with Canada and Mexico.

## Aggregate Quality

The quality of Michigan's aggregate is an important aspect when considering construction projects. Although aggregates are most commonly known to be inert filler in concrete, the different properties of aggregate have a large impact on the strength, durability, workability, and economy of concrete. These different properties of aggregate allow engineers and contractors the most flexibility to meet their design and construction requirements. For example, the shape and texture of aggregate affects the properties of fresh concrete more than hardened concrete. Concrete is more workable when smooth and rounded aggregate is used instead of rough angular or elongated aggregate. Most natural sands and gravel from riverbeds are smooth and rounded and are excellent aggregates. Crushed stone produces much more angular and elongated aggregates, which have a higher surface-to-volume ratio and better bond characteristics but require more cement paste to produce a workable mixture (Mehta and Monteiro 2001).

Due to the varied quality of aggregate supplies found in Michigan, MDOT utilizes specifications for road building materials depending on project type. The standard specifications are the basic requirements governing the material, equipment, and methods used in construction contracts administered by MDOT.

## Recycled Materials

The Construction and Demolition Recycling Association estimates that construction and demolition companies in the United States generate 325 million tons of recoverable construction-related materials each year (Adams 2016). Some of these materials can be used as recycled aggregates for concrete. When companies demolish homes, roads, or other large structures, efforts are often made to recover some of the concrete and aggregates that are often left behind. Although recycled aggregates can be used in a variety of road construction applications, product variability and strength characteristics usually limit their use to road base, backfill, and asphalt pavement (Wilburn and Goonan 1998). Quality of the products containing recycled material is often source dependent, and indiscriminate blending may lead to inferior performance.

When possible, companies also use mobile processing facilities situated near demolition sites to recover left-behind aggregates and broken-up concrete to produce recycled aggregates. Not only does this reduce the need for new aggregates for construction purposes, but it also cuts down on the costs and emissions associated with shipping the aggregates from a production facility. The construction industry generates millions of tons of reusable waste each year. While much of this material is recycled or reused, there is still a significant amount of waste that is transported to the nearest disposal site. This presents a potential opportunity for companies to look to recycled aggregates as demand for material increases, provided that quality standards are met.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

However, high capital requirements, lack of public support, and quality problems or perceptions can make it difficult for a recycler to compete effectively. Recyclers often have little control over product demand and pricing, which are influenced by the amount of natural aggregates locally available. Careful monitoring, testing, and marketing can broaden the use of recycled aggregates for road building purposes, but more research is needed in order to fully understand how recycled aggregate can continue to play a larger role in construction activities.

## Regulatory Overview

In Michigan, much of the permitting of sand and gravel mining operations is conducted at the township and county levels. This authority is conveyed through Michigan's Zoning Enabling Act 110 of 2006. Additional regulatory functions reside within the EGLE. The Oil, Gas, and Minerals Division (OGMD) is the regulatory body for most mining industries in Michigan; however, the OGMD does not regulate all mineral commodities, including gypsum, dimension stone, limestone, and aggregate mined in Michigan (EGLE n.d.). Permitting for these materials is completed at a local level and governed by section 125.3205 of the Michigan Zoning Enabling Act 110 of 2006 (State of Michigan 2006). Mining activities within the purview of the OGMD that require a state permit include metallic, native copper, sand dune, and coal mining. The OGMD's oversight includes a range of activities, from transportation to disposal of waste byproduct as a result of mining (State of Michigan 2006). Other federal, state, or local laws or processes may be involved in the mine permitting process if the location of a potential mine raises other geographical or public concerns. Examples include mines located in proximity to wetlands, tribal lands, or coastal waters, and those that may require air pollution control permits, and those that may exceed a specific size.

### Michigan's Zoning Enabling Act

According to the Michigan Zoning Enabling Act 110 of 2006, a county or municipal ordinance cannot prevent the extraction, by mining, of valuable natural resources from any property unless "very serious consequences" would result from said extraction. Natural resources are deemed valuable if the entity extracting the natural resources generates enough revenue to reasonably expect to operate at a profit. To challenge a zoning decision preventing mining operation, the challenger must prove:

1. There are valuable natural resources located on the property in question
2. There is a need for natural resources by the challenger or in the market served by the challenger
3. There would be no very serious consequences from mining activities on the property in question

In determining if mining activities would result in "very serious consequences," the following factors may be considered:

1. The relationship of extraction and associated activities with existing land uses
2. The impact on existing land uses in the vicinity of the property
3. The impact on property values in the vicinity of the property and along the proposed hauling route serving the property, based on credible evidence
4. The impact on pedestrian and traffic safety in the vicinity of the property and along the proposed hauling route serving the property
5. The impact on other identifiable health, safety, and welfare interests in the local unit of government
6. The overall public interest in the extraction of the specific natural resources on the property

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

A local government can regulate, within reason, mining hours of operation, blasting hours, noise levels, dust control measures, and traffic associated with mining activities (State of Michigan 2006).

## Examples of Mining Projects and Their Regulations

### Schoolcraft County, Michigan: Graymont Mine

Graymont Mine, located in Schoolcraft County, Michigan, is home to a large deposit of limestone of suitable quality and quantity for mining purposes. The Michigan Department of Natural Resources (MDNR) approved a land transaction to Graymont Enterprises, a global supplier of lime and limestone products, with the following terms:

1. A direct purchase of 1,807 acres
2. Mineral rights of 7,027 acres, but surface ownership remains with the MDNR
3. Land exchange of 831 acres, where land of similar value was provided to the MDNR in exchange (Graymont Enterprises n.d.)

Section 6.17 of the Schoolcraft County zoning ordinance allows for the extraction of minerals within the county, outlines an application process with the zoning administrator, and sets the standards for site reclamation after mining activities have been concluded (Schoolcraft County 2018).

### Lyndon Township, Michigan: McCoig Materials

McCoig Materials, a concrete company based out of the city of Detroit, submitted a special land-use zoning request to Lyndon Township in 2014 to open the company's first sand and gravel mine between Pinckney and Waterloo. The proposed location contained the 1,050-foot-tall Stofer Hill, a topographic high point in the area. Along with the application for special land use, a land renewal proposal was also submitted to turn the hill into a greater than 50-acre lake surrounded by woods once the mining project was complete. Opponents to the permit cited serious impacts to property values and impact on pedestrian and traffic safety as two major concerns related to mining activities (Leonard 2014.) An agreement was reached with the developer in which the proposed mining location was donated to the State in exchange for allowing McCoig Materials to mine gravel at a site in the Island Lake State Recreation Area near Brighton, Michigan. As part of the deal, the developer will also reclaim an old, degraded site and return it to a form suitable for recreation (Walters 2018).

Section 14.04 of the Lyndon Township zoning ordinance and the township's separately passed mining ordinance govern local permitting for mining activities. Mining permit approval in the township must comply with the following:

1. Mining operations will not adversely affect the health, safety, and welfare of the township residents
2. The site will be restored so it is safe and harmonious with surrounding land uses
3. The necessary fees, bonds, security deposits, and evidence of insurance will be submitted
4. The proposed operation will not adversely affect the water table, water quality, or the water supply of any surrounding land (Lyndon Township 2012; Lyndon Township 2016)

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## The Role of the Michigan Geological Survey

The Michigan Geological Survey is currently housed in the Department of Geological and Environmental Sciences at Western Michigan University (WMU) and helps facilitate basic and applied geological research to promote the best use of Michigan's geological resources for their social and economic benefits while protecting associated resource values and the environment. The MGS is a crucial organization when discussing Michigan's geology, including aggregates. The organization's mission is to:

- Provide scientifically validated research and the data necessary for appropriate natural resource protection, discovery, assessment and management
- Act as an independent, unbiased authority on geological matters underpinning Michigan's natural resource protection and management
- Provide and preserve geologic records that can support the natural resource decision makers, both public and private

The MGS serves the general public through providing quality research and invaluable expertise and by maintaining a historic data repository. The organization was formerly housed within Michigan's Department of Environmental Quality (now the EGLE). However, in 2010, discussions began with WMU to assume the nonregulatory functions of the MGS. At the time, funding cuts were restricting the MGS's ability to perform any nonregulatory duties, so a transfer to a different institution it was believed would allow the entity to fulfill its mission. In October 2011, the survey was transferred to WMU's Department of Geosciences.

### Michigan Geological Survey Funding

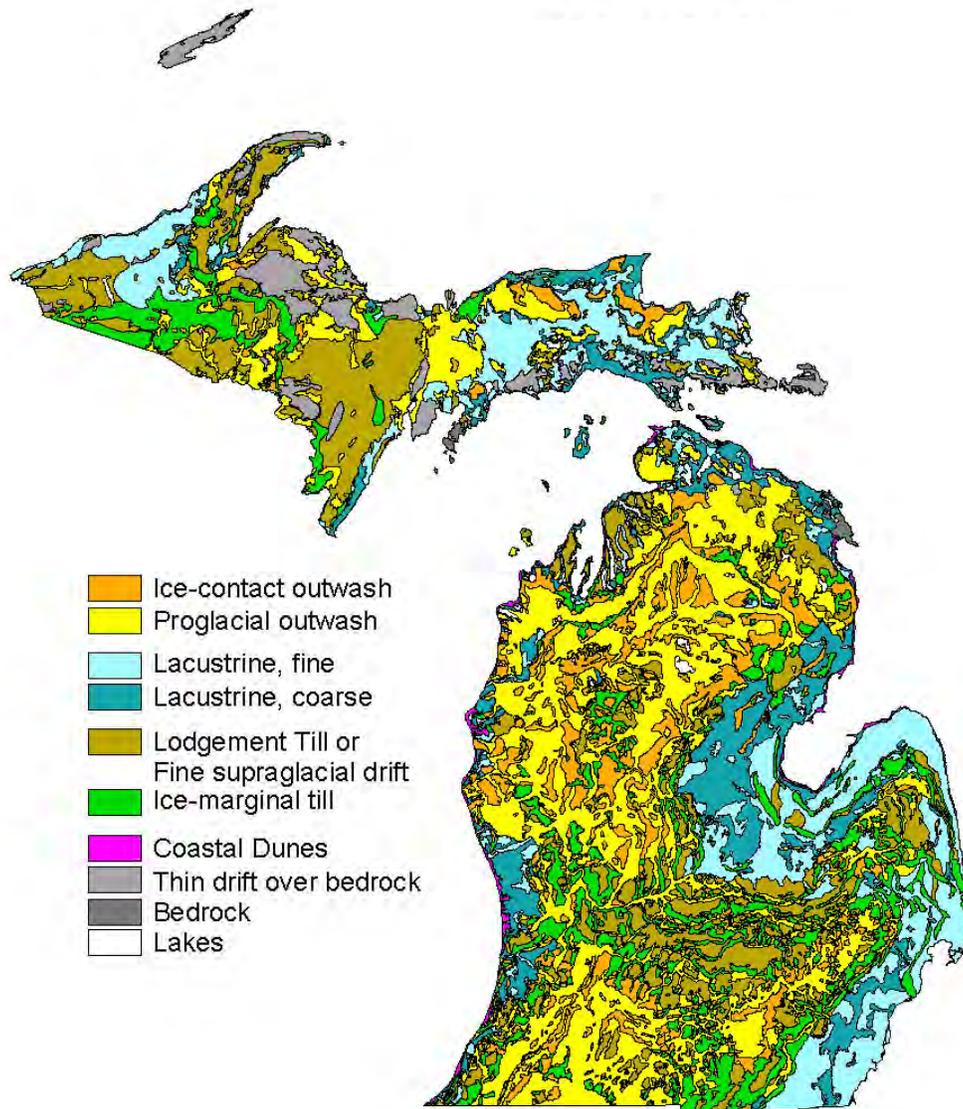
The restructured MGS has been active at the WMU Geological and Environmental Sciences Department for more than eight years. The primary functions mandated for the MGS by the October 11, 2011, legislation remain unchanged; however, the MGS has not received adequate resources from the State to support its mission, which would include updating maps of Michigan's surficial geology. Exhibit 5 provides an assessment of Michigan's surficial geology, which is based on 1915 data with only minimal updates in 1955 and 1982, and it represents surficial geology only, not subsurface geology. Without the funding to regularly update these maps, which are beneficial to the process of identifying potential aggregate mining sites, it becomes more difficult for industry stakeholders to efficiently find greater resources.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## EXHIBIT 5. Michigan's Surficial Geology



Source: Yellich 2019

According to information provided by the MGS, the organization has received only limited funding in the last few years from the State, including \$44,000 in 2014 to assist with subsurface mapping in Cass County, a priority area for water resources and aggregate locations. Subsequently, MGS petitioned the legislature for funds and received two one-time allocations of \$500,000 in June 2016 and again in December 2018 to allow continuing research to support programs and studies initiated and to formally demonstrate the benefits of a funded geological survey. However, the MGS has been unable to access certain additional amounts of federal funding due to a lack of matching dollars provided by the State. In funding for geological surveys, Michigan lags behind several surrounding states, including Ohio, Indiana, and Illinois, which each have dedicated funding sources and continue to carry out high-priority mapping in many areas, including development of three-dimensional maps that highlight subsurface minerals—information which is critical to identifying potential aggregate sources.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

In Michigan in 2016, the MGS identified those counties where mineral, aggregate, and water quality data should be collected, a process which would require similar investments and actions to those of surrounding states using dedicated funding. The MGS also identified a need for the following:

- Three-dimensional maps and reports with validated information, combining new and proven technologies and methods
- Data in formats (e.g., ArcGIS) accessible by smartphones, tablets, and laptops actively showing multiple layers of data in the field
- Secondary mapping products of surface and subsurface data that include water tables, water bearing zones, surface drainage, aggregates, wetlands, recharge areas, deeper subsurface research and data, etc.
- Interactive electronic standard databases to capture existing and new data.

## Potential for Modal Shift to The Great Lakes St. Lawrence Seaway System

The Great Lakes St. Lawrence Seaway System is a deep-draft waterway, the longest in the world, extending 2,340 miles from the Atlantic Ocean to the Great Lakes and provides direct access into the North American heartland, home to over 100 million people, roughly one quarter of the Canada/U.S. combined population. This binational trade corridor complements the region's rail and highway network and offers customers a cost-effective, safe, reliable and environmentally smart means of moving raw materials, agricultural commodities, and manufactured products to and from domestic and global markets. Cargoes include iron ore, coal, steel, aluminum, machinery, stone, cement, grain, sugar, fertilizers, road salt, petroleum products, and goods that arrive in shipping containers, such as furniture.

The seaway was built as a binational partnership between the U.S. and Canada and continues to operate as such. Administration of the system is shared by two entities, the Saint Lawrence Seaway Development Corporation, a federal agency within the U.S. Department of Transportation, as well as the St. Lawrence Seaway Management Corporation, a Canada-based nonprofit corporation (ownership of the Canadian portion of the seaway remains with the Canadian federal government.)

Over the last 200 years, navigation improvements in both the United States and Canada have enhanced the seaway. The Welland Canal first connected Lake Ontario and Lake Erie in 1829, enabling vessels to bypass Niagara Falls. The Soo Locks have made the St. Marys River navigable, connecting Lake Superior to the lower four Great Lakes and the St. Lawrence Seaway. The seaway has enabled ships to sail from Lake Ontario to the Atlantic Ocean since 1959.

Three distinct vessel-operator communities serve the waterway, including U.S. domestic carriers (U.S. lakers) transporting cargo between ports on the Great Lakes; Canadian domestic carriers (Canadian lakers) operating between ports on the Great Lakes and the St. Lawrence River and Canadian coastal waters; and ocean-going vessel operators (salties), which operate between the Great Lakes ports and overseas destinations. These carriers serve more than 110 system ports located in each of the eight Great Lakes states and the provinces of Ontario and Quebec.

In 2017, a total of 143.5 million metric tons (158.3 million short tons) of cargo valued at \$15.2 billion moved through the seaway system (Martin Associates 2018). Most of the domestic cargo moving on Canadian and U.S. flag vessels remains in the Great Lakes-seaway system, creating economic impacts at the loading port as well as the port of discharge. At the same time, a 2007 joint U.S.-Canadian study found

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

that the Great Lakes-seaway was operating at about half of its potential capacity and could absorb additional traffic (Transport Canada 2007). Further, in 2016 the Congressional Research Service reported that U.S. domestic cargo volume within the Great Lakes was about half that of the 1950s and 1960s (Congressional Research Service 2016). The tons of cargo moved by domestic Great Lakes and St. Lawrence Seaway traffic have declined since 1980 by 32 and 48 percent, respectively, according to U.S. Army Corps of Engineers and Saint Lawrence Seaway Development Corporation data (GAO 2018). Given this available capacity, the St. Lawrence Seaway System and Michigan ports in particular could help with the movement of aggregates in Michigan.

## Stakeholder Engagement

To engage further with data outside of that collected during phase one of MDOT's research and outside of the numerical data from SME, PSC consulted with numerous industry representatives and a cross section of aggregate-related facilities, including transportation companies and mining and processing facilities. In addition, discussions were held with local, regional, and statewide municipal representatives and associations (see Appendix A for a list of participating organizations). Several themes surrounding both the prices of aggregate and freight as well as further background and local challenges emerged from these discussions and are summarized below.

### Industry Representatives

Industry representatives were asked a series of questions about aggregate supplies statewide and at locations proximate to project locations and current market demand. There was general agreement among this cohort that material availability continues to be a concern as aggregate demand for road projects increases and the ability of industry to meet that demand locally becomes more challenging. Aggregate production facilities also appear to be operating at full capacity, creating a short-term problem of not being able to extract aggregate at a faster rate to support needed construction. Coupled with what is perceived as a diminishing supply of material locally along with a lack of current funding to adequately address failing infrastructure, there is concern that Michigan will fail to realize its long-term infrastructure plan and rebuild its roadways in a time frame consistent with public expectations.

Generally, there was consensus among industry representatives that Michigan's strong economy, against the backdrop of diminishing aggregate supplies within preferred proximities to project sites, has resulted in logistical challenges and higher cost implications for companies. Given the high capital costs for expanding and/or opening a mining business, these aggregate companies do their best to prepare based upon the economy's performance. There was also emerging consensus among industry representatives that streamlining the permitting process to expand and allow new mines would help alleviate the current challenges.

Industry was also quick to support a conclusion presented in a report by the Senate Fiscal Agency that suggests, "Road quality is a particularly important consideration because while drivers focus mainly on how unpleasant (and/or costly) it can be to drive on a poor road, the quality of the road has a significant impact in both the expected life of the road and the cost of any available repair options. While the 2015 road funding package provided a substantial amount of revenue, and the percentage of roads in good

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

condition have improved, both the magnitude and the timing of the funding did not prevent many roads from degrading to poor condition. As a result, not only to the roads need more revenue, but they will require more revenue than in 2015 to address the situation” (Siracuse and Zin 2019).

Other key observations among industry representatives include:

- Because there are high barriers to entry (i.e., capital requirements, permitting), aggregate companies, like most companies, desire certainty in markets, which helps them plan and make investments in their business to accommodate fluctuating market demand. Companies typically prefer having approximately 15 years or longer of permitted supplies to manage market fluctuations driven by construction activity.
- One industry representative observed that construction aggregate consumption for the 2000–2005 time frame was higher than today, which is approximately 75 percent of the consumption rate witnessed during those years.
- It was indicated that Michigan had 12 processing facilities in 2003, but this number has decreased to seven since that time.
- Sand is the most important aggregate ingredient compared to other available supplies of other aggregates (e.g., limestone).
- Modal shifts to date have occurred within the industry, though aggregate prices remain under pressure and relatively expensive.
- Studies that examine modal shifts to Great Lakes ports and their potential for augmenting aggregate supplies statewide are warranted. Related to this, urban renewal efforts along waterfronts present additional challenges for expanding waterborne commerce. For example, the city of Muskegon, a deep-water port, has witnessed the closing of a paper mill and coal-fired utility over the last 20 years; waterfront revitalization efforts are underway that target urban renewal, away from industrial uses.
- Labor and fuel comprise approximately 50 percent of hauling rates.
- When exceeding a 50-mile radius, the transportation costs will generally exceed the cost of the aggregate products being hauled.
- Railroads are considered a duopoly—there are no meaningful cost savings to be realized through further modal shifts on rail.
- Michigan’s geographic position within the Great Lakes offers advantages for supplying aggregate products.

## Municipal Representatives

As part of the project, PSC also engaged a cross-section of township and county representatives to gain a better understanding of their key issues and perspectives regarding the potential implications of higher costs for road construction activities against the backdrop of diminishing aggregate supplies and legislative pressure to streamline the permitting process. When conducting these interviews and meetings, it became clear that the potential for rising transportation costs is one of many policy issues that must be factored into local decision-making processes for prioritizing and executing road projects.

Municipal stakeholders are generally wary of the conclusions from the phase one study and do not believe that removing or limiting local control for the permitting of aggregate extraction will effectively address the problem of diminishing supplies either in the short or long term. These stakeholders believe that a perception exists that local municipalities generally act as an obstruction to opening new mines or

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

expanding existing ones but suggest that this is not the case in a majority of instances. Under Michigan's Zoning Enabling Act, local governments do not have authority to block mines as they are deemed an acceptable and necessary use in Michigan. These stakeholders do admit, however, that the definition of "very serious consequences" is relatively vague and that local governments do consider additional variables and have authority to address them when it comes to the permitting function (e.g., traffic and noise).

Other key observations among local and municipal representatives:

- Mine operators do feel constrained by the "very serious consequences" criteria and this does compel those operators to examine broader land uses.
- There are 1,400–1,500 mines in Michigan with a limited number being the most controversial—most mining operators comply with zoning regulations and operate in good faith with local units of government.
- Municipal governments must comply with Michigan's Zoning Enabling Act—thus, if a permit application meets required criteria, a local government is compelled to issue a permit.
- There is the perception among industry that not all local permitting authorities function in compliance with Michigan's Zoning Enabling Act, earning these areas a reputation as being especially difficult to obtain permits from or work with. Stakeholders indicated that in some instances it was the mine that chose to withdraw the application due to information requests or there were other legal concerns with the proposed site (e.g., wetlands) that caused the applicant to withdraw. In some cases, the company was uncooperative during the application process.
- One stakeholder compared the current need for road construction in Michigan and the heightened need for aggregate to the Wartime Powers Act of 1941—a perceived power grab for unlimited materials.
- Metamora Township appears to have become a catalyst for recent legislative efforts to remove permitting from the local level, but the township already has four sand and gravel operations and local opposition is to be anticipated.
- Stakeholders have many concerns about the state's ability and capacity to monitor permits if the state were to become the issuing entity.
- The FMI report did not account for increased usage or the increase in development of new mines.
- There is concern about state agencies being currently understaffed and their ability to effectively monitor issues of permitting at the local level, especially near schools.
- Local communities are the ones ultimately bearing the costs of permitting decisions.
- Local authorities cannot mandate haul routes, though they can be negotiated with the mine or trucking company.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## Summary and Conclusion

The vast system of roads and highways in Michigan provides a critical service to the state's economy and its residents. Given Michigan's unique geological position within the Great Lakes basin, the state is fortunate to have vast supplies of underground resources. Natural aggregates (construction sand and gravel and crushed stone) make up a large portion of these resources. Most of these materials are used in construction activities, such as in buildings and roads, and in highways, natural aggregates are incorporated into asphalt and concrete to be used as road base. Even during maintenance, much of the concrete and asphalt that is removed is eventually placed back into the highway as recycled aggregate.

The construction of these roads and highways has required and continues to require large quantities of materials, such as aggregates, asphalt, and cement. Combined with diminishing supplies at existing mining operations, and as commercial and residential development continues to cover potential sources, many of these underground reserves are rendered unusable for the foreseeable future. As these aggregate materials diminish within proximate location to construction activities, they will need to be hauled greater distances, resulting in increased transportation costs and translating to higher project costs overall.

Despite a 2015 road funding package designed to add new revenue to state transportation budgets, the condition of Michigan's roadways is likely to continue its decline because of decades of deferred maintenance. Once roads deteriorate into poor condition, the cost for fixing these roads will continue to rise sharply. In addition to delays in carrying out road construction projects, which add to overall costs, a recent surge in costs for both labor and materials and inflationary pressures exacerbates the problem.

Michigan should recognize and anticipate that the need to identify and supplant diminishing aggregate supplies over time is a significant priority. Successful management of this issue will include inventorying and mapping these resources in a proactive manner, working with county governments to plan for future needs, and conducting additional research to better understand the possibilities of modal shifts within the industry, especially as it relates to Great Lakes ports.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## References

Adams, Matthew. July 6, 2016. "The Importance of Using Sustainable Aggregates." *Engineering News-Record*. Accessed September 12, 2019. <https://www.enr.com/articles/39810-the-importance-of-using-sustainable-aggregates>

AMEC Engineering and Consulting of Michigan and Office of Minerals Management. 2017. *Michigan Mineral Producers 2017: Directory 13*. Accessed August 30, 2019. [https://www.michigan.gov/documents/dnr/MIMineralProducersDirectory2017\\_641309\\_7.pdf](https://www.michigan.gov/documents/dnr/MIMineralProducersDirectory2017_641309_7.pdf)

Bhagwat, Subhash. 2015. "Cost of Transportation of Construction Aggregates in Illinois in 2014." In *Proceedings of the 47<sup>th</sup> Forum on the Geology of Industrial Minerals: Illinois State Geological Survey, Circular 587*, edited by Z. Lasemi. Accessed August 22, 2019. [https://www.isgs.illinois.edu/sites/isgs/files/files/publications/47th-Forum-Bhagwat\\_replacement%2012-3-15\\_one.pdf](https://www.isgs.illinois.edu/sites/isgs/files/files/publications/47th-Forum-Bhagwat_replacement%2012-3-15_one.pdf)

Congressional Research Service. October 26, 2016. *The Great Lakes-St. Lawrence Seaway Navigation System: Options for Growth*. Accessed September 26, 2019. [https://www.everycrsreport.com/files/20161026\\_R44664\\_d1a7611075ba52a75becfba91b099bbeb0c25600.pdf](https://www.everycrsreport.com/files/20161026_R44664_d1a7611075ba52a75becfba91b099bbeb0c25600.pdf)

Ford, George and Lawrence Spiwak. March 2017. "The Economic Impact of the Natural Aggregates Industry: A National, State, and County Analysis." *Industry Scorecard*. Accessed August 27, 2019. <http://www.phoenix-center.org/scorecards/AggregatesIndustry2017ScorecardFinal.pdf>

General Accounting Office (GAO). September 2018. *Great Lakes-St. Lawrence Seaway: Assessing Risks and Measuring Performance Could Improve Maritime Transportation*. Accessed August 15, 2019. <https://www.gao.gov/assets/700/694296.pdf>

Graymont Enterprises. n.d. "The Project." *Rexton Project*. Accessed January 22, 2019. <http://rextonproject.com/the-project/>

Langer, William and V. Glanzman. 1993. "Natural Aggregate: Building America's Future." *Public Issues in Earth Science: U.S. Geological Circular 1110*. Accessed September 10, 2019. <https://pubs.usgs.gov/circ/1993/1110/report.pdf>

Leonard, James. April 2014. "A Gravel Mine in Lyndon?" *Ann Arbor Observer*. Accessed January 22, 2019. [https://annarborobserver.com/articles/a\\_gravel\\_mine\\_in\\_lyndon\\_.html#.XEeFRL4vzcs](https://annarborobserver.com/articles/a_gravel_mine_in_lyndon_.html#.XEeFRL4vzcs)

Longfellow, Rickie. June 27, 2017. "Highway History." *U.S. Department of Transportation Federal Highway Administration*. Accessed July 11, 2019. <https://www.fhwa.dot.gov/infrastructure/back0506.cfm>.

Lyndon Township. July 10, 2012. *Lyndon Township Ordinance Number 21*. Accessed January 23, 2019. <http://www.twp-lyndon.org/Documents/gravel%20extraction%20ordinance%20with%20section%2010%20amendment%20w%20old%20ord%20the%20same.pdf>

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

- . December 28, 2016. *Lyndon Township Zoning Ordinance*. Accessed January 23, 2019. [http://www.twp-lyndon.org/2015%20Zoning%20Ordinance%20as%20Amended\(1\).pdf](http://www.twp-lyndon.org/2015%20Zoning%20Ordinance%20as%20Amended(1).pdf)
- Martin Associates. July 2018. *Economic Impacts of Maritime Shipping in the Great Lakes-St. Lawrence Region*. Accessed August 20, 2019. [http://www.greatlakes-seaway.com/en/pdf/eco\\_impact\\_full.pdf](http://www.greatlakes-seaway.com/en/pdf/eco_impact_full.pdf)
- Mehta, P.K. and Paulo Monteiro. October 20, 2001. *Concrete: Microstructure, Properties, and Materials*. Accessed September 26, 2019. <http://ksaravind.yolasite.com/resources/P.K.Metha%20CONCRETE%20-%20microstructure%20properties%20and%20materials.pdf>
- Michigan Department of Environment, Great Lakes, and Energy. n.d. "Mining in Michigan." *Michigan Department of Environment, Great Lakes, and Energy*. Accessed January 22, 2019. [https://www.michigan.gov/deq/0,4561,7-135-3311\\_18442---,00.html](https://www.michigan.gov/deq/0,4561,7-135-3311_18442---,00.html)
- Michigan Department of Transportation. October 3, 2016. *Michigan Aggregates Market Study Phase I Report, FMI*. Lansing: Michigan Department of Transportation.
- Michigan Geological Survey. March 26, 2019. *Michigan Geological Survey Annual Report for 2018*. Accessed August 22, 2019. <https://wmich.edu/sites/default/files/attachments/u937/2019/2018%20%20MGs%20Annual%20Rept%20Final%20C.pdf>
- Schoolcraft County. April 4, 2018. *Zoning Ordinance: Schoolcraft County*. Accessed January 22, 2019. [https://www.schoolcraftcounty.net/PDF/Zoning\\_Ordinance\\_effective\\_APRIL\\_4\\_2018\\_4.pdf](https://www.schoolcraftcounty.net/PDF/Zoning_Ordinance_effective_APRIL_4_2018_4.pdf)
- Siracuse, Michael and David Zin. 2019. "The Rising Costs of Road Repair." *State Notes: Topics of Legislative Interest*. Accessed August 25, 2019. <http://www.senate.michigan.gov/sfa/Publications/Notes/2019Notes/NotesWin19dzms.pdf>
- State of Michigan. 2006. "Michigan Zoning Enabling Act 110." *Michigan Compiled Law*. Accessed January 22, 2019. [http://www.legislature.mi.gov/\(S\(ilguwnxj0amnmqebbfgn1l3\)\)/mileg.aspx?page=getobject&objectname=mcl-125-3205-amended&query=on](http://www.legislature.mi.gov/(S(ilguwnxj0amnmqebbfgn1l3))/mileg.aspx?page=getobject&objectname=mcl-125-3205-amended&query=on)
- Transport Canada, U.S. Army Corps of Engineers, U.S. Department of Transportation, The St. Lawrence Seaway Management Corporation, Saint Lawrence Seaway Development Corporation, Environment Canada, and U.S. Fish and Wildlife Service. 2007. *Great Lakes St. Lawrence Seaway Study*. Accessed August 22, 2019. <http://www.greatlakes-seaway.com/en/pdf/GLSL-Final-Report-En.pdf>
- Walters, Jacob. May 11, 2018. "Reclamation Project will Improve, Restore Island Lake State Recreation Area." *DBusiness Magazine*. Accessed September 25, 2019. <https://www.dbusiness.com/daily-news/reclamation-project-will-improve-restore-island-lake-state-recreation-area-in-livingston-county/>

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

Wilburn, David and Thomas Goonan. June 1, 1998. "Aggregates from Natural and Recycled Sources: Economic Assessments for Construction Applications—A Materials Flow Analysis." *U.S. Geological Survey Circular*. Accessed August 22, 2019.

<https://pubs.usgs.gov/circ/1998/c1176/c1176.pdf>

Yellich, John. September 2019. "What is Michigan Geology? Update: Annual Funding for the Michigan Geological Survey." PowerPoint presentation.

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## Appendix A: Stakeholder Organizations

Organizations that participated in stakeholder meetings and/or telephone calls:

### Municipal Representatives

Michigan Association of Counties

Michigan Association of School Boards

Michigan County Road Association

Michigan Municipal League

Michigan Townships Association

### Industry Representatives

Ajax Paving

Edw. C. Levy Co.

Michigan Aggregates Association

Michigan Infrastructure and Transportation Association

Mid-Michigan Materials

Northern Sand and Gravel

R. Smith and Sons

Sunrise Aggregates

Stoneco

### Other Representatives

Great Lakes Commission

Michigan Geological Survey

Michigan State University

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

## Appendix B: Cost Table

### Alcona County–Barry County

	Alcona	Alger	Allegan	Alpena	Antrim	Arenac	Baraga	Barry
Alcona	--	\$2050 - \$2550	\$2100 - \$2600	\$250 - \$300	\$900 - \$1100	\$450 - \$600	\$2850 - \$3600	\$2000 - \$2450
Alger	\$2050 - \$2550	--	\$3250 - \$4050	\$1850 - \$2300	\$1650 - \$2050	\$2250 - \$2800	\$850 - \$1050	\$3250 - \$4100
Allegan	\$2100 - \$2600	\$3250 - \$4050	--	\$2200 - \$2750	\$1550 - \$1900	\$1800 - \$2250	\$4100 - \$5100	\$250 - \$300
Alpena	\$250 - \$300	\$1800 - \$2250	\$2200 - \$2750	--	\$800 - \$1000	\$700 - \$850	\$2600 - \$3250	\$2200 - \$2750
Antrim	\$900 - \$1100	\$1650 - \$2050	\$1550 - \$1900	\$800 - \$1000	--	\$900 - \$1150	\$2450 - \$3100	\$1550 - \$1950
Arenac	\$450 - \$600	\$2250 - \$2800	\$1800 - \$2250	\$700 - \$850	\$900 - \$1150	--	\$3050 - \$3850	\$1550 - \$1900
Baraga	\$2850 - \$3600	\$850 - \$1050	\$4050 - \$5100	\$2650 - \$3350	\$2450 - \$3050	\$3050 - \$3850	--	\$4100 - \$5100
Barry	\$2000 - \$2450	\$3300 - \$4100	\$250 - \$300	\$2200 - \$2750	\$1550 - \$1900	\$1550 - \$1950	\$4100 - \$5100	--
Bay	\$750 - \$950	\$2400 - \$3000	\$1500 - \$1900	\$950 - \$1200	\$1050 - \$1350	\$300 - \$400	\$3250 - \$4050	\$1250 - \$1550
Benzie	\$1150 - \$1450	\$2050 - \$2600	\$1400 - \$1750	\$1200 - \$1500	\$500 - \$650	\$1050 - \$1300	\$2900 - \$3600	\$1400 - \$1750
Berrien	\$2650 - \$3300	\$3700 - \$4650	\$550 - \$700	\$2650 - \$3300	\$2000 - \$2500	\$2200 - \$2750	\$3750 - \$4700	\$750 - \$900
Branch	\$2150 - \$2700	\$3450 - \$4300	\$700 - \$900	\$2350 - \$2950	\$2100 - \$2650	\$1750 - \$2150	\$4300 - \$5350	\$600 - \$750
Calhoun	\$2000 - \$2500	\$3300 - \$4100	\$600 - \$750	\$2200 - \$2750	\$1950 - \$2450	\$1550 - \$1950	\$4100 - \$5150	\$350 - \$400
Cass	\$2500 - \$3100	\$3650 - \$4600	\$450 - \$550	\$2600 - \$3250	\$1950 - \$2450	\$2050 - \$2550	\$4050 - \$5050	\$600 - \$750
Charlevoix	\$1050 - \$1300	\$1400 - \$1750	\$1750 - \$2200	\$850 - \$1050	\$250 - \$300	\$1100 - \$1400	\$2250 - \$2800	\$1750 - \$2200
Cheboygan	\$850 - \$1050	\$1350 - \$1700	\$2100 - \$2600	\$600 - \$800	\$550 - \$650	\$1100 - \$1350	\$2150 - \$2700	\$2100 - \$2600
Chippewa	\$1350 - \$1700	\$1000 - \$1250	\$2550 - \$3200	\$1100 - \$1350	\$950 - \$1150	\$1550 - \$1950	\$1800 - \$2250	\$2550 - \$3200
Clare	\$950 - \$1200	\$2150 - \$2650	\$1200 - \$1500	\$1050 - \$1350	\$800 - \$1000	\$450 - \$600	\$2950 - \$3700	\$1200 - \$1450
Clinton	\$1550 - \$1950	\$2750 - \$3400	\$700 - \$900	\$1650 - \$2050	\$1400 - \$1750	\$1200 - \$1500	\$3550 - \$4450	\$500 - \$600
Crawford	\$550 - \$700	\$1700 - \$2100	\$1600 - \$2000	\$600 - \$750	\$350 - \$450	\$600 - \$750	\$2500 - \$3150	\$1600 - \$2000
Delta	\$2050 - \$2550	\$400 - \$500	\$3250 - \$4100	\$1800 - \$2250	\$1650 - \$2050	\$2250 - \$2850	\$950 - \$1200	\$3300 - \$4100
Dickinson	\$2600 - \$3250	\$700 - \$900	\$3800 - \$4750	\$2400 - \$3000	\$2200 - \$2750	\$2800 - \$3500	\$650 - \$850	\$3800 - \$4750
Eaton	\$1750 - \$2150	\$3050 - \$3800	\$450 - \$600	\$1950 - \$2450	\$1700 - \$2100	\$1300 - \$1650	\$3850 - \$4800	\$250 - \$300
Emmet	\$1000 - \$1250	\$1250 - \$1550	\$1900 - \$2350	\$800 - \$1000	\$450 - \$550	\$1200 - \$1500	\$2050 - \$2550	\$1900 - \$2350
Genesee	\$1200 - \$1500	\$2800 - \$3550	\$1100 - \$1400	\$1400 - \$1700	\$1500 - \$1850	\$750 - \$900	\$3650 - \$4550	\$850 - \$1050
Gladwin	\$700 - \$900	\$2200 - \$2750	\$1400 - \$1750	\$850 - \$1050	\$850 - \$1050	\$300 - \$350	\$3000 - \$3750	\$1200 - \$1500
Gogebic	\$3400 - \$4300	\$1400 - \$1750	\$4400 - \$5500	\$3200 - \$4000	\$3000 - \$3750	\$3600 - \$4500	\$750 - \$900	\$4600 - \$5700
Grand Traverse	\$950 - \$1150	\$1850 - \$2300	\$1400 - \$1750	\$950 - \$1200	\$300 - \$400	\$950 - \$1200	\$2700 - \$3350	\$1400 - \$1750
Gratiot	\$1350 - \$1700	\$2550 - \$3150	\$1050 - \$1300	\$1450 - \$1800	\$1200 - \$1450	\$750 - \$950	\$3350 - \$4200	\$750 - \$950
Hillsdale	\$2100 - \$2650	\$3400 - \$4250	\$1000 - \$1200	\$2300 - \$2900	\$2050 - \$2550	\$1650 - \$2100	\$4200 - \$5250	\$750 - \$950
Houghton	\$3100 - \$3900	\$1100 - \$1400	\$4300 - \$5400	\$2900 - \$3650	\$2700 - \$3400	\$3300 - \$4150	\$250 - \$350	\$4350 - \$5400
Huron	\$1250 - \$1550	\$2900 - \$3650	\$1850 - \$2300	\$1450 - \$1850	\$1550 - \$1950	\$800 - \$1000	\$3750 - \$4650	\$1550 - \$1950

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Alcona</b>	<b>Alger</b>	<b>Allegan</b>	<b>Alpena</b>	<b>Antrim</b>	<b>Arenac</b>	<b>Baraga</b>	<b>Barry</b>
Ingham	\$1550 - \$1900	\$2900 - \$3650	\$850 - \$1050	\$1750 - \$2200	\$1600 - \$1950	\$1100 - \$1400	\$3750 - \$4700	\$500 - \$600
Ionia	\$1700 - \$2150	\$2850 - \$3550	\$550 - \$700	\$1800 - \$2250	\$1400 - \$1750	\$1350 - \$1700	\$3700 - \$4650	\$300 - \$400
Iosco	\$300 - \$350	\$2300 - \$2900	\$2000 - \$2500	\$500 - \$600	\$950 - \$1200	\$200 - \$300	\$3150 - \$3900	\$1750 - \$2150
Iron	\$2900 - \$3600	\$900 - \$1100	\$3950 - \$4950	\$2700 - \$3350	\$2500 - \$3100	\$3100 - \$3850	\$400 - \$500	\$4150 - \$5200
Isabella	\$1150 - \$1450	\$2350 - \$2950	\$950 - \$1200	\$1250 - \$1550	\$1000 - \$1250	\$650 - \$850	\$3150 - \$3950	\$950 - \$1200
Jackson	\$1850 - \$2350	\$3150 - \$3950	\$800 - \$1000	\$2050 - \$2550	\$1800 - \$2250	\$1400 - \$1750	\$3950 - \$4950	\$550 - \$650
Kalamazoo	\$2150 - \$2650	\$3450 - \$4300	\$350 - \$450	\$2350 - \$2950	\$1700 - \$2150	\$1700 - \$2150	\$4250 - \$5300	\$250 - \$300
Kalkaska	\$750 - \$950	\$1950 - \$2450	\$1350 - \$1650	\$900 - \$1100	\$250 - \$300	\$800 - \$1000	\$2750 - \$3450	\$1350 - \$1700
Kent	\$1800 - \$2200	\$2950 - \$3700	\$350 - \$450	\$1900 - \$2350	\$1250 - \$1550	\$1350 - \$1650	\$3750 - \$4700	\$300 - \$400
Keweenaw	\$3350 - \$4200	\$1350 - \$1700	\$4550 - \$5700	\$3150 - \$3950	\$2950 - \$3700	\$3550 - \$4450	\$500 - \$650	\$4600 - \$5750
Lake	\$1300 - \$1600	\$2350 - \$2950	\$1000 - \$1250	\$1350 - \$1700	\$800 - \$1000	\$1000 - \$1250	\$3150 - \$3950	\$1000 - \$1250
Lapeer	\$1400 - \$1750	\$3050 - \$3800	\$1350 - \$1650	\$1600 - \$2000	\$1700 - \$2100	\$950 - \$1200	\$3850 - \$4800	\$1050 - \$1350
Leelanau	\$1100 - \$1350	\$2000 - \$2500	\$1550 - \$1950	\$1150 - \$1400	\$450 - \$600	\$1100 - \$1400	\$2850 - \$3550	\$1550 - \$1950
Lenawee	\$1900 - \$2350	\$3450 - \$4300	\$1100 - \$1400	\$2100 - \$2650	\$2100 - \$2600	\$1450 - \$1800	\$4250 - \$5300	\$850 - \$1050
Livingston	\$1550 - \$1900	\$3150 - \$3950	\$1050 - \$1350	\$1750 - \$2200	\$1800 - \$2250	\$1100 - \$1350	\$3950 - \$4950	\$700 - \$850
Luce	\$1650 - \$2050	\$550 - \$650	\$2850 - \$3550	\$1400 - \$1750	\$1250 - \$1550	\$1850 - \$2300	\$1350 - \$1700	\$2850 - \$3600
Mackinac	\$1250 - \$1600	\$850 - \$1050	\$2500 - \$3100	\$1000 - \$1250	\$850 - \$1100	\$1500 - \$1850	\$1650 - \$2050	\$2500 - \$3100
Macomb	\$1600 - \$2000	\$3250 - \$4050	\$1550 - \$1900	\$1850 - \$2250	\$1950 - \$2400	\$1200 - \$1450	\$4100 - \$5100	\$1200 - \$1450
Manistee	\$1200 - \$1500	\$2250 - \$2800	\$1300 - \$1600	\$1350 - \$1650	\$700 - \$850	\$1000 - \$1250	\$3050 - \$3850	\$1400 - \$1750
Marquette	\$2450 - \$3100	\$450 - \$550	\$3650 - \$4600	\$2250 - \$2850	\$2050 - \$2600	\$2650 - \$3350	\$400 - \$500	\$3700 - \$4600
Mason	\$1500 - \$1900	\$2450 - \$3050	\$1050 - \$1300	\$1600 - \$2000	\$1000 - \$1300	\$1100 - \$1400	\$3300 - \$4100	\$1150 - \$1450
Mecosta	\$1350 - \$1700	\$2550 - \$3150	\$750 - \$950	\$1450 - \$1800	\$900 - \$1150	\$850 - \$1050	\$3350 - \$4200	\$800 - \$1000
Menominee	\$2450 - \$3050	\$700 - \$900	\$3600 - \$4450	\$2250 - \$2800	\$2050 - \$2550	\$2650 - \$3300	\$950 - \$1200	\$3650 - \$4600
Midland	\$900 - \$1150	\$2350 - \$2950	\$1150 - \$1450	\$1150 - \$1400	\$1000 - \$1250	\$500 - \$600	\$3200 - \$4000	\$1050 - \$1300
Missaukee	\$850 - \$1050	\$2000 - \$2500	\$1200 - \$1500	\$950 - \$1200	\$500 - \$600	\$600 - \$700	\$2850 - \$3550	\$1200 - \$1550
Monroe	\$1850 - \$2350	\$3500 - \$4400	\$1400 - \$1750	\$2100 - \$2600	\$2150 - \$2700	\$1450 - \$1800	\$4350 - \$5450	\$1150 - \$1450
Montcalm	\$1500 - \$1900	\$2700 - \$3350	\$700 - \$850	\$1600 - \$2000	\$1150 - \$1450	\$1000 - \$1200	\$3500 - \$4400	\$450 - \$600
Montmorency	\$450 - \$550	\$1650 - \$2050	\$2000 - \$2500	\$300 - \$350	\$550 - \$650	\$650 - \$800	\$2450 - \$3050	\$2000 - \$2500
Muskegon	\$1850 - \$2300	\$3050 - \$3800	\$550 - \$700	\$1950 - \$2450	\$1300 - \$1600	\$1400 - \$1750	\$3850 - \$4800	\$650 - \$850
Newaygo	\$1600 - \$2000	\$2750 - \$3400	\$650 - \$800	\$1700 - \$2100	\$1050 - \$1300	\$1100 - \$1400	\$3550 - \$4450	\$700 - \$900
Oakland	\$1450 - \$1850	\$3100 - \$3900	\$1350 - \$1750	\$1650 - \$2100	\$1750 - \$2250	\$1000 - \$1300	\$3950 - \$4950	\$1000 - \$1300
Oceana	\$1650 - \$2050	\$2700 - \$3350	\$800 - \$1000	\$1750 - \$2150	\$1150 - \$1450	\$1250 - \$1550	\$3500 - \$4400	\$900 - \$1150
Ogemaw	\$450 - \$550	\$2100 - \$2650	\$1900 - \$2350	\$600 - \$700	\$800 - \$950	\$250 - \$300	\$2950 - \$3700	\$1650 - \$2050
Ontonagon	\$3150 - \$3950	\$1150 - \$1400	\$4350 - \$5450	\$2950 - \$3700	\$2750 - \$3450	\$3350 - \$4200	\$450 - \$600	\$4350 - \$5450
Osceola	\$1150 - \$1400	\$2300 - \$2900	\$1000 - \$1250	\$1250 - \$1550	\$700 - \$900	\$700 - \$850	\$3150 - \$3900	\$1050 - \$1300
Oscoda	\$250 - \$350	\$1850 - \$2300	\$1850 - \$2350	\$350 - \$450	\$700 - \$850	\$500 - \$600	\$2700 - \$3350	\$1900 - \$2350

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Alcona</b>	<b>Alger</b>	<b>Allegan</b>	<b>Alpena</b>	<b>Antrim</b>	<b>Arenac</b>	<b>Baraga</b>	<b>Barry</b>
Otsego	\$600 - \$750	\$1550 - \$1950	\$1800 - \$2250	\$450 - \$600	\$300 - \$350	\$800 - \$1000	\$2350 - \$2950	\$1800 - \$2250
Ottawa	\$2000 - \$2500	\$3200 - \$4000	\$300 - \$400	\$2150 - \$2650	\$1450 - \$1850	\$1550 - \$1950	\$4000 - \$5000	\$450 - \$600
Presque Isle	\$550 - \$700	\$1550 - \$1950	\$2350 - \$2950	\$250 - \$350	\$850 - \$1050	\$850 - \$1100	\$2350 - \$2950	\$2350 - \$2950
Roscommon	\$600 - \$800	\$1900 - \$2400	\$1500 - \$1900	\$750 - \$900	\$550 - \$700	\$400 - \$500	\$2750 - \$3400	\$1450 - \$1850
Saginaw	\$950 - \$1200	\$2600 - \$3250	\$1250 - \$1550	\$1150 - \$1450	\$1250 - \$1600	\$500 - \$650	\$3400 - \$4250	\$950 - \$1200
St. Clair	\$1650 - \$2050	\$3300 - \$4150	\$1600 - \$2000	\$1850 - \$2300	\$1950 - \$2450	\$1200 - \$1500	\$4150 - \$5150	\$1350 - \$1650
St. Joseph	\$2250 - \$2800	\$3550 - \$4450	\$550 - \$700	\$2500 - \$3100	\$1900 - \$2400	\$1850 - \$2300	\$4200 - \$5250	\$450 - \$550
Sanilac	\$1350 - \$1700	\$3000 - \$3800	\$1750 - \$2200	\$1550 - \$1950	\$1650 - \$2100	\$900 - \$1150	\$3850 - \$4800	\$1500 - \$1850
Schoolcraft	\$1800 - \$2250	\$300 - \$350	\$3000 - \$3750	\$1550 - \$1950	\$1400 - \$1750	\$2000 - \$2500	\$1150 - \$1450	\$3000 - \$3750
Shiawassee	\$1350 - \$1700	\$2900 - \$3650	\$950 - \$1200	\$1550 - \$1950	\$1550 - \$1950	\$900 - \$1150	\$3700 - \$4650	\$700 - \$850
Tuscola	\$1150 - \$1400	\$2800 - \$3500	\$1500 - \$1900	\$1350 - \$1700	\$1450 - \$1800	\$700 - \$850	\$3600 - \$4500	\$1250 - \$1550
Van Buren	\$2400 - \$3000	\$3500 - \$4400	\$250 - \$350	\$2450 - \$3050	\$1800 - \$2250	\$1950 - \$2450	\$4050 - \$5100	\$500 - \$600
Washtenaw	\$1600 - \$2000	\$3250 - \$4050	\$1100 - \$1400	\$1800 - \$2250	\$1900 - \$2400	\$1150 - \$1450	\$4050 - \$5100	\$850 - \$1050
Wayne	\$1800 - \$2200	\$3500 - \$4300	\$1400 - \$1700	\$2050 - \$2500	\$2150 - \$2600	\$1400 - \$1700	\$4300 - \$5300	\$1150 - \$1400
Wexford	\$1050 - \$1300	\$2100 - \$2650	\$1150 - \$1450	\$1150 - \$1450	\$500 - \$650	\$800 - \$1050	\$2950 - \$3650	\$1150 - \$1450

### Bay County–Cheboygan County

	<b>Bay</b>	<b>Benzie</b>	<b>Berrien</b>	<b>Branch</b>	<b>Calhoun</b>	<b>Cass</b>	<b>Charlevoix</b>	<b>Cheboygan</b>
Alcona	\$750 - \$950	\$1150 - \$1450	\$2650 - \$3300	\$2150 - \$2700	\$2000 - \$2500	\$2500 - \$3100	\$1050 - \$1300	\$850 - \$1050
Alger	\$2400 - \$3000	\$2050 - \$2600	\$3700 - \$4650	\$3450 - \$4300	\$3250 - \$4100	\$3650 - \$4600	\$1400 - \$1750	\$1350 - \$1700
Allegan	\$1500 - \$1900	\$1400 - \$1750	\$550 - \$700	\$700 - \$900	\$550 - \$700	\$450 - \$550	\$1750 - \$2200	\$2100 - \$2600
Alpena	\$950 - \$1200	\$1250 - \$1600	\$2650 - \$3300	\$2350 - \$2950	\$2200 - \$2750	\$2600 - \$3250	\$850 - \$1050	\$600 - \$800
Antrim	\$1050 - \$1350	\$500 - \$650	\$2000 - \$2500	\$2100 - \$2600	\$1950 - \$2400	\$1950 - \$2450	\$250 - \$300	\$550 - \$650
Arenac	\$300 - \$400	\$1050 - \$1300	\$2200 - \$2750	\$1700 - \$2150	\$1550 - \$1950	\$2050 - \$2550	\$1100 - \$1400	\$1100 - \$1350
Baraga	\$3250 - \$4050	\$2900 - \$3600	\$3750 - \$4700	\$4250 - \$5300	\$4100 - \$5100	\$4050 - \$5050	\$2250 - \$2800	\$2150 - \$2700
Barry	\$1250 - \$1550	\$1400 - \$1750	\$750 - \$900	\$600 - \$750	\$300 - \$400	\$600 - \$750	\$1750 - \$2200	\$2100 - \$2650
Bay	--	\$1150 - \$1400	\$1900 - \$2350	\$1450 - \$1800	\$1250 - \$1550	\$1750 - \$2200	\$1300 - \$1600	\$1250 - \$1550
Benzie	\$1200 - \$1450	--	\$1750 - \$2150	\$1950 - \$2450	\$1800 - \$2250	\$1800 - \$2250	\$650 - \$850	\$1000 - \$1250
Berrien	\$1900 - \$2400	\$1750 - \$2150	--	\$800 - \$950	\$750 - \$900	\$250 - \$350	\$2200 - \$2750	\$2550 - \$3150
Branch	\$1450 - \$1800	\$1950 - \$2450	\$800 - \$950	--	\$200 - \$250	\$400 - \$500	\$2350 - \$2900	\$2300 - \$2850
Calhoun	\$1250 - \$1600	\$1800 - \$2250	\$750 - \$900	\$200 - \$250	--	\$500 - \$600	\$2150 - \$2700	\$2100 - \$2650
Cass	\$1750 - \$2200	\$1800 - \$2250	\$250 - \$350	\$400 - \$500	\$500 - \$600	--	\$2150 - \$2700	\$2500 - \$3100
Charlevoix	\$1300 - \$1600	\$650 - \$850	\$2200 - \$2750	\$2300 - \$2900	\$2150 - \$2700	\$2150 - \$2700	--	\$350 - \$450
Cheboygan	\$1250 - \$1550	\$1000 - \$1250	\$2550 - \$3150	\$2250 - \$2850	\$2100 - \$2600	\$2500 - \$3100	\$350 - \$450	--
Chippewa	\$1700 - \$2150	\$1350 - \$1700	\$3000 - \$3750	\$2750 - \$3400	\$2550 - \$3200	\$2950 - \$3700	\$700 - \$900	\$650 - \$800

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Bay</b>	<b>Benzie</b>	<b>Berrien</b>	<b>Branch</b>	<b>Calhoun</b>	<b>Cass</b>	<b>Charlevoix</b>	<b>Cheboygan</b>
Clare	\$550 - \$650	\$700 - \$850	\$1650 - \$2050	\$1350 - \$1700	\$1200 - \$1500	\$1600 - \$2000	\$1000 - \$1250	\$950 - \$1200
Clinton	\$700 - \$850	\$1300 - \$1600	\$1150 - \$1450	\$700 - \$850	\$500 - \$650	\$1000 - \$1250	\$1600 - \$2000	\$1550 - \$1950
Crawford	\$750 - \$950	\$700 - \$850	\$2050 - \$2550	\$1800 - \$2250	\$1650 - \$2050	\$2000 - \$2550	\$550 - \$700	\$500 - \$650
Delta	\$2400 - \$3050	\$2100 - \$2600	\$3400 - \$4250	\$3450 - \$4300	\$3300 - \$4100	\$3700 - \$4600	\$1400 - \$1800	\$1350 - \$1700
Dickinson	\$2950 - \$3700	\$2600 - \$3250	\$3300 - \$4150	\$4000 - \$5000	\$3800 - \$4750	\$3600 - \$4450	\$1950 - \$2450	\$1900 - \$2350
Eaton	\$1000 - \$1250	\$1550 - \$1950	\$950 - \$1200	\$500 - \$600	\$300 - \$400	\$800 - \$1000	\$1900 - \$2400	\$1850 - \$2350
Emmet	\$1350 - \$1700	\$850 - \$1100	\$2350 - \$2900	\$2400 - \$2950	\$2200 - \$2750	\$2300 - \$2850	\$200 - \$250	\$300 - \$350
Genesee	\$450 - \$550	\$1500 - \$1850	\$1500 - \$1850	\$1000 - \$1250	\$850 - \$1050	\$1350 - \$1700	\$1700 - \$2100	\$1650 - \$2050
Gladwin	\$350 - \$450	\$850 - \$1100	\$1850 - \$2300	\$1400 - \$1700	\$1200 - \$1500	\$1700 - \$2150	\$1050 - \$1350	\$1000 - \$1250
Gogebic	\$3750 - \$4700	\$3450 - \$4300	\$3850 - \$4850	\$4450 - \$5550	\$4550 - \$5700	\$4150 - \$5150	\$2750 - \$3450	\$2700 - \$3400
Grand Traverse	\$1100 - \$1400	\$200 - \$250	\$1850 - \$2300	\$1950 - \$2400	\$1800 - \$2250	\$1800 - \$2250	\$450 - \$550	\$800 - \$1000
Gratiot	\$500 - \$600	\$1100 - \$1350	\$1400 - \$1750	\$950 - \$1150	\$750 - \$950	\$1250 - \$1600	\$1400 - \$1750	\$1350 - \$1700
Hillsdale	\$1350 - \$1700	\$1950 - \$2450	\$1050 - \$1300	\$300 - \$350	\$400 - \$500	\$650 - \$850	\$2250 - \$2850	\$2200 - \$2750
Houghton	\$3500 - \$4350	\$3150 - \$3900	\$4000 - \$5050	\$4500 - \$5650	\$4350 - \$5450	\$4300 - \$5350	\$2500 - \$3100	\$2400 - \$3000
Huron	\$500 - \$650	\$1600 - \$1950	\$2200 - \$2750	\$1750 - \$2150	\$1550 - \$1950	\$2050 - \$2550	\$1800 - \$2200	\$1750 - \$2150
Ingham	\$800 - \$1000	\$1500 - \$1850	\$1150 - \$1400	\$650 - \$800	\$500 - \$600	\$1000 - \$1250	\$1800 - \$2250	\$1750 - \$2200
Ionia	\$850 - \$1050	\$1150 - \$1450	\$1050 - \$1300	\$800 - \$1000	\$450 - \$600	\$950 - \$1200	\$1600 - \$2000	\$1700 - \$2150
Iosco	\$500 - \$650	\$1100 - \$1400	\$2400 - \$3000	\$1900 - \$2400	\$1750 - \$2200	\$2250 - \$2800	\$1200 - \$1450	\$950 - \$1200
Iron	\$3250 - \$4050	\$2900 - \$3650	\$3450 - \$4300	\$4000 - \$5000	\$4150 - \$5150	\$3700 - \$4650	\$2250 - \$2800	\$2200 - \$2750
Isabella	\$450 - \$550	\$800 - \$1000	\$1400 - \$1750	\$1200 - \$1500	\$1000 - \$1250	\$1350 - \$1700	\$1200 - \$1500	\$1150 - \$1450
Jackson	\$1100 - \$1400	\$1700 - \$2150	\$950 - \$1200	\$500 - \$650	\$350 - \$400	\$850 - \$1050	\$2000 - \$2500	\$1950 - \$2450
Kalamazoo	\$1400 - \$1750	\$1600 - \$2000	\$500 - \$650	\$500 - \$600	\$250 - \$300	\$350 - \$450	\$1950 - \$2400	\$2250 - \$2850
Kalkaska	\$950 - \$1150	\$400 - \$500	\$1800 - \$2200	\$1850 - \$2350	\$1750 - \$2150	\$1750 - \$2200	\$450 - \$600	\$650 - \$850
Kent	\$1050 - \$1300	\$1100 - \$1350	\$800 - \$1000	\$1050 - \$1300	\$750 - \$950	\$750 - \$950	\$1450 - \$1800	\$1800 - \$2200
Keweenaw	\$3750 - \$4650	\$3400 - \$4250	\$4250 - \$5350	\$4750 - \$5950	\$4600 - \$5750	\$4550 - \$5650	\$2750 - \$3400	\$2650 - \$3350
Lake	\$950 - \$1200	\$500 - \$600	\$1450 - \$1800	\$1550 - \$1950	\$1400 - \$1750	\$1400 - \$1750	\$950 - \$1200	\$1300 - \$1600
Lapeer	\$650 - \$800	\$1700 - \$2150	\$1700 - \$2150	\$1250 - \$1550	\$1100 - \$1350	\$1550 - \$1950	\$1900 - \$2400	\$1850 - \$2350
Leelanau	\$1250 - \$1600	\$250 - \$300	\$2000 - \$2500	\$2100 - \$2600	\$1950 - \$2450	\$1950 - \$2450	\$600 - \$750	\$950 - \$1200
Lenawee	\$1150 - \$1450	\$2000 - \$2500	\$1300 - \$1600	\$450 - \$600	\$650 - \$800	\$850 - \$1050	\$2300 - \$2850	\$2250 - \$2800
Livingston	\$800 - \$1000	\$1700 - \$2150	\$1350 - \$1700	\$900 - \$1100	\$700 - \$900	\$1200 - \$1500	\$2000 - \$2500	\$1950 - \$2450
Luce	\$2000 - \$2500	\$1650 - \$2100	\$3300 - \$4100	\$3050 - \$3800	\$2850 - \$3600	\$3250 - \$4100	\$1000 - \$1250	\$950 - \$1200
Mackinac	\$1650 - \$2050	\$1300 - \$1600	\$2950 - \$3650	\$2650 - \$3350	\$2500 - \$3100	\$2900 - \$3600	\$650 - \$800	\$550 - \$700
Macomb	\$900 - \$1100	\$1950 - \$2400	\$1750 - \$2150	\$1150 - \$1450	\$1100 - \$1350	\$1600 - \$2000	\$2150 - \$2650	\$2100 - \$2600
Manistee	\$1150 - \$1400	\$200 - \$250	\$1600 - \$1950	\$1950 - \$2400	\$1800 - \$2250	\$1800 - \$2250	\$850 - \$1050	\$1300 - \$1600
Marquette	\$2850 - \$3550	\$2500 - \$3100	\$3650 - \$4550	\$3850 - \$4850	\$3700 - \$4600	\$3900 - \$4900	\$1850 - \$2300	\$1750 - \$2200
Mason	\$1100 - \$1350	\$450 - \$600	\$1350 - \$1650	\$1700 - \$2100	\$1550 - \$1950	\$1550 - \$1950	\$1050 - \$1300	\$1500 - \$1900

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Bay</b>	<b>Benzie</b>	<b>Berrien</b>	<b>Branch</b>	<b>Calhoun</b>	<b>Cass</b>	<b>Charlevoix</b>	<b>Cheboygan</b>
Mecosta	\$700 - \$850	\$800 - \$950	\$1200 - \$1500	\$1300 - \$1650	\$1150 - \$1450	\$1200 - \$1500	\$1150 - \$1400	\$1350 - \$1700
Menominee	\$2800 - \$3500	\$2450 - \$3100	\$3050 - \$3800	\$3600 - \$4550	\$3650 - \$4600	\$3300 - \$4150	\$1800 - \$2250	\$1750 - \$2200
Midland	\$250 - \$350	\$900 - \$1150	\$1600 - \$2000	\$1200 - \$1500	\$1050 - \$1300	\$1550 - \$1900	\$1250 - \$1550	\$1200 - \$1500
Missaukee	\$850 - \$1050	\$500 - \$650	\$1650 - \$2050	\$1650 - \$2100	\$1500 - \$1850	\$1600 - \$2050	\$700 - \$900	\$850 - \$1050
Monroe	\$1150 - \$1400	\$2200 - \$2750	\$1550 - \$1950	\$700 - \$900	\$900 - \$1150	\$1300 - \$1600	\$2400 - \$3000	\$2350 - \$2950
Montcalm	\$700 - \$850	\$950 - \$1150	\$1150 - \$1400	\$1050 - \$1300	\$700 - \$850	\$1100 - \$1400	\$1350 - \$1700	\$1500 - \$1900
Montmorency	\$850 - \$1050	\$900 - \$1150	\$2450 - \$3050	\$2150 - \$2700	\$2000 - \$2500	\$2400 - \$3000	\$600 - \$800	\$400 - \$500
Muskegon	\$1100 - \$1400	\$900 - \$1150	\$850 - \$1050	\$1200 - \$1500	\$1050 - \$1300	\$1050 - \$1350	\$1500 - \$1900	\$1850 - \$2300
Newaygo	\$850 - \$1100	\$700 - \$900	\$1100 - \$1400	\$1250 - \$1550	\$1100 - \$1350	\$1100 - \$1400	\$1250 - \$1550	\$1500 - \$1900
Oakland	\$750 - \$950	\$1800 - \$2250	\$1550 - \$2000	\$1000 - \$1300	\$900 - \$1200	\$1400 - \$1800	\$2000 - \$2500	\$1950 - \$2450
Oceana	\$1250 - \$1550	\$700 - \$900	\$1100 - \$1350	\$1450 - \$1800	\$1300 - \$1650	\$1300 - \$1650	\$1300 - \$1600	\$1650 - \$2050
Ogemaw	\$400 - \$500	\$950 - \$1150	\$2300 - \$2850	\$1800 - \$2250	\$1650 - \$2050	\$2150 - \$2650	\$1000 - \$1250	\$950 - \$1200
Ontonagon	\$3500 - \$4400	\$3150 - \$3950	\$3950 - \$4900	\$4550 - \$5650	\$4350 - \$5450	\$4200 - \$5250	\$2500 - \$3150	\$2450 - \$3050
Osceola	\$750 - \$950	\$550 - \$700	\$1450 - \$1850	\$1550 - \$1950	\$1400 - \$1750	\$1450 - \$1800	\$900 - \$1150	\$1150 - \$1450
Oscoda	\$650 - \$800	\$950 - \$1200	\$2300 - \$2900	\$2050 - \$2550	\$1900 - \$2350	\$2300 - \$2850	\$850 - \$1050	\$650 - \$800
Otsego	\$950 - \$1200	\$750 - \$900	\$2250 - \$2800	\$2000 - \$2500	\$1850 - \$2300	\$2200 - \$2800	\$450 - \$550	\$350 - \$450
Ottawa	\$1250 - \$1600	\$1100 - \$1400	\$650 - \$800	\$1000 - \$1250	\$850 - \$1050	\$700 - \$850	\$1700 - \$2100	\$2000 - \$2500
Presque Isle	\$1050 - \$1350	\$1250 - \$1600	\$2800 - \$3500	\$2550 - \$3150	\$2350 - \$2950	\$2750 - \$3450	\$600 - \$750	\$400 - \$500
Roscommon	\$550 - \$700	\$750 - \$900	\$1950 - \$2450	\$1650 - \$2050	\$1450 - \$1850	\$1900 - \$2400	\$800 - \$1000	\$750 - \$900
Saginaw	\$250 - \$300	\$1200 - \$1500	\$1600 - \$2050	\$1150 - \$1450	\$1000 - \$1250	\$1450 - \$1850	\$1500 - \$1850	\$1450 - \$1800
St. Clair	\$900 - \$1150	\$2000 - \$2450	\$1950 - \$2450	\$1500 - \$1900	\$1300 - \$1650	\$1800 - \$2250	\$2150 - \$2700	\$2150 - \$2650
St. Joseph	\$1550 - \$1900	\$1800 - \$2200	\$450 - \$600	\$200 - \$250	\$300 - \$350	\$200 - \$250	\$2150 - \$2650	\$2400 - \$3000
Sanilac	\$650 - \$800	\$1700 - \$2100	\$2150 - \$2650	\$1650 - \$2050	\$1500 - \$1850	\$2000 - \$2500	\$1900 - \$2350	\$1850 - \$2300
Schoolcraft	\$2150 - \$2700	\$1800 - \$2250	\$3450 - \$4300	\$3200 - \$4000	\$3050 - \$3800	\$3400 - \$4300	\$1150 - \$1450	\$1100 - \$1350
Shiawassee	\$600 - \$800	\$1450 - \$1850	\$1350 - \$1700	\$850 - \$1100	\$700 - \$900	\$1200 - \$1500	\$1750 - \$2200	\$1750 - \$2150
Tuscola	\$400 - \$500	\$1450 - \$1850	\$1900 - \$2350	\$1400 - \$1750	\$1250 - \$1550	\$1750 - \$2150	\$1650 - \$2100	\$1600 - \$2000
Van Buren	\$1650 - \$2100	\$1650 - \$2050	\$350 - \$400	\$650 - \$800	\$500 - \$600	\$250 - \$350	\$2000 - \$2500	\$2350 - \$2900
Washtenaw	\$850 - \$1100	\$1900 - \$2400	\$1250 - \$1550	\$700 - \$900	\$600 - \$750	\$1100 - \$1400	\$2100 - \$2650	\$2050 - \$2600
Wayne	\$1100 - \$1300	\$2150 - \$2650	\$1550 - \$1900	\$900 - \$1050	\$900 - \$1100	\$1400 - \$1700	\$2350 - \$2900	\$2300 - \$2850
Wexford	\$900 - \$1150	\$250 - \$350	\$1600 - \$2000	\$1700 - \$2100	\$1550 - \$1950	\$1550 - \$1950	\$700 - \$900	\$1100 - \$1350

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

Chippewa County–Emmet County

	Chippewa	Clare	Clinton	Crawford	Delta	Dickinson	Eaton	Emmet
Alcona	\$1350 - \$1700	\$950 - \$1200	\$1550 - \$1950	\$550 - \$700	\$2050 - \$2550	\$2600 - \$3250	\$1750 - \$2150	\$1000 - \$1250
Alger	\$1000 - \$1250	\$2150 - \$2650	\$2750 - \$3400	\$1700 - \$2100	\$400 - \$500	\$700 - \$900	\$3000 - \$3750	\$1250 - \$1550
Allegan	\$2550 - \$3200	\$1200 - \$1500	\$700 - \$900	\$1600 - \$2000	\$3250 - \$4100	\$3800 - \$4750	\$450 - \$600	\$1900 - \$2350
Alpena	\$1100 - \$1350	\$1050 - \$1350	\$1650 - \$2100	\$700 - \$900	\$1800 - \$2250	\$2350 - \$2900	\$1950 - \$2450	\$800 - \$950
Antrim	\$950 - \$1150	\$800 - \$1000	\$1400 - \$1750	\$350 - \$450	\$1650 - \$2050	\$2200 - \$2750	\$1650 - \$2100	\$450 - \$550
Arenac	\$1550 - \$1950	\$450 - \$600	\$1200 - \$1450	\$600 - \$750	\$2250 - \$2850	\$2800 - \$3500	\$1300 - \$1600	\$1200 - \$1500
Baraga	\$1800 - \$2250	\$2950 - \$3700	\$3550 - \$4450	\$2500 - \$3150	\$950 - \$1200	\$650 - \$850	\$3850 - \$4800	\$2050 - \$2550
Barry	\$2550 - \$3200	\$1200 - \$1500	\$500 - \$650	\$1650 - \$2050	\$3250 - \$4100	\$3800 - \$4750	\$250 - \$300	\$1900 - \$2350
Bay	\$1700 - \$2150	\$500 - \$600	\$900 - \$1100	\$750 - \$950	\$2400 - \$3050	\$2950 - \$3700	\$1000 - \$1250	\$1350 - \$1700
Benzie	\$1350 - \$1700	\$700 - \$850	\$1300 - \$1600	\$650 - \$850	\$2100 - \$2600	\$2600 - \$3250	\$1550 - \$1950	\$850 - \$1100
Berrien	\$3000 - \$3750	\$1650 - \$2050	\$1150 - \$1450	\$2050 - \$2550	\$3400 - \$4250	\$3300 - \$4150	\$950 - \$1200	\$2350 - \$2900
Branch	\$2750 - \$3450	\$1350 - \$1700	\$700 - \$850	\$1800 - \$2250	\$3450 - \$4350	\$4000 - \$5000	\$500 - \$600	\$2400 - \$3000
Calhoun	\$2600 - \$3250	\$1200 - \$1500	\$500 - \$650	\$1650 - \$2050	\$3300 - \$4150	\$3850 - \$4800	\$300 - \$400	\$2250 - \$2800
Cass	\$2950 - \$3700	\$1600 - \$2000	\$1000 - \$1250	\$2000 - \$2550	\$3700 - \$4600	\$3600 - \$4450	\$800 - \$1000	\$2300 - \$2850
Charlevoix	\$700 - \$900	\$1000 - \$1250	\$1600 - \$2000	\$550 - \$700	\$1450 - \$1800	\$1950 - \$2450	\$1900 - \$2350	\$200 - \$250
Cheboygan	\$650 - \$800	\$950 - \$1200	\$1550 - \$1950	\$500 - \$650	\$1350 - \$1700	\$1900 - \$2350	\$1850 - \$2300	\$300 - \$350
Chippewa	--	\$1450 - \$1800	\$2050 - \$2550	\$1000 - \$1250	\$1200 - \$1500	\$1700 - \$2150	\$2300 - \$2900	\$550 - \$650
Clare	\$1450 - \$1800	--	\$650 - \$800	\$500 - \$600	\$2150 - \$2700	\$2650 - \$3350	\$950 - \$1150	\$1050 - \$1350
Clinton	\$2050 - \$2550	\$650 - \$800	--	\$1100 - \$1350	\$2750 - \$3450	\$3300 - \$4100	\$250 - \$350	\$1650 - \$2100
Crawford	\$1000 - \$1250	\$500 - \$600	\$1100 - \$1350	--	\$1700 - \$2100	\$2250 - \$2800	\$1350 - \$1700	\$600 - \$800
Delta	\$1200 - \$1500	\$2150 - \$2700	\$2750 - \$3450	\$1700 - \$2150	--	\$600 - \$750	\$3050 - \$3800	\$1250 - \$1550
Dickinson	\$1700 - \$2150	\$2650 - \$3350	\$3250 - \$4100	\$2250 - \$2800	\$600 - \$750	--	\$3550 - \$4450	\$1750 - \$2200
Eaton	\$2350 - \$2900	\$950 - \$1200	\$250 - \$350	\$1400 - \$1750	\$3050 - \$3800	\$3600 - \$4450	--	\$1950 - \$2450
Emmet	\$500 - \$650	\$1050 - \$1350	\$1650 - \$2100	\$650 - \$800	\$1250 - \$1550	\$1750 - \$2200	\$1950 - \$2450	--
Genesee	\$2100 - \$2650	\$850 - \$1050	\$500 - \$600	\$1200 - \$1450	\$2850 - \$3550	\$3350 - \$4200	\$600 - \$750	\$1750 - \$2200
Gladwin	\$1500 - \$1850	\$200 - \$250	\$650 - \$850	\$550 - \$700	\$2200 - \$2750	\$2750 - \$3400	\$950 - \$1200	\$1150 - \$1400
Gogebic	\$2350 - \$2950	\$3500 - \$4350	\$4100 - \$5100	\$3050 - \$3800	\$1400 - \$1750	\$900 - \$1100	\$4400 - \$5450	\$2600 - \$3250
Grand Traverse	\$1150 - \$1450	\$650 - \$850	\$1300 - \$1600	\$450 - \$550	\$1850 - \$2350	\$2400 - \$3000	\$1550 - \$1950	\$650 - \$800
Gratiot	\$1800 - \$2250	\$450 - \$550	\$250 - \$300	\$900 - \$1100	\$2550 - \$3150	\$3050 - \$3850	\$550 - \$650	\$1450 - \$1850
Hillsdale	\$2700 - \$3350	\$1300 - \$1650	\$700 - \$900	\$1750 - \$2200	\$3400 - \$4250	\$3950 - \$4900	\$550 - \$700	\$2350 - \$2900
Houghton	\$2050 - \$2550	\$3200 - \$4000	\$3800 - \$4750	\$2750 - \$3450	\$1200 - \$1550	\$900 - \$1150	\$4100 - \$5100	\$2300 - \$2850
Huron	\$2200 - \$2750	\$950 - \$1150	\$1200 - \$1500	\$1250 - \$1600	\$2900 - \$3650	\$3450 - \$4300	\$1300 - \$1650	\$1850 - \$2300
Ingham	\$2200 - \$2750	\$850 - \$1050	\$250 - \$300	\$1250 - \$1600	\$2950 - \$3650	\$3450 - \$4350	\$250 - \$300	\$1850 - \$2300
Ionia	\$2200 - \$2750	\$800 - \$1000	\$200 - \$250	\$1250 - \$1550	\$2850 - \$3550	\$3350 - \$4200	\$250 - \$350	\$1850 - \$2300

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	Chippewa	Clare	Clinton	Crawford	Delta	Dickinson	Eaton	Emmet
Iosco	\$1600 - \$2000	\$650 - \$850	\$1350 - \$1700	\$650 - \$850	\$2300 - \$2900	\$2850 - \$3550	\$1500 - \$1850	\$1250 - \$1550
Iron	\$1950 - \$2400	\$2950 - \$3700	\$3600 - \$4450	\$2550 - \$3150	\$900 - \$1100	\$350 - \$450	\$3850 - \$4800	\$2050 - \$2600
Isabella	\$1650 - \$2050	\$250 - \$350	\$500 - \$600	\$700 - \$850	\$2350 - \$2950	\$2900 - \$3600	\$750 - \$950	\$1300 - \$1600
Jackson	\$2450 - \$3050	\$1050 - \$1300	\$450 - \$550	\$1500 - \$1850	\$3150 - \$3950	\$3700 - \$4600	\$350 - \$400	\$2100 - \$2600
Kalamazoo	\$2750 - \$3400	\$1350 - \$1700	\$650 - \$850	\$1800 - \$2250	\$3450 - \$4300	\$3800 - \$4750	\$450 - \$600	\$2050 - \$2600
Kalkaska	\$1250 - \$1550	\$650 - \$850	\$1200 - \$1550	\$300 - \$350	\$1950 - \$2450	\$2500 - \$3100	\$1500 - \$1900	\$550 - \$700
Kent	\$2250 - \$2800	\$900 - \$1100	\$500 - \$600	\$1300 - \$1650	\$2950 - \$3700	\$3500 - \$4350	\$450 - \$600	\$1600 - \$1950
Keweenaw	\$2300 - \$2900	\$3450 - \$4300	\$4050 - \$5050	\$3000 - \$3750	\$1450 - \$1850	\$1150 - \$1450	\$4350 - \$5400	\$2550 - \$3200
Lake	\$1650 - \$2050	\$500 - \$650	\$1050 - \$1350	\$800 - \$1000	\$2350 - \$2950	\$2900 - \$3600	\$1150 - \$1450	\$1100 - \$1400
Lapeer	\$2350 - \$2900	\$1050 - \$1350	\$700 - \$900	\$1400 - \$1750	\$3050 - \$3800	\$3600 - \$4450	\$800 - \$1050	\$1950 - \$2450
Leelanau	\$1300 - \$1650	\$850 - \$1050	\$1450 - \$1800	\$600 - \$750	\$2050 - \$2550	\$2550 - \$3200	\$1750 - \$2150	\$800 - \$1000
Lenawee	\$2700 - \$3400	\$1350 - \$1700	\$750 - \$900	\$1800 - \$2200	\$3450 - \$4300	\$3950 - \$4950	\$750 - \$900	\$2350 - \$2950
Livingston	\$2450 - \$3050	\$1050 - \$1300	\$450 - \$550	\$1500 - \$1850	\$3150 - \$3950	\$3700 - \$4600	\$450 - \$550	\$2100 - \$2600
Luce	\$600 - \$700	\$1750 - \$2150	\$2350 - \$2900	\$1300 - \$1600	\$850 - \$1050	\$1350 - \$1700	\$2600 - \$3250	\$850 - \$1050
Mackinac	\$400 - \$500	\$1350 - \$1700	\$1950 - \$2450	\$900 - \$1150	\$850 - \$1050	\$1350 - \$1700	\$2250 - \$2800	\$450 - \$550
Macomb	\$2550 - \$3200	\$1300 - \$1600	\$950 - \$1150	\$1600 - \$2000	\$3300 - \$4100	\$3800 - \$4750	\$950 - \$1150	\$2200 - \$2750
Manistee	\$1550 - \$1950	\$650 - \$800	\$1250 - \$1550	\$750 - \$950	\$2250 - \$2800	\$2800 - \$3500	\$1550 - \$1950	\$1000 - \$1250
Marquette	\$1400 - \$1750	\$2550 - \$3200	\$3150 - \$3950	\$2100 - \$2650	\$550 - \$700	\$500 - \$650	\$3450 - \$4300	\$1650 - \$2050
Mason	\$1750 - \$2200	\$650 - \$850	\$1200 - \$1500	\$1050 - \$1300	\$2450 - \$3100	\$3000 - \$3750	\$1300 - \$1650	\$1350 - \$1700
Mecosta	\$1800 - \$2300	\$400 - \$500	\$700 - \$850	\$900 - \$1100	\$2550 - \$3200	\$3050 - \$3850	\$750 - \$900	\$1250 - \$1550
Menominee	\$1600 - \$2000	\$2550 - \$3150	\$3150 - \$3900	\$2100 - \$2600	\$450 - \$550	\$450 - \$550	\$3400 - \$4250	\$1650 - \$2050
Midland	\$1650 - \$2050	\$300 - \$350	\$500 - \$650	\$700 - \$900	\$2400 - \$2950	\$2900 - \$3650	\$800 - \$1000	\$1300 - \$1600
Missaukee	\$1300 - \$1650	\$350 - \$450	\$950 - \$1200	\$350 - \$450	\$2050 - \$2550	\$2550 - \$3200	\$1250 - \$1550	\$950 - \$1200
Monroe	\$2800 - \$3500	\$1550 - \$1950	\$950 - \$1200	\$1850 - \$2350	\$3550 - \$4400	\$4050 - \$5100	\$950 - \$1200	\$2450 - \$3050
Montcalm	\$2000 - \$2500	\$600 - \$750	\$450 - \$550	\$1050 - \$1300	\$2700 - \$3400	\$3250 - \$4050	\$500 - \$600	\$1650 - \$2050
Montmorency	\$900 - \$1150	\$850 - \$1100	\$1450 - \$1850	\$350 - \$400	\$1650 - \$2050	\$2150 - \$2700	\$1750 - \$2200	\$550 - \$700
Muskegon	\$2300 - \$2900	\$950 - \$1200	\$900 - \$1150	\$1350 - \$1700	\$3050 - \$3800	\$3550 - \$4450	\$850 - \$1050	\$1650 - \$2050
Newaygo	\$2000 - \$2500	\$650 - \$800	\$900 - \$1100	\$1050 - \$1300	\$2750 - \$3400	\$3250 - \$4100	\$850 - \$1100	\$1400 - \$1750
Oakland	\$2400 - \$3050	\$1150 - \$1450	\$750 - \$1000	\$1450 - \$1850	\$3150 - \$3950	\$3650 - \$4600	\$750 - \$950	\$2050 - \$2600
Oceana	\$2000 - \$2500	\$800 - \$1000	\$1150 - \$1450	\$1200 - \$1450	\$2700 - \$3400	\$3250 - \$4050	\$1100 - \$1350	\$1500 - \$1850
Ogemaw	\$1400 - \$1750	\$550 - \$650	\$1250 - \$1600	\$450 - \$600	\$2150 - \$2650	\$2650 - \$3350	\$1400 - \$1750	\$1050 - \$1300
Ontonagon	\$2100 - \$2600	\$3250 - \$4050	\$3850 - \$4800	\$2800 - \$3500	\$1250 - \$1550	\$850 - \$1050	\$4100 - \$5150	\$2350 - \$2900
Osceola	\$1600 - \$2000	\$300 - \$350	\$850 - \$1050	\$650 - \$850	\$2350 - \$2900	\$2850 - \$3550	\$900 - \$1150	\$1050 - \$1300
Oscoda	\$1150 - \$1450	\$750 - \$950	\$1350 - \$1700	\$400 - \$500	\$1850 - \$2350	\$2400 - \$3000	\$1650 - \$2050	\$800 - \$1000
Otsego	\$850 - \$1050	\$700 - \$850	\$1300 - \$1600	\$250 - \$300	\$1550 - \$1950	\$2100 - \$2600	\$1550 - \$1950	\$500 - \$600
Ottawa	\$2500 - \$3100	\$1100 - \$1400	\$750 - \$900	\$1550 - \$1900	\$3200 - \$4000	\$3750 - \$4650	\$650 - \$800	\$1800 - \$2250

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Chippewa</b>	<b>Clare</b>	<b>Clinton</b>	<b>Crawford</b>	<b>Delta</b>	<b>Dickinson</b>	<b>Eaton</b>	<b>Emmet</b>
Presque Isle	\$850 - \$1050	\$1200 - \$1550	\$1850 - \$2300	\$800 - \$950	\$1550 - \$1950	\$2100 - \$2600	\$2100 - \$2650	\$550 - \$700
Roscommon	\$1200 - \$1500	\$350 - \$400	\$950 - \$1150	\$250 - \$350	\$1950 - \$2400	\$2450 - \$3050	\$1200 - \$1500	\$850 - \$1050
Saginaw	\$1900 - \$2350	\$550 - \$700	\$450 - \$600	\$950 - \$1200	\$2600 - \$3250	\$3150 - \$3900	\$700 - \$900	\$1550 - \$1950
St. Clair	\$2600 - \$3250	\$1350 - \$1650	\$950 - \$1200	\$1650 - \$2050	\$3300 - \$4150	\$3850 - \$4800	\$1100 - \$1350	\$2250 - \$2800
St. Joseph	\$2850 - \$3550	\$1500 - \$1850	\$800 - \$1000	\$1900 - \$2400	\$3550 - \$4450	\$3750 - \$4700	\$600 - \$750	\$2250 - \$2800
Sanilac	\$2300 - \$2900	\$1050 - \$1300	\$1100 - \$1400	\$1350 - \$1700	\$3050 - \$3800	\$3550 - \$4450	\$1250 - \$1550	\$1950 - \$2450
Schoolcraft	\$950 - \$1150	\$1900 - \$2350	\$2500 - \$3100	\$1450 - \$1800	\$350 - \$450	\$900 - \$1100	\$2750 - \$3450	\$1000 - \$1250
Shiawassee	\$2200 - \$2750	\$800 - \$1000	\$250 - \$300	\$1250 - \$1550	\$2900 - \$3650	\$3450 - \$4300	\$450 - \$550	\$1850 - \$2300
Tuscola	\$2100 - \$2600	\$800 - \$1000	\$850 - \$1100	\$1150 - \$1450	\$2800 - \$3500	\$3350 - \$4150	\$1000 - \$1250	\$1750 - \$2150
Van Buren	\$2800 - \$3500	\$1450 - \$1800	\$950 - \$1150	\$1850 - \$2350	\$3500 - \$4400	\$3600 - \$4500	\$750 - \$900	\$2150 - \$2650
Washtenaw	\$2550 - \$3200	\$1300 - \$1600	\$700 - \$850	\$1600 - \$2000	\$3250 - \$4100	\$3800 - \$4750	\$600 - \$750	\$2200 - \$2750
Wayne	\$2750 - \$3400	\$1500 - \$1850	\$900 - \$1100	\$1850 - \$2250	\$3500 - \$4300	\$4000 - \$4950	\$900 - \$1100	\$2400 - \$2950
Wexford	\$1400 - \$1750	\$450 - \$550	\$1050 - \$1300	\$600 - \$750	\$2100 - \$2650	\$2650 - \$3300	\$1300 - \$1650	\$850 - \$1100

### Genesee County–Huron County

	<b>Genesee</b>	<b>Gladwin</b>	<b>Gogebic</b>	<b>Grand Traverse</b>	<b>Gratiot</b>	<b>Hillsdale</b>	<b>Houghton</b>	<b>Huron</b>
Alcona	\$1200 - \$1500	\$700 - \$900	\$3400 - \$4300	\$950 - \$1150	\$1350 - \$1700	\$2100 - \$2650	\$3100 - \$3900	\$1250 - \$1550
Alger	\$2850 - \$3550	\$2200 - \$2750	\$1400 - \$1750	\$1850 - \$2300	\$2500 - \$3150	\$3400 - \$4250	\$1100 - \$1350	\$2900 - \$3650
Allegan	\$1100 - \$1400	\$1350 - \$1700	\$4350 - \$5450	\$1400 - \$1750	\$1000 - \$1250	\$1000 - \$1250	\$4350 - \$5400	\$1800 - \$2300
Alpena	\$1400 - \$1750	\$850 - \$1050	\$3150 - \$3950	\$1050 - \$1300	\$1450 - \$1800	\$2300 - \$2900	\$2850 - \$3600	\$1450 - \$1850
Antrim	\$1500 - \$1850	\$850 - \$1050	\$3000 - \$3800	\$300 - \$400	\$1200 - \$1450	\$2050 - \$2550	\$2700 - \$3400	\$1550 - \$1950
Arenac	\$750 - \$950	\$300 - \$350	\$3650 - \$4550	\$950 - \$1200	\$750 - \$950	\$1650 - \$2100	\$3300 - \$4150	\$800 - \$1000
Baraga	\$3650 - \$4550	\$3000 - \$3750	\$750 - \$900	\$2650 - \$3350	\$3350 - \$4200	\$4200 - \$5250	\$250 - \$300	\$3750 - \$4650
Barry	\$850 - \$1050	\$1200 - \$1500	\$4550 - \$5650	\$1400 - \$1750	\$800 - \$950	\$800 - \$1000	\$4350 - \$5400	\$1550 - \$1950
Bay	\$450 - \$550	\$350 - \$450	\$3800 - \$4750	\$1100 - \$1400	\$500 - \$650	\$1350 - \$1700	\$3500 - \$4350	\$550 - \$650
Benzie	\$1500 - \$1900	\$850 - \$1100	\$3450 - \$4300	\$200 - \$250	\$1100 - \$1350	\$1950 - \$2450	\$3150 - \$3900	\$1600 - \$2000
Berrien	\$1500 - \$1850	\$1800 - \$2250	\$3850 - \$4800	\$1850 - \$2300	\$1450 - \$1800	\$1050 - \$1300	\$4000 - \$5050	\$2200 - \$2750
Branch	\$1050 - \$1300	\$1400 - \$1750	\$4400 - \$5500	\$1950 - \$2400	\$950 - \$1200	\$250 - \$350	\$4550 - \$5650	\$1750 - \$2150
Calhoun	\$850 - \$1050	\$1250 - \$1550	\$4550 - \$5650	\$1800 - \$2250	\$800 - \$1000	\$450 - \$550	\$4350 - \$5450	\$1550 - \$1950
Cass	\$1350 - \$1700	\$1700 - \$2150	\$4100 - \$5100	\$1800 - \$2250	\$1300 - \$1600	\$650 - \$800	\$4300 - \$5350	\$2050 - \$2600
Charlevoix	\$1700 - \$2150	\$1050 - \$1300	\$2800 - \$3500	\$450 - \$550	\$1400 - \$1750	\$2250 - \$2850	\$2500 - \$3100	\$1800 - \$2250
Cheboygan	\$1650 - \$2100	\$1000 - \$1250	\$2700 - \$3400	\$800 - \$1000	\$1350 - \$1700	\$2200 - \$2750	\$2400 - \$3000	\$1750 - \$2150
Chippewa	\$2150 - \$2650	\$1500 - \$1850	\$2350 - \$2950	\$1150 - \$1450	\$1800 - \$2300	\$2700 - \$3350	\$2050 - \$2550	\$2200 - \$2750
Clare	\$850 - \$1050	\$200 - \$250	\$3500 - \$4400	\$700 - \$850	\$450 - \$550	\$1300 - \$1650	\$3200 - \$4000	\$950 - \$1150
Clinton	\$500 - \$600	\$700 - \$850	\$4100 - \$5150	\$1300 - \$1600	\$250 - \$300	\$700 - \$850	\$3800 - \$4750	\$1200 - \$1500

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Genesee</b>	<b>Gladwin</b>	<b>Gogebic</b>	<b>Grand Traverse</b>	<b>Gratiot</b>	<b>Hillsdale</b>	<b>Houghton</b>	<b>Huron</b>
Crawford	\$1200 - \$1500	\$550 - \$650	\$3050 - \$3850	\$450 - \$600	\$900 - \$1100	\$1750 - \$2200	\$2750 - \$3450	\$1250 - \$1600
Delta	\$2850 - \$3550	\$2200 - \$2750	\$1400 - \$1800	\$1850 - \$2350	\$2550 - \$3150	\$3400 - \$4250	\$1200 - \$1550	\$2900 - \$3650
Dickinson	\$3400 - \$4200	\$2700 - \$3400	\$900 - \$1100	\$2400 - \$3000	\$3050 - \$3850	\$3950 - \$4900	\$900 - \$1150	\$3450 - \$4300
Eaton	\$600 - \$750	\$950 - \$1200	\$4400 - \$5500	\$1550 - \$1950	\$550 - \$650	\$650 - \$850	\$4100 - \$5150	\$1300 - \$1650
Emmet	\$1800 - \$2200	\$1100 - \$1400	\$2600 - \$3250	\$650 - \$800	\$1450 - \$1850	\$2350 - \$2900	\$2300 - \$2900	\$1850 - \$2300
Genesee	--	\$750 - \$900	\$4200 - \$5250	\$1500 - \$1850	\$550 - \$650	\$950 - \$1200	\$3900 - \$4850	\$750 - \$950
Gladwin	\$750 - \$950	--	\$3550 - \$4450	\$850 - \$1050	\$450 - \$550	\$1350 - \$1650	\$3250 - \$4100	\$850 - \$1050
Gogebic	\$4200 - \$5250	\$3550 - \$4450	--	\$3200 - \$4000	\$3900 - \$4850	\$4700 - \$5900	\$750 - \$950	\$4250 - \$5350
Grand Traverse	\$1500 - \$1850	\$850 - \$1050	\$3250 - \$4050	--	\$1100 - \$1350	\$1950 - \$2450	--	\$1550 - \$1950
Gratiot	\$550 - \$700	\$450 - \$600	\$3900 - \$4900	\$1100 - \$1350	--	\$900 - \$1100	\$3600 - \$4500	\$900 - \$1100
Hillsdale	\$950 - \$1200	\$1350 - \$1650	\$4700 - \$5850	\$1950 - \$2450	\$900 - \$1100	--	\$4450 - \$5600	\$1700 - \$2100
Houghton	\$3900 - \$4900	\$3250 - \$4050	\$750 - \$950	\$2900 - \$3650	\$3600 - \$4500	\$4450 - \$5600	--	\$4000 - \$5000
Huron	\$700 - \$900	\$850 - \$1050	\$4300 - \$5350	\$1550 - \$1950	\$900 - \$1150	\$1700 - \$2100	\$4000 - \$5000	--
Ingham	\$400 - \$500	\$850 - \$1050	\$4300 - \$5400	\$1450 - \$1850	\$400 - \$550	\$500 - \$650	\$4000 - \$5000	\$1100 - \$1400
Ionia	\$650 - \$850	\$850 - \$1050	\$4200 - \$5250	\$1150 - \$1400	\$400 - \$500	\$850 - \$1100	\$3900 - \$4900	\$1400 - \$1700
Iosco	\$950 - \$1150	\$500 - \$600	\$3700 - \$4600	\$1000 - \$1250	\$950 - \$1200	\$1850 - \$2300	\$3400 - \$4250	\$1000 - \$1250
Iron	\$3700 - \$4600	\$3000 - \$3800	\$550 - \$700	\$2700 - \$3350	\$3350 - \$4200	\$4250 - \$5300	\$650 - \$800	\$3750 - \$4700
Isabella	\$750 - \$950	\$400 - \$500	\$3750 - \$4650	\$800 - \$1000	\$250 - \$350	\$1150 - \$1400	\$3400 - \$4250	\$850 - \$1050
Jackson	\$700 - \$900	\$1100 - \$1350	\$4500 - \$5650	\$1700 - \$2100	\$650 - \$800	\$250 - \$300	\$4200 - \$5250	\$1400 - \$1800
Kalamazoo	\$1000 - \$1250	\$1400 - \$1700	\$4300 - \$5400	\$1600 - \$1950	\$950 - \$1150	\$650 - \$850	\$4500 - \$5650	\$1700 - \$2150
Kalkaska	\$1350 - \$1700	\$700 - \$900	\$3300 - \$4150	\$200 - \$200	\$1000 - \$1250	\$1900 - \$2350	\$3000 - \$3750	\$1450 - \$1800
Kent	\$900 - \$1100	\$1050 - \$1350	\$4350 - \$5400	\$1100 - \$1350	\$550 - \$700	\$1100 - \$1350	\$4000 - \$5050	\$1600 - \$2000
Keweenaw	\$4150 - \$5200	\$3500 - \$4400	\$1000 - \$1300	\$3150 - \$3950	\$3850 - \$4800	\$4700 - \$5900	\$300 - \$400	\$4250 - \$5300
Lake	\$1250 - \$1600	\$700 - \$900	\$3750 - \$4650	\$500 - \$600	\$850 - \$1050	\$1800 - \$2250	\$3400 - \$4250	\$1350 - \$1700
Lapeer	\$250 - \$300	\$950 - \$1200	\$4400 - \$5500	\$1700 - \$2100	\$750 - \$950	\$1200 - \$1500	\$4100 - \$5150	\$500 - \$650
Leelanau	\$1650 - \$2100	\$1000 - \$1250	\$3400 - \$4250	\$200 - \$250	\$1250 - \$1550	\$2100 - \$2650	\$3100 - \$3850	\$1750 - \$2150
Lenawee	\$750 - \$950	\$1450 - \$1850	\$4800 - \$6000	\$2000 - \$2450	\$950 - \$1150	\$250 - \$300	\$4500 - \$5600	\$1500 - \$1850
Livingston	\$400 - \$500	\$1100 - \$1350	\$4500 - \$5650	\$1700 - \$2100	\$650 - \$800	\$800 - \$1000	\$4200 - \$5250	\$1100 - \$1400
Luce	\$2450 - \$3050	\$1800 - \$2250	\$1900 - \$2400	\$1450 - \$1800	\$2100 - \$2650	\$3000 - \$3750	\$1600 - \$2000	\$2500 - \$3150
Mackinac	\$2050 - \$2600	\$1400 - \$1750	\$2200 - \$2750	\$1100 - \$1350	\$1750 - \$2200	\$2600 - \$3250	\$1900 - \$2400	\$2150 - \$2650
Macomb	\$500 - \$600	\$1200 - \$1450	\$4650 - \$5800	\$1950 - \$2400	\$1000 - \$1200	\$1050 - \$1300	\$4350 - \$5400	\$750 - \$900
Manistee	\$1450 - \$1850	\$800 - \$1000	\$3600 - \$4550	\$350 - \$450	\$1050 - \$1300	\$1900 - \$2400	\$3300 - \$4150	\$1550 - \$1900
Marquette	\$3250 - \$4050	\$2600 - \$3250	\$950 - \$1200	\$2250 - \$2850	\$2950 - \$3700	\$3800 - \$4750	\$650 - \$800	\$3350 - \$4150
Mason	\$1400 - \$1800	\$850 - \$1100	\$3850 - \$4800	\$600 - \$750	\$1000 - \$1250	\$1950 - \$2450	\$3550 - \$4400	\$1500 - \$1850
Mecosta	\$1000 - \$1250	\$550 - \$700	\$3900 - \$4900	\$750 - \$950	\$500 - \$600	\$1350 - \$1700	\$3600 - \$4500	\$1100 - \$1350
Menominee	\$3250 - \$4050	\$2600 - \$3250	\$1150 - \$1450	\$2250 - \$2800	\$2900 - \$3650	\$3800 - \$4750	\$1200 - \$1500	\$3300 - \$4150

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Genesee</b>	<b>Gladwin</b>	<b>Gogebic</b>	<b>Grand Traverse</b>	<b>Gratiot</b>	<b>Hillsdale</b>	<b>Houghton</b>	<b>Huron</b>
Midland	\$600 - \$750	\$150 - \$200	\$3750 - \$4700	\$900 - \$1150	\$300 - \$350	\$1150 - \$1450	\$3450 - \$4300	\$650 - \$850
Missaukee	\$1150 - \$1450	\$500 - \$600	\$3400 - \$4250	\$400 - \$500	\$750 - \$950	\$1600 - \$2000	\$3100 - \$3850	\$1250 - \$1550
Monroe	\$750 - \$900	\$1450 - \$1800	\$4900 - \$6100	\$2200 - \$2750	\$1150 - \$1450	\$500 - \$600	\$4600 - \$5750	\$1300 - \$1650
Montcalm	\$900 - \$1150	\$650 - \$850	\$4050 - \$5100	\$900 - \$1150	\$250 - \$300	\$1100 - \$1400	\$3750 - \$4700	\$1100 - \$1350
Montmorency	\$1250 - \$1600	\$700 - \$850	\$3000 - \$3750	\$700 - \$900	\$1250 - \$1550	\$2100 - \$2650	\$2700 - \$3350	\$1350 - \$1700
Muskegon	\$1250 - \$1550	\$1150 - \$1450	\$4650 - \$5800	\$1000 - \$1250	\$750 - \$950	\$1450 - \$1800	\$4100 - \$5150	\$1950 - \$2450
Newaygo	\$1300 - \$1600	\$850 - \$1050	\$4100 - \$5150	\$700 - \$900	\$700 - \$850	\$1500 - \$1850	\$3800 - \$4750	\$1250 - \$1600
Oakland	\$300 - \$450	\$1000 - \$1300	\$4500 - \$5650	\$1750 - \$2250	\$950 - \$1200	\$800 - \$1050	\$4200 - \$5250	\$850 - \$1100
Oceana	\$1500 - \$1900	\$1000 - \$1250	\$4050 - \$5100	\$850 - \$1050	\$900 - \$1150	\$1700 - \$2150	\$3750 - \$4700	\$1650 - \$2050
Ogemaw	\$850 - \$1050	\$300 - \$350	\$3500 - \$4400	\$850 - \$1050	\$850 - \$1050	\$1750 - \$2200	\$3200 - \$4000	\$900 - \$1150
Ontonagon	\$3950 - \$4900	\$3300 - \$4100	\$350 - \$450	\$2950 - \$3700	\$3600 - \$4550	\$4500 - \$5600	\$500 - \$600	\$4000 - \$5000
Osceola	\$1050 - \$1350	\$450 - \$550	\$3700 - \$4600	\$550 - \$700	\$650 - \$800	\$1500 - \$1900	\$3400 - \$4250	\$1150 - \$1450
Oscoda	\$1100 - \$1350	\$550 - \$650	\$3250 - \$4050	\$750 - \$900	\$1150 - \$1400	\$2000 - \$2500	\$2950 - \$3650	\$1150 - \$1450
Otsego	\$1400 - \$1750	\$750 - \$900	\$2900 - \$3650	\$550 - \$650	\$1100 - \$1350	\$1950 - \$2450	\$2600 - \$3250	\$1450 - \$1850
Ottawa	\$1050 - \$1350	\$1300 - \$1650	\$4450 - \$5550	\$1300 - \$1650	\$900 - \$1150	\$1250 - \$1600	\$4250 - \$5300	\$1800 - \$2200
Presque Isle	\$1500 - \$1850	\$950 - \$1200	\$2900 - \$3650	\$1050 - \$1350	\$1600 - \$2000	\$2400 - \$3000	\$2600 - \$3300	\$1550 - \$1950
Roscommon	\$1000 - \$1250	\$350 - \$400	\$3300 - \$4100	\$600 - \$750	\$700 - \$900	\$1600 - \$2000	\$3000 - \$3750	\$1050 - \$1350
Saginaw	\$350 - \$450	\$450 - \$550	\$3950 - \$4950	\$1200 - \$1500	\$300 - \$350	\$1050 - \$1300	\$3650 - \$4600	\$650 - \$800
St. Clair	\$500 - \$600	\$1200 - \$1500	\$4700 - \$5850	\$1950 - \$2450	\$1000 - \$1300	\$1150 - \$1450	\$4400 - \$5450	\$700 - \$900
St. Joseph	\$1150 - \$1400	\$1500 - \$1850	\$4250 - \$5350	\$1750 - \$2200	\$1050 - \$1350	\$450 - \$550	\$4450 - \$5550	\$1850 - \$2300
Sanilac	\$650 - \$800	\$950 - \$1150	\$4400 - \$5500	\$1700 - \$2100	\$850 - \$1050	\$1600 - \$2000	\$4100 - \$5100	\$400 - \$500
Schoolcraft	\$2600 - \$3250	\$1950 - \$2400	\$1700 - \$2150	\$1600 - \$2000	\$2300 - \$2850	\$3150 - \$3950	\$1400 - \$1800	\$2650 - \$3350
Shiawassee	\$200 - \$250	\$700 - \$850	\$4300 - \$5350	\$1450 - \$1800	\$400 - \$500	\$800 - \$950	\$3950 - \$4950	\$950 - \$1150
Tuscola	\$400 - \$500	\$700 - \$900	\$4150 - \$5200	\$1450 - \$1800	\$600 - \$750	\$1350 - \$1700	\$3850 - \$4850	\$300 - \$400
Van Buren	\$1250 - \$1600	\$1650 - \$2050	\$4100 - \$5150	\$1650 - \$2050	\$1200 - \$1500	\$900 - \$1150	\$4300 - \$5400	\$2000 - \$2450
Washtenaw	\$450 - \$550	\$1150 - \$1450	\$4650 - \$5800	\$1900 - \$2400	\$900 - \$1100	\$550 - \$700	\$4300 - \$5400	\$1150 - \$1450
Wayne	\$700 - \$800	\$1400 - \$1700	\$4850 - \$6000	\$2150 - \$2600	\$1100 - \$1350	\$750 - \$850	\$4550 - \$5650	\$1050 - \$1250
Wexford	\$1250 - \$1550	\$600 - \$750	\$3500 - \$4350	\$250 - \$300	\$850 - \$1050	\$1700 - \$2100	\$3200 - \$3950	\$1300 - \$1650

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

Ingham County–Kalkaska County

	Ingham	Ionia	Iosco	Iron	Isabella	Jackson	Kalamazoo	Kalkaska
Alcona	\$1550 - \$1900	\$1700 - \$2150	\$300 - \$350	\$2900 - \$3600	\$1150 - \$1450	\$1850 - \$2350	\$2150 - \$2650	\$750 - \$950
Alger	\$2900 - \$3650	\$2850 - \$3550	\$2300 - \$2900	\$900 - \$1100	\$2350 - \$2950	\$3150 - \$3950	\$3400 - \$4300	\$1950 - \$2450
Allegan	\$850 - \$1050	\$550 - \$700	\$2000 - \$2500	\$4000 - \$4950	\$950 - \$1200	\$800 - \$1000	\$350 - \$450	\$1350 - \$1650
Alpena	\$1750 - \$2200	\$1850 - \$2300	\$500 - \$600	\$2650 - \$3300	\$1300 - \$1600	\$2050 - \$2600	\$2350 - \$2950	\$900 - \$1100
Antrim	\$1550 - \$1950	\$1400 - \$1750	\$950 - \$1200	\$2500 - \$3100	\$1000 - \$1250	\$1800 - \$2250	\$1700 - \$2150	\$250 - \$300
Arenac	\$1100 - \$1400	\$1350 - \$1700	\$200 - \$300	\$3100 - \$3850	\$700 - \$850	\$1400 - \$1800	\$1700 - \$2100	\$800 - \$1000
Baraga	\$3750 - \$4650	\$3650 - \$4550	\$3150 - \$3900	\$400 - \$500	\$3150 - \$3950	\$3950 - \$4950	\$4250 - \$5300	\$2750 - \$3450
Barry	\$450 - \$550	\$300 - \$400	\$1750 - \$2200	\$4150 - \$5200	\$950 - \$1200	\$600 - \$700	\$250 - \$300	\$1350 - \$1650
Bay	\$800 - \$1000	\$1050 - \$1350	\$500 - \$650	\$3250 - \$4050	\$450 - \$550	\$1150 - \$1400	\$1400 - \$1750	\$950 - \$1150
Benzie	\$1500 - \$1850	\$1250 - \$1550	\$1100 - \$1400	\$2900 - \$3650	\$800 - \$1000	\$1700 - \$2150	\$1600 - \$2000	\$400 - \$500
Berrien	\$1100 - \$1400	\$1050 - \$1300	\$2400 - \$3000	\$3450 - \$4300	\$1400 - \$1750	\$950 - \$1200	\$500 - \$650	\$1800 - \$2200
Branch	\$650 - \$800	\$800 - \$1000	\$1900 - \$2400	\$4000 - \$5000	\$1200 - \$1500	\$400 - \$500	\$400 - \$450	\$1850 - \$2350
Calhoun	\$450 - \$600	\$450 - \$550	\$1750 - \$2200	\$4150 - \$5200	\$1050 - \$1300	\$350 - \$400	\$250 - \$300	\$1750 - \$2150
Cass	\$950 - \$1200	\$950 - \$1200	\$2250 - \$2800	\$3700 - \$4650	\$1350 - \$1700	\$800 - \$1050	\$350 - \$450	\$1750 - \$2200
Charlevoix	\$1800 - \$2250	\$1600 - \$2000	\$1200 - \$1450	\$2250 - \$2800	\$1200 - \$1500	\$2000 - \$2500	\$1950 - \$2400	\$450 - \$600
Cheboygan	\$1750 - \$2200	\$1700 - \$2150	\$950 - \$1200	\$2200 - \$2750	\$1150 - \$1450	\$1950 - \$2450	\$2250 - \$2800	\$650 - \$850
Chippewa	\$2200 - \$2750	\$2200 - \$2750	\$1600 - \$2000	\$1950 - \$2400	\$1650 - \$2050	\$2450 - \$3050	\$2700 - \$3400	\$1250 - \$1550
Clare	\$850 - \$1050	\$800 - \$1000	\$650 - \$850	\$3000 - \$3700	\$250 - \$300	\$1050 - \$1300	\$1350 - \$1650	\$650 - \$850
Clinton	\$250 - \$300	\$200 - \$250	\$1400 - \$1750	\$3600 - \$4450	\$500 - \$600	\$450 - \$550	\$650 - \$850	\$1250 - \$1550
Crawford	\$1250 - \$1600	\$1250 - \$1550	\$650 - \$850	\$2550 - \$3150	\$700 - \$850	\$1500 - \$1850	\$1750 - \$2200	\$300 - \$350
Delta	\$2950 - \$3650	\$2900 - \$3650	\$2300 - \$2900	\$900 - \$1100	\$2350 - \$2950	\$3150 - \$3950	\$3450 - \$4300	\$1950 - \$2450
Dickinson	\$3450 - \$4300	\$3450 - \$4300	\$2850 - \$3550	\$350 - \$450	\$2900 - \$3600	\$3700 - \$4600	\$3800 - \$4750	\$2500 - \$3100
Eaton	\$200 - \$250	\$250 - \$350	\$1500 - \$1850	\$3900 - \$4850	\$800 - \$950	\$350 - \$400	\$450 - \$600	\$1500 - \$1850
Emmet	\$1850 - \$2300	\$1850 - \$2300	\$1250 - \$1550	\$2050 - \$2600	\$1300 - \$1600	\$2100 - \$2600	\$2050 - \$2600	\$550 - \$700
Genesee	\$400 - \$500	\$650 - \$800	\$900 - \$1150	\$3650 - \$4600	\$750 - \$950	\$650 - \$850	\$1000 - \$1250	\$1350 - \$1700
Gladwin	\$850 - \$1050	\$850 - \$1050	\$500 - \$600	\$3050 - \$3800	\$400 - \$500	\$1100 - \$1350	\$1350 - \$1700	\$700 - \$900
Gogebic	\$4300 - \$5350	\$4250 - \$5300	\$3650 - \$4600	\$550 - \$700	\$3700 - \$4650	\$4500 - \$5650	\$4350 - \$5450	\$3300 - \$4150
Grand Traverse	\$1450 - \$1850	\$1250 - \$1550	\$1000 - \$1250	\$2700 - \$3350	\$800 - \$1000	\$1700 - \$2100	\$1550 - \$1950	\$200 - \$200
Gratiot	\$400 - \$500	\$400 - \$500	\$950 - \$1200	\$3350 - \$4200	\$250 - \$350	\$650 - \$800	\$900 - \$1150	\$1000 - \$1250
Hillsdale	\$500 - \$650	\$850 - \$1100	\$1850 - \$2300	\$4250 - \$5300	\$1150 - \$1400	\$250 - \$300	\$650 - \$800	\$1900 - \$2350
Houghton	\$4000 - \$5000	\$3950 - \$4950	\$3400 - \$4250	\$650 - \$800	\$3400 - \$4250	\$4200 - \$5250	\$4500 - \$5600	\$3000 - \$3750
Huron	\$1100 - \$1400	\$1350 - \$1700	\$1000 - \$1250	\$3750 - \$4700	\$850 - \$1050	\$1400 - \$1750	\$1700 - \$2150	\$1450 - \$1800
Ingham	--	\$400 - \$500	\$1300 - \$1600	\$3750 - \$4700	\$650 - \$850	\$250 - \$350	\$650 - \$800	\$1400 - \$1750
Ionia	\$400 - \$500	--	\$1550 - \$1950	\$3650 - \$4600	\$450 - \$600	\$600 - \$750	\$750 - \$900	\$1200 - \$1500

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	Ingham	Ionia	Iosco	Iron	Isabella	Jackson	Kalamazoo	Kalkaska
Iosco	\$1300 - \$1600	\$1550 - \$1950	--	\$3150 - \$3950	\$950 - \$1150	\$1600 - \$2000	\$1900 - \$2350	\$850 - \$1050
Iron	\$3750 - \$4700	\$3750 - \$4650	\$3150 - \$3950	--	\$3200 - \$4000	\$4000 - \$5000	\$3900 - \$4900	\$2800 - \$3450
Isabella	\$650 - \$850	\$450 - \$600	\$950 - \$1150	\$3200 - \$4000	--	\$900 - \$1100	\$1100 - \$1400	\$750 - \$950
Jackson	\$250 - \$350	\$600 - \$750	\$1600 - \$2000	\$4000 - \$5000	\$900 - \$1100	--	\$500 - \$600	\$1650 - \$2050
Kalamazoo	\$600 - \$750	\$750 - \$900	\$1900 - \$2400	\$3900 - \$4900	\$1150 - \$1400	\$500 - \$600	--	\$1500 - \$1900
Kalkaska	\$1400 - \$1750	\$1200 - \$1500	\$850 - \$1050	\$2800 - \$3500	\$750 - \$950	\$1650 - \$2050	\$1500 - \$1900	--
Kent	\$600 - \$800	\$350 - \$400	\$1600 - \$2000	\$3800 - \$4750	\$650 - \$800	\$850 - \$1050	\$550 - \$650	\$1000 - \$1300
Keweenaw	\$4250 - \$5300	\$4200 - \$5250	\$3650 - \$4550	\$900 - \$1150	\$3650 - \$4600	\$4450 - \$5600	\$4750 - \$5950	\$3250 - \$4100
Lake	\$1300 - \$1650	\$850 - \$1050	\$1050 - \$1350	\$3200 - \$4000	\$600 - \$750	\$1550 - \$1900	\$1200 - \$1450	\$550 - \$700
Lapeer	\$650 - \$800	\$900 - \$1100	\$1150 - \$1400	\$3900 - \$4850	\$1000 - \$1200	\$900 - \$1150	\$1200 - \$1550	\$1550 - \$1950
Leelanau	\$1650 - \$2050	\$1400 - \$1750	\$1150 - \$1450	\$2850 - \$3550	\$950 - \$1200	\$1850 - \$2300	\$1750 - \$2150	\$400 - \$500
Lenawee	\$550 - \$700	\$900 - \$1100	\$1650 - \$2050	\$4250 - \$5350	\$1150 - \$1450	\$300 - \$350	\$800 - \$1000	\$1900 - \$2400
Livingston	\$250 - \$350	\$600 - \$750	\$1300 - \$1600	\$4000 - \$5000	\$900 - \$1100	\$550 - \$650	\$850 - \$1050	\$1650 - \$2050
Luce	\$2500 - \$3150	\$2450 - \$3050	\$1900 - \$2400	\$1500 - \$1850	\$1950 - \$2450	\$2750 - \$3400	\$3000 - \$3750	\$1550 - \$1900
Mackinac	\$2150 - \$2700	\$2100 - \$2650	\$1550 - \$1900	\$1650 - \$2100	\$1550 - \$1950	\$2350 - \$2950	\$2650 - \$3300	\$1150 - \$1450
Macomb	\$750 - \$950	\$1100 - \$1350	\$1350 - \$1700	\$4100 - \$5100	\$1200 - \$1500	\$800 - \$1000	\$1250 - \$1550	\$1800 - \$2250
Manistee	\$1450 - \$1800	\$1100 - \$1400	\$1050 - \$1350	\$3100 - \$3850	\$750 - \$950	\$1650 - \$2050	\$1550 - \$1950	\$450 - \$600
Marquette	\$3350 - \$4150	\$3300 - \$4150	\$2750 - \$3400	\$550 - \$650	\$2750 - \$3450	\$3550 - \$4450	\$3850 - \$4800	\$2350 - \$2950
Mason	\$1450 - \$1850	\$1200 - \$1450	\$1300 - \$1650	\$3300 - \$4100	\$750 - \$900	\$1700 - \$2100	\$1300 - \$1650	\$800 - \$1000
Mecosta	\$900 - \$1100	\$500 - \$600	\$1100 - \$1400	\$3350 - \$4200	\$200 - \$300	\$1100 - \$1350	\$950 - \$1200	\$700 - \$900
Menominee	\$3300 - \$4150	\$3250 - \$4050	\$2700 - \$3400	\$650 - \$800	\$2750 - \$3450	\$3550 - \$4400	\$3500 - \$4400	\$2350 - \$2900
Midland	\$700 - \$850	\$650 - \$850	\$700 - \$850	\$3200 - \$4000	\$250 - \$300	\$900 - \$1150	\$1200 - \$1500	\$850 - \$1050
Missaukee	\$1150 - \$1450	\$800 - \$1000	\$650 - \$800	\$2850 - \$3550	\$550 - \$700	\$1350 - \$1700	\$1400 - \$1750	\$300 - \$350
Monroe	\$750 - \$950	\$1100 - \$1400	\$1600 - \$2050	\$4350 - \$5450	\$1400 - \$1750	\$600 - \$750	\$1050 - \$1300	\$2050 - \$2550
Montcalm	\$650 - \$800	\$250 - \$300	\$1150 - \$1450	\$3550 - \$4400	\$300 - \$400	\$850 - \$1100	\$850 - \$1100	\$950 - \$1200
Montmorency	\$1650 - \$2050	\$1650 - \$2050	\$550 - \$700	\$2450 - \$3100	\$1100 - \$1350	\$1850 - \$2350	\$2150 - \$2700	\$550 - \$700
Muskegon	\$1000 - \$1200	\$700 - \$850	\$1650 - \$2100	\$3850 - \$4850	\$700 - \$900	\$1200 - \$1500	\$850 - \$1050	\$1100 - \$1350
Newaygo	\$1000 - \$1300	\$700 - \$850	\$1300 - \$1650	\$3550 - \$4450	\$450 - \$550	\$1250 - \$1550	\$850 - \$1100	\$850 - \$1050
Oakland	\$550 - \$750	\$900 - \$1200	\$1200 - \$1550	\$3950 - \$4950	\$1050 - \$1350	\$650 - \$800	\$1050 - \$1350	\$1650 - \$2100
Oceana	\$1250 - \$1550	\$950 - \$1150	\$1450 - \$1800	\$3550 - \$4400	\$700 - \$850	\$1450 - \$1800	\$1100 - \$1350	\$950 - \$1200
Ogemaw	\$1200 - \$1500	\$1450 - \$1800	\$200 - \$250	\$2950 - \$3700	\$750 - \$950	\$1500 - \$1900	\$1800 - \$2250	\$650 - \$800
Ontonagon	\$4000 - \$5000	\$4000 - \$5000	\$3400 - \$4250	\$500 - \$650	\$3450 - \$4300	\$4250 - \$5300	\$4500 - \$5650	\$3050 - \$3800
Osceola	\$1050 - \$1300	\$650 - \$850	\$900 - \$1100	\$3150 - \$3950	\$400 - \$500	\$1250 - \$1600	\$1200 - \$1500	\$500 - \$600
Oscoda	\$1550 - \$1900	\$1500 - \$1900	\$400 - \$500	\$2700 - \$3350	\$950 - \$1200	\$1750 - \$2200	\$2050 - \$2550	\$550 - \$700
Otsego	\$1450 - \$1850	\$1450 - \$1800	\$850 - \$1100	\$2400 - \$3000	\$900 - \$1100	\$1700 - \$2100	\$1950 - \$2450	\$400 - \$500
Ottawa	\$800 - \$1000	\$500 - \$600	\$1800 - \$2300	\$4050 - \$5100	\$850 - \$1100	\$1000 - \$1250	\$650 - \$800	\$1250 - \$1550

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	Ingham	Ionia	Iosco	Iron	Isabella	Jackson	Kalamazoo	Kalkaska
Presque Isle	\$2000 - \$2500	\$2000 - \$2500	\$700 - \$850	\$2400 - \$3000	\$1450 - \$1800	\$2250 - \$2800	\$2500 - \$3150	\$950 - \$1150
Roscommon	\$1100 - \$1400	\$1100 - \$1350	\$450 - \$600	\$2750 - \$3450	\$550 - \$700	\$1350 - \$1700	\$1600 - \$2050	\$450 - \$550
Saginaw	\$550 - \$650	\$650 - \$800	\$700 - \$900	\$3450 - \$4300	\$450 - \$550	\$800 - \$1000	\$1150 - \$1400	\$1100 - \$1400
St. Clair	\$950 - \$1200	\$1150 - \$1450	\$1400 - \$1750	\$4150 - \$5200	\$1250 - \$1550	\$1000 - \$1250	\$1450 - \$1800	\$1850 - \$2300
St. Joseph	\$750 - \$900	\$700 - \$850	\$2000 - \$2550	\$3900 - \$4850	\$1300 - \$1650	\$600 - \$750	\$250 - \$300	\$1700 - \$2150
Sanilac	\$1050 - \$1300	\$1300 - \$1600	\$1100 - \$1400	\$3850 - \$4850	\$950 - \$1200	\$1300 - \$1650	\$1650 - \$2050	\$1550 - \$1950
Schoolcraft	\$2650 - \$3350	\$2600 - \$3250	\$2050 - \$2600	\$1200 - \$1500	\$2100 - \$2600	\$2900 - \$3600	\$3150 - \$3950	\$1700 - \$2100
Shiawassee	\$250 - \$300	\$500 - \$650	\$1100 - \$1400	\$3750 - \$4700	\$650 - \$800	\$550 - \$650	\$850 - \$1050	\$1400 - \$1750
Tuscola	\$800 - \$1000	\$1050 - \$1300	\$900 - \$1100	\$3650 - \$4550	\$750 - \$900	\$1050 - \$1350	\$1400 - \$1750	\$1300 - \$1650
Van Buren	\$850 - \$1100	\$800 - \$1000	\$2150 - \$2700	\$3750 - \$4650	\$1200 - \$1500	\$750 - \$900	\$250 - \$350	\$1600 - \$2000
Washtenaw	\$500 - \$600	\$850 - \$1050	\$1350 - \$1700	\$4100 - \$5100	\$1100 - \$1400	\$300 - \$400	\$750 - \$950	\$1800 - \$2200
Wayne	\$750 - \$850	\$1100 - \$1300	\$1600 - \$1900	\$4300 - \$5350	\$1350 - \$1650	\$600 - \$700	\$1050 - \$1250	\$2000 - \$2450
Wexford	\$1250 - \$1550	\$1000 - \$1250	\$900 - \$1100	\$2950 - \$3700	\$550 - \$700	\$1450 - \$1800	\$1300 - \$1650	\$300 - \$400

### Kent County–Luce County

	Kent	Keweenaw	Lake	Lapeer	Leelanau	Lenawee	Livingston	Luce
Alcona	\$1800 - \$2200	\$3350 - \$4200	\$1300 - \$1600	\$1400 - \$1750	\$1100 - \$1350	\$1900 - \$2350	\$1550 - \$1900	\$1650 - \$2050
Alger	\$2950 - \$3700	\$1350 - \$1700	\$2350 - \$2950	\$3050 - \$3800	\$2000 - \$2500	\$3450 - \$4300	\$3150 - \$3950	\$550 - \$650
Allegan	\$350 - \$450	\$4600 - \$5700	\$1000 - \$1250	\$1350 - \$1650	\$1550 - \$1950	\$1100 - \$1400	\$1050 - \$1350	\$2850 - \$3550
Alpena	\$1900 - \$2350	\$3100 - \$3900	\$1400 - \$1750	\$1600 - \$2000	\$1200 - \$1500	\$2100 - \$2600	\$1750 - \$2200	\$1400 - \$1750
Antrim	\$1250 - \$1550	\$2950 - \$3700	\$800 - \$950	\$1700 - \$2100	\$450 - \$600	\$2100 - \$2600	\$1800 - \$2250	\$1250 - \$1550
Arenac	\$1600 - \$2000	\$3550 - \$4450	\$950 - \$1200	\$950 - \$1200	\$1100 - \$1400	\$1450 - \$1800	\$1100 - \$1350	\$1850 - \$2300
Baraga	\$3750 - \$4700	\$500 - \$650	\$3150 - \$3950	\$3850 - \$4800	\$2850 - \$3550	\$4250 - \$5300	\$3950 - \$4950	\$1350 - \$1700
Barry	\$300 - \$350	\$4600 - \$5750	\$1000 - \$1250	\$1050 - \$1350	\$1550 - \$1950	\$900 - \$1100	\$700 - \$850	\$2900 - \$3600
Bay	\$1300 - \$1600	\$3750 - \$4650	\$900 - \$1150	\$650 - \$800	\$1250 - \$1600	\$1150 - \$1450	\$800 - \$1000	\$2000 - \$2500
Benzie	\$1100 - \$1350	\$3400 - \$4250	\$500 - \$600	\$1700 - \$2150	\$250 - \$300	\$2000 - \$2500	\$1700 - \$2150	\$1650 - \$2100
Berrien	\$800 - \$1000	\$4250 - \$5350	\$1450 - \$1800	\$1700 - \$2150	\$2000 - \$2500	\$1300 - \$1600	\$1350 - \$1650	\$3300 - \$4150
Branch	\$900 - \$1100	\$4800 - \$5950	\$1550 - \$1950	\$1250 - \$1550	\$2100 - \$2650	\$450 - \$600	\$850 - \$1050	\$3050 - \$3800
Calhoun	\$750 - \$950	\$4600 - \$5750	\$1400 - \$1750	\$1100 - \$1350	\$1950 - \$2450	\$650 - \$800	\$700 - \$850	\$2900 - \$3600
Cass	\$800 - \$950	\$4550 - \$5650	\$1400 - \$1750	\$1550 - \$1950	\$2000 - \$2500	\$850 - \$1050	\$1200 - \$1500	\$3250 - \$4100
Charlevoix	\$1450 - \$1800	\$2750 - \$3400	\$950 - \$1200	\$1900 - \$2400	\$600 - \$750	\$2300 - \$2850	\$2000 - \$2500	\$1000 - \$1250
Cheboygan	\$1800 - \$2200	\$2650 - \$3350	\$1300 - \$1600	\$1850 - \$2350	\$950 - \$1200	\$2250 - \$2800	\$1950 - \$2450	\$950 - \$1200
Chippewa	\$2250 - \$2800	\$2300 - \$2900	\$1650 - \$2050	\$2350 - \$2900	\$1300 - \$1650	\$2700 - \$3400	\$2450 - \$3050	\$600 - \$700
Clare	\$900 - \$1100	\$3450 - \$4300	\$500 - \$650	\$1050 - \$1350	\$850 - \$1050	\$1350 - \$1650	\$1050 - \$1300	\$1750 - \$2150
Clinton	\$500 - \$600	\$4050 - \$5050	\$1050 - \$1350	\$700 - \$900	\$1450 - \$1850	\$750 - \$900	\$450 - \$550	\$2350 - \$2900

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	Kent	Keweenaw	Lake	Lapeer	Leelanau	Lenawee	Livingston	Luce
Crawford	\$1300 - \$1650	\$3000 - \$3750	\$800 - \$1000	\$1400 - \$1750	\$600 - \$800	\$1800 - \$2200	\$1500 - \$1850	\$1300 - \$1600
Delta	\$2950 - \$3700	\$1450 - \$1850	\$2350 - \$2950	\$3050 - \$3800	\$2050 - \$2550	\$3450 - \$4300	\$3150 - \$3950	\$850 - \$1050
Dickinson	\$3500 - \$4350	\$1150 - \$1450	\$2900 - \$3600	\$3600 - \$4500	\$2550 - \$3200	\$3950 - \$4950	\$3700 - \$4600	\$1350 - \$1700
Eaton	\$450 - \$600	\$4350 - \$5450	\$1150 - \$1450	\$850 - \$1050	\$1750 - \$2150	\$700 - \$900	\$450 - \$550	\$2650 - \$3300
Emmet	\$1600 - \$2000	\$2550 - \$3200	\$1100 - \$1400	\$2000 - \$2500	\$800 - \$1000	\$2350 - \$2950	\$2100 - \$2600	\$850 - \$1050
Genesee	\$900 - \$1100	\$4150 - \$5200	\$1250 - \$1600	\$250 - \$350	\$1650 - \$2050	\$750 - \$950	\$400 - \$500	\$2400 - \$3050
Gladwin	\$1100 - \$1350	\$3500 - \$4400	\$700 - \$900	\$950 - \$1200	\$1050 - \$1300	\$1450 - \$1800	\$1100 - \$1350	\$1800 - \$2250
Gogebic	\$4300 - \$5400	\$1000 - \$1250	\$3700 - \$4650	\$4400 - \$5500	\$3350 - \$4200	\$4800 - \$6000	\$4500 - \$5650	\$1900 - \$2400
Grand Traverse	\$1100 - \$1350	\$3200 - \$3950	\$500 - \$600	\$1700 - \$2150	\$200 - \$250	\$2000 - \$2450	\$1700 - \$2100	\$1450 - \$1800
Gratiot	\$550 - \$700	\$3850 - \$4800	\$850 - \$1050	\$750 - \$950	\$1250 - \$1550	\$900 - \$1150	\$650 - \$800	\$2100 - \$2650
Hillsdale	\$1100 - \$1350	\$4700 - \$5900	\$1800 - \$2250	\$1200 - \$1500	\$2100 - \$2650	\$250 - \$300	\$650 - \$850	\$3000 - \$3750
Houghton	\$4000 - \$5050	\$300 - \$400	\$3400 - \$4250	\$4100 - \$5150	\$3100 - \$3850	\$4500 - \$5600	\$4200 - \$5250	\$1600 - \$2000
Huron	\$1600 - \$2000	\$4250 - \$5300	\$1350 - \$1700	\$500 - \$650	\$1750 - \$2200	\$1450 - \$1800	\$1100 - \$1400	\$2500 - \$3150
Ingham	\$600 - \$750	\$4250 - \$5300	\$1300 - \$1650	\$650 - \$800	\$1650 - \$2050	\$550 - \$700	\$250 - \$300	\$2500 - \$3150
Ionia	\$300 - \$400	\$4200 - \$5250	\$850 - \$1050	\$900 - \$1100	\$1300 - \$1650	\$900 - \$1100	\$600 - \$750	\$2500 - \$3100
Iosco	\$1750 - \$2200	\$3650 - \$4550	\$1100 - \$1350	\$1150 - \$1450	\$1150 - \$1450	\$1650 - \$2050	\$1300 - \$1600	\$1900 - \$2400
Iron	\$3800 - \$4750	\$900 - \$1150	\$3200 - \$4000	\$3900 - \$4850	\$2850 - \$3550	\$4250 - \$5350	\$4000 - \$5000	\$1500 - \$1850
Isabella	\$650 - \$800	\$3650 - \$4600	\$600 - \$750	\$1000 - \$1200	\$1000 - \$1250	\$1150 - \$1450	\$900 - \$1100	\$1950 - \$2450
Jackson	\$850 - \$1050	\$4450 - \$5600	\$1550 - \$1900	\$950 - \$1150	\$1850 - \$2350	\$300 - \$350	\$550 - \$650	\$2750 - \$3400
Kalamazoo	\$550 - \$700	\$4750 - \$5950	\$1200 - \$1500	\$1250 - \$1550	\$1750 - \$2200	\$800 - \$1000	\$850 - \$1050	\$3050 - \$3800
Kalkaska	\$1050 - \$1300	\$3250 - \$4100	\$550 - \$700	\$1550 - \$1950	\$350 - \$450	\$1900 - \$2400	\$1650 - \$2050	\$1550 - \$1900
Kent	--	\$4250 - \$5350	\$700 - \$850	\$1100 - \$1400	\$1250 - \$1600	\$1150 - \$1400	\$850 - \$1050	\$2550 - \$3200
Keweenaw	\$4250 - \$5350	--	\$3650 - \$4600	\$4350 - \$5450	\$3350 - \$4150	\$4750 - \$5950	\$4450 - \$5600	\$1850 - \$2300
Lake	\$700 - \$850	\$3650 - \$4600	--	\$1500 - \$1850	\$650 - \$850	\$1850 - \$2300	\$1550 - \$1950	\$1950 - \$2450
Lapeer	\$1100 - \$1400	\$4350 - \$5450	\$1500 - \$1850	--	\$1850 - \$2350	\$950 - \$1200	\$600 - \$800	\$2650 - \$3300
Leelanau	\$1250 - \$1550	\$3350 - \$4150	\$650 - \$800	\$1850 - \$2350	--	\$2150 - \$2700	\$1850 - \$2350	\$1600 - \$2000
Lenawee	\$1100 - \$1400	\$4750 - \$5950	\$1800 - \$2300	\$1000 - \$1250	\$2150 - \$2700	--	\$600 - \$750	\$3000 - \$3800
Livingston	\$850 - \$1050	\$4450 - \$5600	\$1550 - \$1950	\$600 - \$750	\$1850 - \$2350	\$550 - \$700	--	\$2750 - \$3450
Luce	\$2550 - \$3200	\$1850 - \$2300	\$1950 - \$2450	\$2650 - \$3300	\$1600 - \$2000	\$3000 - \$3800	\$2750 - \$3450	--
Mackinac	\$2200 - \$2700	\$2150 - \$2700	\$1550 - \$1950	\$2250 - \$2850	\$1250 - \$1550	\$2650 - \$3300	\$2350 - \$2950	\$400 - \$450
Macomb	\$1350 - \$1650	\$4600 - \$5700	\$1700 - \$2100	\$400 - \$450	\$2100 - \$2600	\$800 - \$950	\$550 - \$650	\$2850 - \$3550
Manistee	\$1150 - \$1450	\$3550 - \$4450	\$300 - \$400	\$1650 - \$2100	\$450 - \$550	\$1950 - \$2450	\$1650 - \$2100	\$1850 - \$2300
Marquette	\$3350 - \$4200	\$900 - \$1150	\$2750 - \$3450	\$3450 - \$4350	\$2450 - \$3050	\$3850 - \$4800	\$3550 - \$4450	\$950 - \$1200
Mason	\$900 - \$1150	\$3800 - \$4700	\$200 - \$250	\$1650 - \$2050	\$700 - \$900	\$2000 - \$2450	\$1700 - \$2100	\$2050 - \$2550
Mecosta	\$450 - \$600	\$3850 - \$4800	\$400 - \$450	\$1200 - \$1500	\$1000 - \$1250	\$1400 - \$1750	\$1100 - \$1400	\$2150 - \$2650
Menominee	\$3350 - \$4200	\$1450 - \$1800	\$2750 - \$3450	\$3450 - \$4300	\$2400 - \$3000	\$3800 - \$4800	\$3550 - \$4450	\$1200 - \$1500

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Kent</b>	<b>Keweenaw</b>	<b>Lake</b>	<b>Lapeer</b>	<b>Leelanau</b>	<b>Lenawee</b>	<b>Livingston</b>	<b>Luce</b>
Midland	\$850 - \$1050	\$3700 - \$4600	\$700 - \$850	\$800 - \$1000	\$1100 - \$1350	\$1300 - \$1600	\$950 - \$1200	\$1950 - \$2450
Missaukee	\$900 - \$1150	\$3350 - \$4150	\$450 - \$550	\$1350 - \$1700	\$650 - \$800	\$1650 - \$2050	\$1350 - \$1700	\$1600 - \$2000
Monroe	\$1350 - \$1700	\$4850 - \$6050	\$1950 - \$2450	\$950 - \$1200	\$2350 - \$2950	\$300 - \$350	\$550 - \$700	\$3100 - \$3900
Montcalm	\$350 - \$450	\$4000 - \$5000	\$600 - \$800	\$1150 - \$1400	\$1100 - \$1350	\$1150 - \$1450	\$850 - \$1100	\$2300 - \$2850
Montmorency	\$1700 - \$2100	\$2950 - \$3700	\$1200 - \$1500	\$1500 - \$1850	\$850 - \$1100	\$2150 - \$2700	\$1600 - \$2050	\$1200 - \$1550
Muskegon	\$400 - \$500	\$4350 - \$5450	\$550 - \$700	\$1450 - \$1850	\$1150 - \$1450	\$1500 - \$1850	\$1200 - \$1500	\$2650 - \$3300
Newaygo	\$400 - \$550	\$4050 - \$5050	\$250 - \$350	\$1500 - \$1900	\$900 - \$1100	\$1550 - \$1900	\$1250 - \$1550	\$2300 - \$2900
Oakland	\$1150 - \$1450	\$4450 - \$5550	\$1550 - \$1950	\$350 - \$450	\$1950 - \$2450	\$600 - \$800	\$350 - \$450	\$2700 - \$3400
Oceana	\$650 - \$850	\$4000 - \$5000	\$400 - \$500	\$1750 - \$2150	\$950 - \$1200	\$1750 - \$2150	\$1450 - \$1800	\$2300 - \$2850
Ogemaw	\$1400 - \$1750	\$3450 - \$4300	\$900 - \$1100	\$1050 - \$1300	\$1000 - \$1250	\$1550 - \$1900	\$1200 - \$1500	\$1700 - \$2150
Ontonagon	\$4050 - \$5050	\$750 - \$950	\$3450 - \$4300	\$4150 - \$5200	\$3100 - \$3900	\$4500 - \$5650	\$4250 - \$5300	\$1650 - \$2050
Osceola	\$700 - \$900	\$3650 - \$4550	\$250 - \$350	\$1250 - \$1600	\$750 - \$900	\$1550 - \$1950	\$1250 - \$1600	\$1900 - \$2400
Oscoda	\$1550 - \$1950	\$3200 - \$3950	\$1050 - \$1350	\$1300 - \$1600	\$900 - \$1100	\$1750 - \$2200	\$1450 - \$1800	\$1450 - \$1800
Otsego	\$1500 - \$1900	\$2850 - \$3600	\$1000 - \$1250	\$1600 - \$2000	\$700 - \$850	\$2000 - \$2500	\$1700 - \$2100	\$1150 - \$1400
Ottawa	\$250 - \$300	\$4500 - \$5650	\$900 - \$1100	\$1300 - \$1600	\$1350 - \$1700	\$1300 - \$1600	\$1000 - \$1250	\$2800 - \$3500
Presque Isle	\$2050 - \$2550	\$2850 - \$3600	\$1550 - \$1950	\$1700 - \$2100	\$1200 - \$1500	\$2200 - \$2750	\$1850 - \$2300	\$1150 - \$1450
Roscommon	\$1200 - \$1500	\$3250 - \$4050	\$700 - \$850	\$1200 - \$1500	\$800 - \$950	\$1700 - \$2100	\$1350 - \$1700	\$1500 - \$1900
Saginaw	\$850 - \$1050	\$3900 - \$4900	\$950 - \$1200	\$600 - \$700	\$1350 - \$1700	\$1050 - \$1350	\$700 - \$900	\$2200 - \$2750
St. Clair	\$1400 - \$1700	\$4650 - \$5800	\$1750 - \$2200	\$350 - \$450	\$2150 - \$2650	\$950 - \$1150	\$750 - \$950	\$2900 - \$3650
St. Joseph	\$750 - \$900	\$4700 - \$5900	\$1400 - \$1700	\$1350 - \$1700	\$1950 - \$2450	\$650 - \$800	\$950 - \$1200	\$3150 - \$3950
Sanilac	\$1500 - \$1900	\$4350 - \$5450	\$1450 - \$1800	\$400 - \$500	\$1850 - \$2300	\$1350 - \$1700	\$1000 - \$1250	\$2600 - \$3250
Schoolcraft	\$2700 - \$3400	\$1650 - \$2100	\$2100 - \$2600	\$2800 - \$3500	\$1750 - \$2200	\$3200 - \$3950	\$2900 - \$3600	\$550 - \$700
Shiawassee	\$750 - \$900	\$4200 - \$5300	\$1250 - \$1550	\$450 - \$550	\$1600 - \$2050	\$650 - \$850	\$300 - \$350	\$2500 - \$3100
Tuscola	\$1250 - \$1600	\$4100 - \$5150	\$1250 - \$1550	\$250 - \$350	\$1650 - \$2050	\$1150 - \$1400	\$800 - \$1000	\$2400 - \$3000
Van Buren	\$600 - \$750	\$4550 - \$5700	\$1250 - \$1550	\$1500 - \$1850	\$1800 - \$2300	\$1050 - \$1300	\$1100 - \$1350	\$3100 - \$3900
Washtenaw	\$1100 - \$1350	\$4550 - \$5700	\$1700 - \$2100	\$700 - \$850	\$2100 - \$2600	\$250 - \$350	\$300 - \$350	\$2850 - \$3550
Wayne	\$1300 - \$1600	\$4800 - \$5950	\$1900 - \$2350	\$650 - \$750	\$2300 - \$2850	\$500 - \$600	\$500 - \$600	\$3050 - \$3800
Wexford	\$850 - \$1050	\$3450 - \$4300	\$350 - \$400	\$1450 - \$1800	\$400 - \$550	\$1750 - \$2150	\$1450 - \$1800	\$1700 - \$2150

**Mackinac County–Midland County**

	<b>Mackinac</b>	<b>Macomb</b>	<b>Manistee</b>	<b>Marquette</b>	<b>Mason</b>	<b>Mecosta</b>	<b>Menominee</b>	<b>Midland</b>
Alcona	\$1250 - \$1600	\$1600 - \$2000	\$1200 - \$1500	\$2450 - \$3100	\$1500 - \$1900	\$1350 - \$1700	\$2450 - \$3050	\$900 - \$1150
Alger	\$850 - \$1050	\$3300 - \$4050	\$2250 - \$2800	\$450 - \$550	\$2450 - \$3050	\$2500 - \$3150	\$700 - \$900	\$2350 - \$2950
Allegan	\$2500 - \$3100	\$1550 - \$1900	\$1300 - \$1600	\$3700 - \$4600	\$1050 - \$1300	\$750 - \$950	\$3600 - \$4500	\$1150 - \$1450
Alpena	\$1000 - \$1250	\$1850 - \$2250	\$1350 - \$1650	\$2200 - \$2750	\$1650 - \$2050	\$1450 - \$1800	\$2200 - \$2750	\$1150 - \$1400

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Mackinac</b>	<b>Macomb</b>	<b>Manistee</b>	<b>Marquette</b>	<b>Mason</b>	<b>Mecosta</b>	<b>Menominee</b>	<b>Midland</b>
Antrim	\$850 - \$1100	\$1950 - \$2400	\$700 - \$850	\$2050 - \$2600	\$1000 - \$1300	\$900 - \$1150	\$2050 - \$2550	\$1000 - \$1250
Arenac	\$1500 - \$1850	\$1200 - \$1450	\$1000 - \$1250	\$2650 - \$3350	\$1100 - \$1400	\$850 - \$1050	\$2650 - \$3300	\$500 - \$600
Baraga	\$1650 - \$2050	\$4100 - \$5100	\$3050 - \$3800	\$400 - \$500	\$3250 - \$4100	\$3350 - \$4150	\$950 - \$1200	\$3200 - \$3950
Barry	\$2500 - \$3100	\$1200 - \$1450	\$1400 - \$1750	\$3700 - \$4600	\$1150 - \$1450	\$750 - \$950	\$3700 - \$4600	\$1050 - \$1300
Bay	\$1650 - \$2050	\$900 - \$1100	\$1100 - \$1350	\$2850 - \$3550	\$1050 - \$1300	\$650 - \$800	\$2800 - \$3500	\$250 - \$300
Benzie	\$1300 - \$1600	\$1950 - \$2400	\$200 - \$250	\$2500 - \$3100	\$450 - \$600	\$800 - \$950	\$2450 - \$3100	\$900 - \$1150
Berrien	\$2950 - \$3650	\$1750 - \$2150	\$1550 - \$1950	\$3650 - \$4550	\$1350 - \$1650	\$1200 - \$1500	\$3050 - \$3800	\$1600 - \$2000
Branch	\$2700 - \$3350	\$1200 - \$1500	\$1900 - \$2400	\$3900 - \$4850	\$1700 - \$2100	\$1300 - \$1650	\$3600 - \$4550	\$1250 - \$1550
Calhoun	\$2500 - \$3150	\$1100 - \$1350	\$1800 - \$2250	\$3700 - \$4650	\$1550 - \$1950	\$1200 - \$1450	\$3700 - \$4600	\$1050 - \$1300
Cass	\$2900 - \$3600	\$1600 - \$2000	\$1800 - \$2250	\$3900 - \$4900	\$1550 - \$1950	\$1200 - \$1500	\$3300 - \$4150	\$1550 - \$1950
Charlevoix	\$650 - \$800	\$2150 - \$2650	\$850 - \$1050	\$1850 - \$2300	\$1050 - \$1300	\$1150 - \$1400	\$1800 - \$2250	\$1250 - \$1550
Cheboygan	\$550 - \$700	\$2100 - \$2600	\$1200 - \$1500	\$1750 - \$2200	\$1500 - \$1900	\$1350 - \$1700	\$1750 - \$2200	\$1200 - \$1500
Chippewa	\$400 - \$500	\$2550 - \$3200	\$1550 - \$1900	\$1400 - \$1750	\$1750 - \$2200	\$1800 - \$2250	\$1600 - \$1950	\$1650 - \$2050
Clare	\$1350 - \$1700	\$1300 - \$1600	\$650 - \$800	\$2550 - \$3200	\$650 - \$850	\$400 - \$500	\$2550 - \$3150	\$250 - \$350
Clinton	\$1950 - \$2450	\$950 - \$1150	\$1250 - \$1550	\$3150 - \$3950	\$1200 - \$1500	\$700 - \$850	\$3150 - \$3900	\$500 - \$650
Crawford	\$900 - \$1150	\$1650 - \$2000	\$750 - \$950	\$2100 - \$2650	\$1050 - \$1300	\$850 - \$1100	\$2100 - \$2600	\$700 - \$900
Delta	\$850 - \$1050	\$3300 - \$4100	\$2250 - \$2800	\$550 - \$700	\$2450 - \$3100	\$2550 - \$3150	\$450 - \$550	\$2350 - \$2950
Dickinson	\$1350 - \$1700	\$3800 - \$4750	\$2800 - \$3500	\$500 - \$650	\$3000 - \$3750	\$3050 - \$3800	\$450 - \$550	\$2900 - \$3650
Eaton	\$2250 - \$2850	\$950 - \$1150	\$1550 - \$1950	\$3450 - \$4350	\$1300 - \$1650	\$950 - \$1150	\$3450 - \$4300	\$800 - \$1000
Emmet	\$450 - \$550	\$2200 - \$2750	\$1000 - \$1250	\$1650 - \$2050	\$1350 - \$1700	\$1250 - \$1550	\$1650 - \$2050	\$1300 - \$1650
Genesee	\$2050 - \$2550	\$500 - \$600	\$1450 - \$1800	\$3250 - \$4050	\$1400 - \$1750	\$1000 - \$1250	\$3200 - \$4050	\$600 - \$750
Gladwin	\$1400 - \$1750	\$1200 - \$1450	\$800 - \$1000	\$2600 - \$3250	\$850 - \$1100	\$550 - \$700	\$2600 - \$3250	\$150 - \$200
Gogebic	\$2200 - \$2750	\$4650 - \$5750	\$3600 - \$4500	\$950 - \$1200	\$3800 - \$4750	\$3900 - \$4850	\$1150 - \$1450	\$3700 - \$4650
Grand Traverse	\$1100 - \$1350	\$1950 - \$2400	\$350 - \$450	\$2300 - \$2850	\$600 - \$750	\$750 - \$950	\$2250 - \$2800	\$900 - \$1150
Gratiot	\$1750 - \$2200	\$1000 - \$1200	\$1050 - \$1300	\$2950 - \$3700	\$1000 - \$1250	\$500 - \$600	\$2900 - \$3650	\$300 - \$350
Hillsdale	\$2600 - \$3250	\$1050 - \$1300	\$1900 - \$2400	\$3800 - \$4750	\$1950 - \$2400	\$1350 - \$1700	\$3800 - \$4750	\$1150 - \$1450
Houghton	\$1900 - \$2350	\$4350 - \$5400	\$3300 - \$4150	\$650 - \$800	\$3500 - \$4400	\$3600 - \$4500	\$1200 - \$1500	\$3450 - \$4300
Huron	\$2150 - \$2650	\$750 - \$900	\$1550 - \$1900	\$3350 - \$4150	\$1500 - \$1850	\$1100 - \$1350	\$3300 - \$4150	\$650 - \$850
Ingham	\$2150 - \$2700	\$750 - \$900	\$1450 - \$1800	\$3350 - \$4200	\$1450 - \$1850	\$900 - \$1100	\$3300 - \$4150	\$700 - \$850
Ionia	\$2100 - \$2650	\$1100 - \$1350	\$1100 - \$1400	\$3250 - \$4050	\$1150 - \$1450	\$500 - \$600	\$3300 - \$4100	\$650 - \$850
Iosco	\$1550 - \$1900	\$1350 - \$1700	\$1050 - \$1350	\$2750 - \$3400	\$1300 - \$1650	\$1100 - \$1400	\$2700 - \$3400	\$700 - \$850
Iron	\$1650 - \$2100	\$4100 - \$5100	\$3100 - \$3850	\$550 - \$650	\$3300 - \$4100	\$3350 - \$4200	\$650 - \$800	\$3200 - \$4000
Isabella	\$1550 - \$1950	\$1200 - \$1500	\$750 - \$950	\$2750 - \$3450	\$750 - \$950	\$200 - \$300	\$2750 - \$3450	\$250 - \$300
Jackson	\$2350 - \$2950	\$800 - \$1000	\$1650 - \$2050	\$3550 - \$4450	\$1700 - \$2100	\$1100 - \$1400	\$3550 - \$4450	\$900 - \$1150
Kalamazoo	\$2650 - \$3350	\$1250 - \$1550	\$1550 - \$1950	\$3850 - \$4850	\$1300 - \$1650	\$950 - \$1200	\$3550 - \$4400	\$1200 - \$1500
Kalkaska	\$1150 - \$1450	\$1800 - \$2250	\$450 - \$600	\$2350 - \$2950	\$800 - \$1000	\$700 - \$900	\$2350 - \$2900	\$850 - \$1050

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Mackinac</b>	<b>Macomb</b>	<b>Manistee</b>	<b>Marquette</b>	<b>Mason</b>	<b>Mecosta</b>	<b>Menominee</b>	<b>Midland</b>
Kent	\$2200 - \$2700	\$1350 - \$1650	\$1100 - \$1400	\$3350 - \$4200	\$850 - \$1100	\$450 - \$600	\$3350 - \$4200	\$850 - \$1050
Keweenaw	\$2150 - \$2700	\$4600 - \$5700	\$3550 - \$4450	\$900 - \$1150	\$3800 - \$4700	\$3850 - \$4800	\$1450 - \$1850	\$3700 - \$4600
Lake	\$1550 - \$1950	\$1700 - \$2100	\$300 - \$400	\$2750 - \$3450	\$200 - \$250	\$400 - \$450	\$2750 - \$3450	\$700 - \$850
Lapeer	\$2250 - \$2850	\$400 - \$450	\$1650 - \$2100	\$3450 - \$4350	\$1650 - \$2050	\$1200 - \$1500	\$3450 - \$4300	\$800 - \$1000
Leelanau	\$1250 - \$1550	\$2100 - \$2600	\$400 - \$550	\$2450 - \$3050	\$700 - \$900	\$950 - \$1150	\$2400 - \$3000	\$1100 - \$1350
Lenawee	\$2650 - \$3300	\$800 - \$950	\$1950 - \$2450	\$3850 - \$4800	\$1950 - \$2450	\$1400 - \$1750	\$3800 - \$4800	\$1350 - \$1650
Livingston	\$2350 - \$2950	\$550 - \$650	\$1650 - \$2100	\$3550 - \$4450	\$1700 - \$2100	\$1100 - \$1400	\$3550 - \$4450	\$950 - \$1200
Luce	\$400 - \$450	\$2850 - \$3550	\$1850 - \$2300	\$950 - \$1200	\$2050 - \$2550	\$2100 - \$2650	\$1200 - \$1500	\$1950 - \$2450
Mackinac	--	\$2500 - \$3100	\$1450 - \$1850	\$1250 - \$1550	\$1700 - \$2100	\$1750 - \$2200	\$1250 - \$1550	\$1600 - \$2000
Macomb	\$2500 - \$3100	--	\$1900 - \$2350	\$3700 - \$4600	\$1850 - \$2300	\$1450 - \$1800	\$3650 - \$4550	\$1050 - \$1250
Manistee	\$1450 - \$1850	\$1900 - \$2350	--	\$2650 - \$3350	\$300 - \$400	\$750 - \$900	\$2650 - \$3300	\$900 - \$1100
Marquette	\$1250 - \$1550	\$3700 - \$4600	\$2650 - \$3350	--	\$2900 - \$3600	\$2950 - \$3650	\$750 - \$950	\$2800 - \$3500
Mason	\$1700 - \$2100	\$1850 - \$2300	\$300 - \$400	\$2900 - \$3600	--	\$550 - \$650	\$2850 - \$3550	\$850 - \$1050
Mecosta	\$1750 - \$2200	\$1450 - \$1800	\$700 - \$900	\$2950 - \$3700	\$550 - \$650	--	\$2950 - \$3650	\$400 - \$500
Menominee	\$1250 - \$1550	\$3650 - \$4550	\$2650 - \$3300	\$750 - \$950	\$2850 - \$3550	\$2900 - \$3650	--	\$2750 - \$3450
Midland	\$1600 - \$2000	\$1050 - \$1250	\$900 - \$1100	\$2800 - \$3500	\$850 - \$1050	\$400 - \$500	\$2750 - \$3450	--
Missaukee	\$1250 - \$1550	\$1600 - \$2000	\$450 - \$600	\$2450 - \$3050	\$700 - \$850	\$500 - \$600	\$2400 - \$3000	\$600 - \$750
Monroe	\$2750 - \$3450	\$600 - \$750	\$2150 - \$2700	\$3950 - \$4950	\$2200 - \$2750	\$1600 - \$2000	\$3900 - \$4900	\$1300 - \$1600
Montcalm	\$1900 - \$2400	\$1350 - \$1700	\$900 - \$1100	\$3100 - \$3900	\$750 - \$950	\$300 - \$350	\$3100 - \$3850	\$500 - \$650
Montmorency	\$850 - \$1050	\$1700 - \$2100	\$1100 - \$1400	\$2050 - \$2550	\$1450 - \$1800	\$1250 - \$1550	\$2000 - \$2550	\$1100 - \$1350
Muskegon	\$2250 - \$2800	\$1700 - \$2100	\$750 - \$950	\$3450 - \$4300	\$500 - \$650	\$550 - \$650	\$3450 - \$4300	\$950 - \$1150
Newaygo	\$1950 - \$2450	\$1750 - \$2150	\$550 - \$700	\$3150 - \$3950	\$400 - \$500	\$250 - \$350	\$3100 - \$3900	\$650 - \$850
Oakland	\$2350 - \$2950	\$200 - \$250	\$1750 - \$2200	\$3550 - \$4450	\$1700 - \$2150	\$1300 - \$1650	\$3500 - \$4400	\$900 - \$1150
Oceana	\$1900 - \$2400	\$1950 - \$2400	\$550 - \$700	\$3100 - \$3900	\$250 - \$300	\$500 - \$600	\$3100 - \$3850	\$950 - \$1200
Ogemaw	\$1350 - \$1700	\$1250 - \$1550	\$900 - \$1100	\$2550 - \$3200	\$1150 - \$1400	\$900 - \$1150	\$2500 - \$3150	\$450 - \$600
Ontonagon	\$1950 - \$2400	\$4350 - \$5450	\$3350 - \$4200	\$700 - \$850	\$3550 - \$4450	\$3600 - \$4500	\$1150 - \$1400	\$3450 - \$4300
Osceola	\$1550 - \$1950	\$1500 - \$1850	\$500 - \$650	\$2750 - \$3400	\$500 - \$600	\$250 - \$300	\$2700 - \$3400	\$500 - \$600
Oscoda	\$1100 - \$1350	\$1500 - \$1850	\$1000 - \$1250	\$2300 - \$2850	\$1300 - \$1650	\$1150 - \$1400	\$2250 - \$2800	\$800 - \$1050
Otsego	\$750 - \$950	\$1850 - \$2250	\$950 - \$1200	\$1950 - \$2450	\$1250 - \$1550	\$1050 - \$1350	\$1950 - \$2400	\$900 - \$1150
Ottawa	\$2400 - \$3000	\$1500 - \$1850	\$950 - \$1200	\$3600 - \$4500	\$700 - \$900	\$700 - \$850	\$3600 - \$4500	\$1100 - \$1350
Presque Isle	\$800 - \$950	\$1950 - \$2400	\$1500 - \$1850	\$1950 - \$2450	\$1800 - \$2250	\$1600 - \$2000	\$1950 - \$2450	\$1450 - \$1800
Roscommon	\$1150 - \$1400	\$1450 - \$1750	\$700 - \$850	\$2350 - \$2900	\$950 - \$1150	\$700 - \$900	\$2300 - \$2900	\$550 - \$700
Saginaw	\$1800 - \$2250	\$800 - \$1000	\$1150 - \$1450	\$3000 - \$3750	\$1100 - \$1400	\$650 - \$850	\$3000 - \$3750	\$300 - \$350
St. Clair	\$2550 - \$3150	\$250 - \$300	\$1950 - \$2400	\$3750 - \$4650	\$1900 - \$2350	\$1500 - \$1850	\$3700 - \$4650	\$1050 - \$1350
St. Joseph	\$2800 - \$3500	\$1400 - \$1700	\$1750 - \$2200	\$4000 - \$5000	\$1500 - \$1900	\$1150 - \$1450	\$3500 - \$4350	\$1350 - \$1650
Sanilac	\$2250 - \$2800	\$700 - \$850	\$1650 - \$2050	\$3450 - \$4300	\$1600 - \$2000	\$1200 - \$1500	\$3400 - \$4250	\$800 - \$1000

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Mackinac</b>	<b>Macomb</b>	<b>Manistee</b>	<b>Marquette</b>	<b>Mason</b>	<b>Mecosta</b>	<b>Menominee</b>	<b>Midland</b>
Schoolcraft	\$600 - \$750	\$3050 - \$3750	\$2000 - \$2500	\$750 - \$950	\$2200 - \$2750	\$2250 - \$2850	\$750 - \$950	\$2100 - \$2650
Shiawassee	\$2150 - \$2650	\$650 - \$800	\$1400 - \$1750	\$3300 - \$4150	\$1600 - \$2000	\$850 - \$1100	\$3300 - \$4100	\$550 - \$650
Tuscola	\$2000 - \$2500	\$650 - \$800	\$1400 - \$1800	\$3200 - \$4000	\$1400 - \$1750	\$950 - \$1200	\$3200 - \$4000	\$550 - \$700
Van Buren	\$2750 - \$3400	\$1500 - \$1900	\$1400 - \$1750	\$3950 - \$4900	\$1150 - \$1450	\$1000 - \$1300	\$3350 - \$4200	\$1450 - \$1850
Washtenaw	\$2450 - \$3100	\$550 - \$650	\$1900 - \$2350	\$3650 - \$4600	\$1900 - \$2400	\$1350 - \$1700	\$3650 - \$4550	\$1000 - \$1250
Wayne	\$2700 - \$3350	\$350 - \$400	\$2100 - \$2600	\$3900 - \$4800	\$2050 - \$2550	\$1550 - \$1900	\$3850 - \$4800	\$1250 - \$1500
Wexford	\$1350 - \$1650	\$1700 - \$2100	\$200 - \$250	\$2550 - \$3150	\$450 - \$550	\$500 - \$650	\$2500 - \$3150	\$650 - \$850

### Missaukee County–Oceana County

	<b>Missaukee</b>	<b>Monroe</b>	<b>Montcalm</b>	<b>Montmorency</b>	<b>Muskegon</b>	<b>Newaygo</b>	<b>Oakland</b>	<b>Oceana</b>
Alcona	\$850 - \$1050	\$1850 - \$2350	\$1500 - \$1900	\$450 - \$550	\$1850 - \$2300	\$1600 - \$2000	\$1450 - \$1850	\$1650 - \$2050
Alger	\$2000 - \$2500	\$3500 - \$4400	\$2700 - \$3350	\$1650 - \$2050	\$3000 - \$3750	\$2700 - \$3400	\$3100 - \$3900	\$2700 - \$3350
Allegan	\$1200 - \$1500	\$1400 - \$1750	\$700 - \$850	\$2000 - \$2500	\$550 - \$700	\$650 - \$800	\$1350 - \$1750	\$800 - \$1000
Alpena	\$950 - \$1200	\$2100 - \$2600	\$1650 - \$2050	\$300 - \$350	\$1950 - \$2450	\$1700 - \$2100	\$1650 - \$2100	\$1750 - \$2200
Antrim	\$500 - \$600	\$2200 - \$2700	\$1150 - \$1450	\$550 - \$650	\$1300 - \$1650	\$1050 - \$1300	\$1750 - \$2250	\$1150 - \$1450
Arenac	\$550 - \$700	\$1450 - \$1800	\$950 - \$1150	\$650 - \$800	\$1400 - \$1750	\$1100 - \$1400	\$1000 - \$1300	\$1250 - \$1550
Baraga	\$2850 - \$3550	\$4350 - \$5400	\$3500 - \$4400	\$2450 - \$3050	\$3800 - \$4750	\$3550 - \$4400	\$3900 - \$4950	\$3500 - \$4400
Barry	\$1200 - \$1500	\$1200 - \$1500	\$450 - \$600	\$2000 - \$2500	\$650 - \$800	\$700 - \$900	\$1000 - \$1250	\$900 - \$1150
Bay	\$750 - \$900	\$1150 - \$1400	\$650 - \$850	\$850 - \$1050	\$1150 - \$1450	\$850 - \$1100	\$700 - \$950	\$1200 - \$1500
Benzie	\$500 - \$650	\$2200 - \$2750	\$1000 - \$1300	\$900 - \$1150	\$900 - \$1150	\$700 - \$900	\$1800 - \$2250	\$650 - \$800
Berrien	\$1650 - \$2050	\$1550 - \$1950	\$1150 - \$1400	\$2450 - \$3050	\$850 - \$1050	\$1100 - \$1400	\$1550 - \$2000	\$1100 - \$1350
Branch	\$1700 - \$2100	\$700 - \$900	\$1050 - \$1300	\$2200 - \$2750	\$1200 - \$1500	\$1250 - \$1550	\$1000 - \$1300	\$1450 - \$1800
Calhoun	\$1500 - \$1900	\$900 - \$1150	\$700 - \$850	\$2000 - \$2550	\$1050 - \$1300	\$1100 - \$1400	\$950 - \$1200	\$1300 - \$1650
Cass	\$1600 - \$2050	\$1300 - \$1600	\$1100 - \$1400	\$2400 - \$3000	\$1050 - \$1350	\$1100 - \$1400	\$1400 - \$1800	\$1300 - \$1650
Charlevoix	\$700 - \$900	\$2400 - \$3000	\$1400 - \$1700	\$600 - \$800	\$1550 - \$1900	\$1250 - \$1550	\$2000 - \$2500	\$1300 - \$1600
Cheboygan	\$850 - \$1050	\$2350 - \$2950	\$1500 - \$1900	\$400 - \$500	\$1850 - \$2300	\$1500 - \$1900	\$1950 - \$2450	\$1650 - \$2050
Chippewa	\$1300 - \$1650	\$2800 - \$3500	\$2000 - \$2500	\$900 - \$1150	\$2300 - \$2850	\$2000 - \$2500	\$2400 - \$3050	\$2000 - \$2500
Clare	\$350 - \$450	\$1550 - \$1950	\$600 - \$750	\$850 - \$1100	\$950 - \$1200	\$650 - \$800	\$1150 - \$1450	\$800 - \$1000
Clinton	\$950 - \$1200	\$950 - \$1200	\$450 - \$550	\$1450 - \$1850	\$900 - \$1150	\$900 - \$1100	\$750 - \$950	\$1150 - \$1450
Crawford	\$350 - \$450	\$1850 - \$2350	\$1050 - \$1300	\$350 - \$400	\$1400 - \$1750	\$1100 - \$1400	\$1450 - \$1850	\$1200 - \$1450
Delta	\$2000 - \$2550	\$3550 - \$4400	\$2700 - \$3400	\$1650 - \$2050	\$3000 - \$3750	\$2750 - \$3400	\$3100 - \$3900	\$2700 - \$3400
Dickinson	\$2550 - \$3200	\$4050 - \$5100	\$3250 - \$4050	\$2150 - \$2700	\$3550 - \$4400	\$3250 - \$4050	\$3650 - \$4600	\$3250 - \$4050
Eaton	\$1250 - \$1550	\$950 - \$1200	\$500 - \$600	\$1750 - \$2200	\$800 - \$1050	\$900 - \$1100	\$750 - \$950	\$1050 - \$1350
Emmet	\$950 - \$1200	\$2450 - \$3100	\$1650 - \$2050	\$550 - \$700	\$1650 - \$2050	\$1400 - \$1750	\$2050 - \$2600	\$1500 - \$1850
Genesee	\$1150 - \$1450	\$750 - \$900	\$900 - \$1150	\$1250 - \$1600	\$1250 - \$1550	\$1300 - \$1600	\$300 - \$400	\$1500 - \$1850

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Missaukee</b>	<b>Monroe</b>	<b>Montcalm</b>	<b>Montmorency</b>	<b>Muskegon</b>	<b>Newaygo</b>	<b>Oakland</b>	<b>Oceana</b>
Gladwin	\$500 - \$600	\$1450 - \$1800	\$650 - \$800	\$700 - \$850	\$1150 - \$1450	\$850 - \$1050	\$1000 - \$1300	\$1000 - \$1250
Gogebic	\$3350 - \$4200	\$4900 - \$6100	\$4050 - \$5050	\$3000 - \$3750	\$4350 - \$5450	\$4100 - \$5100	\$4450 - \$5600	\$4050 - \$5050
Grand Traverse	\$400 - \$500	\$2200 - \$2750	\$1000 - \$1250	\$700 - \$900	\$1000 - \$1250	\$700 - \$900	\$1750 - \$2250	\$850 - \$1050
Gratiot	\$750 - \$950	\$1150 - \$1450	\$250 - \$300	\$1250 - \$1550	\$800 - \$950	\$700 - \$850	\$950 - \$1200	\$900 - \$1150
Hillsdale	\$1600 - \$2000	\$500 - \$600	\$1100 - \$1400	\$2100 - \$2650	\$1450 - \$1800	\$1500 - \$1900	\$850 - \$1100	\$1700 - \$2100
Houghton	\$3100 - \$3850	\$4600 - \$5750	\$3750 - \$4700	\$2700 - \$3350	\$4050 - \$5050	\$3800 - \$4750	\$4200 - \$5250	\$3750 - \$4700
Huron	\$1250 - \$1550	\$1300 - \$1650	\$1100 - \$1350	\$1350 - \$1700	\$1950 - \$2450	\$1250 - \$1600	\$850 - \$1100	\$1600 - \$2050
Ingham	\$1150 - \$1450	\$750 - \$950	\$650 - \$800	\$1650 - \$2050	\$950 - \$1200	\$1050 - \$1300	\$550 - \$750	\$1200 - \$1500
Ionia	\$800 - \$1000	\$1150 - \$1400	\$250 - \$300	\$1650 - \$2050	\$650 - \$850	\$750 - \$900	\$900 - \$1200	\$900 - \$1150
Iosco	\$650 - \$800	\$1600 - \$2050	\$1100 - \$1400	\$550 - \$700	\$1650 - \$2100	\$1300 - \$1650	\$1200 - \$1550	\$1450 - \$1800
Iron	\$2850 - \$3550	\$4350 - \$5450	\$3550 - \$4400	\$2450 - \$3100	\$3850 - \$4800	\$3550 - \$4450	\$3950 - \$4950	\$3550 - \$4400
Isabella	\$550 - \$700	\$1400 - \$1750	\$300 - \$400	\$1100 - \$1350	\$700 - \$900	\$450 - \$550	\$1050 - \$1350	\$700 - \$850
Jackson	\$1350 - \$1700	\$600 - \$750	\$850 - \$1100	\$1850 - \$2350	\$1200 - \$1500	\$1250 - \$1550	\$650 - \$800	\$1450 - \$1800
Kalamazoo	\$1400 - \$1750	\$1050 - \$1300	\$850 - \$1100	\$2150 - \$2700	\$850 - \$1050	\$900 - \$1100	\$1050 - \$1350	\$1100 - \$1350
Kalkaska	\$300 - \$350	\$2050 - \$2550	\$950 - \$1200	\$550 - \$700	\$1100 - \$1400	\$850 - \$1050	\$1650 - \$2050	\$950 - \$1150
Kent	\$900 - \$1100	\$1350 - \$1700	\$350 - \$450	\$1700 - \$2100	\$400 - \$450	\$400 - \$550	\$1150 - \$1450	\$650 - \$800
Keweenaw	\$3350 - \$4150	\$4850 - \$6050	\$4000 - \$5000	\$2950 - \$3700	\$4300 - \$5400	\$4050 - \$5050	\$4450 - \$5550	\$4000 - \$5000
Lake	\$450 - \$550	\$1950 - \$2450	\$600 - \$800	\$1200 - \$1500	\$550 - \$700	\$250 - \$350	\$1550 - \$1950	\$400 - \$500
Lapeer	\$1350 - \$1700	\$950 - \$1200	\$1150 - \$1400	\$1500 - \$1850	\$1450 - \$1850	\$1550 - \$1900	\$350 - \$450	\$1700 - \$2150
Leelanau	\$650 - \$800	\$2350 - \$2950	\$1200 - \$1450	\$850 - \$1100	\$1150 - \$1450	\$900 - \$1100	\$1950 - \$2450	\$900 - \$1100
Lenawee	\$1650 - \$2050	\$300 - \$350	\$1150 - \$1450	\$2150 - \$2700	\$1450 - \$1850	\$1550 - \$1900	\$600 - \$800	\$1700 - \$2150
Livingston	\$1350 - \$1700	\$550 - \$700	\$850 - \$1100	\$1650 - \$2050	\$1200 - \$1500	\$1250 - \$1550	\$350 - \$450	\$1450 - \$1800
Luce	\$1600 - \$2000	\$3100 - \$3900	\$2300 - \$2850	\$1200 - \$1550	\$2600 - \$3250	\$2300 - \$2900	\$2700 - \$3400	\$2300 - \$2850
Mackinac	\$1250 - \$1550	\$2750 - \$3450	\$1900 - \$2400	\$850 - \$1050	\$2200 - \$2750	\$1950 - \$2450	\$2350 - \$2950	\$1900 - \$2400
Macomb	\$1600 - \$2000	\$650 - \$750	\$1350 - \$1650	\$1700 - \$2100	\$1700 - \$2100	\$1750 - \$2150	\$200 - \$250	\$1950 - \$2400
Manistee	\$450 - \$600	\$2150 - \$2700	\$900 - \$1100	\$1200 - \$1450	\$750 - \$950	\$550 - \$700	\$1750 - \$2200	\$500 - \$600
Marquette	\$2450 - \$3050	\$3950 - \$4950	\$3100 - \$3900	\$2050 - \$2550	\$3400 - \$4250	\$3150 - \$3950	\$3550 - \$4450	\$3100 - \$3900
Mason	\$700 - \$850	\$2200 - \$2750	\$750 - \$950	\$1450 - \$1800	\$500 - \$650	\$400 - \$500	\$1700 - \$2150	\$250 - \$300
Mecosta	\$500 - \$600	\$1600 - \$2000	\$300 - \$350	\$1250 - \$1550	\$550 - \$650	\$250 - \$350	\$1300 - \$1650	\$500 - \$600
Menominee	\$2400 - \$3000	\$3900 - \$4900	\$3100 - \$3850	\$2000 - \$2550	\$3400 - \$4250	\$3100 - \$3900	\$3500 - \$4400	\$3100 - \$3850
Midland	\$600 - \$750	\$1300 - \$1600	\$500 - \$600	\$1100 - \$1350	\$950 - \$1150	\$650 - \$850	\$850 - \$1100	\$950 - \$1200
Missaukee	--	\$1850 - \$2300	\$600 - \$750	\$750 - \$950	\$1000 - \$1250	\$700 - \$900	\$1450 - \$1800	\$800 - \$1000
Monroe	\$1850 - \$2300	--	\$1350 - \$1700	\$1950 - \$2450	\$1700 - \$2100	\$1750 - \$2200	\$500 - \$650	\$1950 - \$2450
Montcalm	\$600 - \$750	\$1400 - \$1700	--	\$1400 - \$1800	\$550 - \$700	\$450 - \$550	\$1150 - \$1500	\$650 - \$850
Montmorency	\$750 - \$950	\$1950 - \$2450	\$1400 - \$1800	--	\$1750 - \$2200	\$1400 - \$1750	\$1550 - \$1950	\$1550 - \$1950
Muskegon	\$950 - \$1200	\$1700 - \$2150	\$500 - \$650	\$1750 - \$2150	--	\$250 - \$350	\$1500 - \$1900	\$250 - \$350

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Missaukee</b>	<b>Monroe</b>	<b>Montcalm</b>	<b>Montmorency</b>	<b>Muskegon</b>	<b>Newaygo</b>	<b>Oakland</b>	<b>Oceana</b>
Newaygo	\$700 - \$900	\$1750 - \$2200	\$450 - \$550	\$1400 - \$1750	\$250 - \$350	--	\$1550 - \$1950	\$250 - \$300
Oakland	\$1450 - \$1850	\$550 - \$700	\$1150 - \$1500	\$1550 - \$1950	\$1500 - \$1900	\$1550 - \$2000	\$0 - \$50	\$1750 - \$2200
Oceana	\$800 - \$1000	\$1950 - \$2450	\$650 - \$850	\$1550 - \$1950	\$300 - \$350	\$250 - \$300	\$1750 - \$2250	--
Ogemaw	\$450 - \$550	\$1500 - \$1900	\$1000 - \$1250	\$450 - \$550	\$1500 - \$1850	\$1100 - \$1400	\$1100 - \$1400	\$1250 - \$1550
Ontonagon	\$3100 - \$3900	\$4600 - \$5800	\$3800 - \$4750	\$2700 - \$3400	\$4100 - \$5100	\$3800 - \$4750	\$4200 - \$5300	\$3800 - \$4750
Osceola	\$300 - \$350	\$1750 - \$2200	\$450 - \$550	\$1050 - \$1300	\$800 - \$1000	\$500 - \$650	\$1350 - \$1700	\$600 - \$750
Oscoda	\$650 - \$800	\$1750 - \$2200	\$1300 - \$1650	\$250 - \$300	\$1650 - \$2050	\$1350 - \$1700	\$1350 - \$1700	\$1450 - \$1800
Otsego	\$550 - \$700	\$2100 - \$2600	\$1250 - \$1550	\$200 - \$250	\$1600 - \$2000	\$1250 - \$1550	\$1650 - \$2100	\$1400 - \$1700
Ottawa	\$1150 - \$1400	\$1500 - \$1900	\$600 - \$750	\$1900 - \$2400	\$250 - \$300	\$500 - \$600	\$1300 - \$1700	\$450 - \$600
Presque Isle	\$1100 - \$1400	\$2200 - \$2700	\$1800 - \$2250	\$300 - \$400	\$2100 - \$2650	\$1750 - \$2200	\$1750 - \$2250	\$1900 - \$2400
Roscommon	\$250 - \$300	\$1700 - \$2100	\$900 - \$1100	\$650 - \$800	\$1300 - \$1600	\$900 - \$1150	\$1250 - \$1600	\$1050 - \$1300
Saginaw	\$850 - \$1050	\$1050 - \$1300	\$550 - \$650	\$1050 - \$1300	\$950 - \$1200	\$850 - \$1100	\$650 - \$850	\$1100 - \$1350
St. Clair	\$1650 - \$2050	\$800 - \$1000	\$1400 - \$1750	\$1750 - \$2200	\$1750 - \$2150	\$1800 - \$2250	\$500 - \$700	\$2000 - \$2450
St. Joseph	\$1600 - \$1950	\$900 - \$1100	\$1050 - \$1300	\$2300 - \$2850	\$1000 - \$1300	\$1050 - \$1350	\$1200 - \$1500	\$1250 - \$1600
Sanilac	\$1350 - \$1700	\$1250 - \$1550	\$1050 - \$1300	\$1450 - \$1800	\$1900 - \$2350	\$1400 - \$1700	\$750 - \$950	\$1750 - \$2150
Schoolcraft	\$1750 - \$2200	\$3250 - \$4100	\$2450 - \$3050	\$1400 - \$1700	\$2750 - \$3450	\$2450 - \$3100	\$2850 - \$3600	\$2450 - \$3050
Shiawassee	\$1100 - \$1400	\$900 - \$1150	\$700 - \$900	\$1450 - \$1800	\$1100 - \$1350	\$1150 - \$1450	\$500 - \$650	\$1350 - \$1650
Tuscola	\$1150 - \$1400	\$1100 - \$1400	\$800 - \$1000	\$1250 - \$1550	\$1650 - \$2050	\$1150 - \$1450	\$550 - \$700	\$1500 - \$1900
Van Buren	\$1450 - \$1800	\$1300 - \$1650	\$950 - \$1150	\$2250 - \$2800	\$700 - \$850	\$950 - \$1200	\$1350 - \$1700	\$950 - \$1150
Washtenaw	\$1600 - \$2000	\$300 - \$400	\$1100 - \$1350	\$1700 - \$2100	\$1450 - \$1800	\$1500 - \$1850	\$350 - \$500	\$1700 - \$2100
Wayne	\$1800 - \$2200	\$400 - \$450	\$1350 - \$1600	\$1900 - \$2350	\$1650 - \$2000	\$1700 - \$2100	\$300 - \$300	\$1900 - \$2350
Wexford	\$300 - \$350	\$1950 - \$2400	\$750 - \$950	\$1000 - \$1250	\$800 - \$1000	\$650 - \$800	\$1500 - \$1950	\$700 - \$850

### Ogemaw County–Roscommon County

	<b>Ogemaw</b>	<b>Ontonagon</b>	<b>Osceola</b>	<b>Oscoda</b>	<b>Otsego</b>	<b>Ottawa</b>	<b>Presque Isle</b>	<b>Roscommon</b>
Alcona	\$450 - \$550	\$3150 - \$3950	\$1150 - \$1400	\$250 - \$350	\$600 - \$750	\$2000 - \$2500	\$550 - \$700	\$600 - \$800
Alger	\$2100 - \$2650	\$1150 - \$1400	\$2300 - \$2900	\$1850 - \$2300	\$1550 - \$1950	\$3200 - \$4000	\$1600 - \$2000	\$1900 - \$2400
Allegan	\$1900 - \$2350	\$4350 - \$5450	\$1000 - \$1250	\$1850 - \$2350	\$1800 - \$2250	\$300 - \$350	\$2350 - \$2950	\$1500 - \$1900
Alpena	\$600 - \$700	\$2900 - \$3600	\$1250 - \$1550	\$350 - \$450	\$450 - \$600	\$2100 - \$2650	\$250 - \$350	\$750 - \$900
Antrim	\$800 - \$950	\$2750 - \$3450	\$700 - \$900	\$600 - \$750	\$300 - \$350	\$1450 - \$1850	\$800 - \$1050	\$550 - \$700
Arenac	\$250 - \$300	\$3350 - \$4200	\$700 - \$850	\$500 - \$600	\$800 - \$1000	\$1550 - \$1950	\$850 - \$1100	\$400 - \$500
Baraga	\$2950 - \$3700	\$450 - \$600	\$3150 - \$3900	\$2700 - \$3350	\$2350 - \$2950	\$4000 - \$5000	\$2400 - \$3000	\$2750 - \$3400
Barry	\$1650 - \$2050	\$4400 - \$5500	\$1000 - \$1250	\$1850 - \$2350	\$1850 - \$2300	\$500 - \$600	\$2350 - \$2950	\$1500 - \$1900
Bay	\$400 - \$500	\$3500 - \$4400	\$700 - \$850	\$650 - \$800	\$950 - \$1200	\$1450 - \$1850	\$1050 - \$1300	\$550 - \$700
Benzie	\$950 - \$1150	\$3150 - \$3950	\$550 - \$700	\$950 - \$1200	\$750 - \$900	\$1150 - \$1400	\$1250 - \$1600	\$750 - \$900

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	Ogemaw	Ontonagon	Osceola	Oscoda	Otsego	Ottawa	Presque Isle	Roscommon
Berrien	\$2300 - \$2850	\$3950 - \$4900	\$1450 - \$1800	\$2300 - \$2900	\$2250 - \$2800	\$650 - \$800	\$2800 - \$3500	\$1950 - \$2450
Branch	\$1800 - \$2250	\$4550 - \$5700	\$1600 - \$2000	\$2050 - \$2550	\$2000 - \$2500	\$1000 - \$1250	\$2550 - \$3200	\$1650 - \$2050
Calhoun	\$1650 - \$2050	\$4400 - \$5500	\$1400 - \$1750	\$1900 - \$2350	\$1850 - \$2300	\$850 - \$1100	\$2400 - \$2950	\$1500 - \$1850
Cass	\$2150 - \$2650	\$4200 - \$5250	\$1400 - \$1800	\$2300 - \$2850	\$2200 - \$2800	\$750 - \$950	\$2750 - \$3450	\$1900 - \$2400
Charlevoix	\$1000 - \$1250	\$2500 - \$3150	\$900 - \$1150	\$850 - \$1050	\$400 - \$500	\$1700 - \$2100	\$600 - \$750	\$800 - \$1000
Cheboygan	\$950 - \$1200	\$2450 - \$3050	\$1150 - \$1400	\$650 - \$800	\$350 - \$450	\$2000 - \$2500	\$400 - \$500	\$750 - \$900
Chippewa	\$1400 - \$1800	\$2100 - \$2600	\$1600 - \$2000	\$1150 - \$1450	\$850 - \$1050	\$2500 - \$3100	\$900 - \$1100	\$1200 - \$1500
Clare	\$550 - \$650	\$3250 - \$4050	\$300 - \$350	\$750 - \$950	\$700 - \$850	\$1100 - \$1400	\$1200 - \$1500	\$350 - \$400
Clinton	\$1250 - \$1600	\$3850 - \$4800	\$850 - \$1100	\$1350 - \$1650	\$1300 - \$1600	\$750 - \$900	\$1800 - \$2300	\$950 - \$1150
Crawford	\$500 - \$600	\$2800 - \$3500	\$650 - \$850	\$300 - \$400	\$250 - \$300	\$1550 - \$1900	\$750 - \$950	\$250 - \$350
Delta	\$2150 - \$2650	\$1250 - \$1550	\$2350 - \$2900	\$1850 - \$2350	\$1550 - \$1950	\$3200 - \$4000	\$1600 - \$2000	\$1950 - \$2400
Dickinson	\$2650 - \$3350	\$850 - \$1050	\$2850 - \$3550	\$2400 - \$3000	\$2100 - \$2600	\$3700 - \$4650	\$2100 - \$2600	\$2450 - \$3050
Eaton	\$1400 - \$1750	\$4150 - \$5150	\$900 - \$1150	\$1650 - \$2050	\$1600 - \$2000	\$650 - \$800	\$2100 - \$2650	\$1250 - \$1550
Emmet	\$1050 - \$1350	\$2350 - \$2900	\$1050 - \$1300	\$800 - \$1000	\$500 - \$600	\$1800 - \$2250	\$550 - \$700	\$850 - \$1050
Genesee	\$800 - \$1000	\$3950 - \$4900	\$1050 - \$1300	\$1050 - \$1350	\$1350 - \$1700	\$1050 - \$1300	\$1500 - \$1850	\$1000 - \$1250
Gladwin	\$300 - \$350	\$3300 - \$4100	\$450 - \$550	\$550 - \$650	\$750 - \$950	\$1300 - \$1650	\$950 - \$1200	\$350 - \$400
Gogebic	\$3500 - \$4350	\$350 - \$450	\$3700 - \$4600	\$3200 - \$4000	\$2900 - \$3650	\$4500 - \$5650	\$2950 - \$3700	\$3250 - \$4100
Grand Traverse	\$850 - \$1050	\$2950 - \$3700	\$550 - \$700	\$750 - \$900	\$550 - \$650	\$1300 - \$1650	\$1050 - \$1300	\$600 - \$750
Gratiot	\$900 - \$1150	\$3650 - \$4550	\$650 - \$800	\$1100 - \$1400	\$1100 - \$1350	\$950 - \$1150	\$1600 - \$2000	\$700 - \$900
Hillsdale	\$1750 - \$2200	\$4500 - \$5600	\$1500 - \$1900	\$2000 - \$2500	\$1950 - \$2450	\$1250 - \$1600	\$2500 - \$3100	\$1600 - \$2000
Houghton	\$3200 - \$4000	\$500 - \$600	\$3400 - \$4250	\$2950 - \$3650	\$2600 - \$3250	\$4250 - \$5300	\$2650 - \$3300	\$3000 - \$3750
Huron	\$900 - \$1150	\$4000 - \$5000	\$1150 - \$1450	\$1150 - \$1450	\$1450 - \$1800	\$1750 - \$2200	\$1550 - \$1950	\$1050 - \$1350
Ingham	\$1200 - \$1500	\$4000 - \$5050	\$1050 - \$1300	\$1450 - \$1800	\$1450 - \$1850	\$800 - \$1000	\$2000 - \$2500	\$1100 - \$1400
Ionia	\$1450 - \$1800	\$4000 - \$5000	\$650 - \$850	\$1500 - \$1850	\$1450 - \$1800	\$500 - \$600	\$2000 - \$2500	\$1100 - \$1350
Iosco	\$200 - \$250	\$3400 - \$4250	\$900 - \$1100	\$400 - \$500	\$850 - \$1100	\$1800 - \$2300	\$700 - \$850	\$450 - \$600
Iron	\$2950 - \$3700	\$500 - \$650	\$3150 - \$3950	\$2700 - \$3350	\$2400 - \$3000	\$4050 - \$5100	\$2400 - \$3000	\$2750 - \$3450
Isabella	\$750 - \$950	\$3450 - \$4300	\$400 - \$500	\$950 - \$1150	\$900 - \$1100	\$850 - \$1100	\$1450 - \$1800	\$550 - \$700
Jackson	\$1500 - \$1850	\$4250 - \$5300	\$1250 - \$1600	\$1750 - \$2200	\$1700 - \$2100	\$1000 - \$1250	\$2250 - \$2800	\$1350 - \$1700
Kalamazoo	\$1800 - \$2250	\$4550 - \$5700	\$1200 - \$1500	\$2050 - \$2550	\$2000 - \$2500	\$650 - \$800	\$2500 - \$3150	\$1650 - \$2050
Kalkaska	\$650 - \$800	\$3050 - \$3800	\$500 - \$600	\$550 - \$700	\$400 - \$500	\$1250 - \$1550	\$900 - \$1150	\$450 - \$550
Kent	\$1400 - \$1750	\$4050 - \$5050	\$700 - \$900	\$1550 - \$1950	\$1500 - \$1900	\$300 - \$350	\$2050 - \$2550	\$1200 - \$1500
Keweenaw	\$3450 - \$4300	\$750 - \$950	\$3650 - \$4550	\$3200 - \$3950	\$2850 - \$3600	\$4500 - \$5650	\$2900 - \$3650	\$3250 - \$4050
Lake	\$900 - \$1100	\$3450 - \$4300	\$250 - \$350	\$1050 - \$1300	\$1000 - \$1250	\$950 - \$1150	\$1550 - \$1950	\$700 - \$850
Lapeer	\$1050 - \$1300	\$4150 - \$5150	\$1250 - \$1600	\$1300 - \$1600	\$1600 - \$2000	\$1300 - \$1600	\$1700 - \$2100	\$1200 - \$1500
Leelanau	\$1000 - \$1250	\$3100 - \$3900	\$700 - \$900	\$900 - \$1100	\$700 - \$850	\$1350 - \$1700	\$1200 - \$1500	\$750 - \$950
Lenawee	\$1550 - \$1950	\$4550 - \$5650	\$1550 - \$1950	\$1800 - \$2250	\$2000 - \$2450	\$1300 - \$1600	\$2200 - \$2750	\$1700 - \$2100

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	Ogemaw	Ontonagon	Osceola	Oscoda	Otsego	Ottawa	Presque Isle	Roscommon
Livingston	\$1200 - \$1500	\$4250 - \$5300	\$1250 - \$1600	\$1450 - \$1800	\$1700 - \$2100	\$1000 - \$1250	\$1850 - \$2300	\$1350 - \$1700
Luce	\$1700 - \$2150	\$1650 - \$2050	\$1900 - \$2400	\$1450 - \$1800	\$1150 - \$1400	\$2800 - \$3450	\$1200 - \$1500	\$1500 - \$1900
Mackinac	\$1350 - \$1700	\$1950 - \$2400	\$1550 - \$1900	\$1100 - \$1350	\$750 - \$950	\$2400 - \$3000	\$800 - \$1000	\$1150 - \$1400
Macomb	\$1250 - \$1550	\$4350 - \$5450	\$1500 - \$1850	\$1500 - \$1850	\$1800 - \$2250	\$1500 - \$1850	\$1900 - \$2400	\$1450 - \$1750
Manistee	\$900 - \$1100	\$3350 - \$4200	\$500 - \$650	\$1000 - \$1250	\$1000 - \$1250	\$950 - \$1200	\$1550 - \$1900	\$700 - \$850
Marquette	\$2550 - \$3200	\$700 - \$850	\$2750 - \$3400	\$2300 - \$2850	\$1950 - \$2450	\$3600 - \$4500	\$2000 - \$2500	\$2350 - \$2900
Mason	\$1150 - \$1400	\$3550 - \$4450	\$500 - \$600	\$1300 - \$1600	\$1250 - \$1550	\$700 - \$900	\$1800 - \$2250	\$950 - \$1150
Mecosta	\$950 - \$1150	\$3650 - \$4550	\$250 - \$300	\$1100 - \$1400	\$1100 - \$1350	\$700 - \$850	\$1600 - \$2000	\$750 - \$900
Menominee	\$2500 - \$3150	\$1150 - \$1400	\$2700 - \$3400	\$2250 - \$2800	\$1950 - \$2400	\$3600 - \$4450	\$2000 - \$2500	\$2300 - \$2900
Midland	\$450 - \$600	\$3450 - \$4350	\$500 - \$600	\$800 - \$1050	\$900 - \$1150	\$1100 - \$1350	\$1450 - \$1800	\$450 - \$550
Missaukee	\$450 - \$550	\$3100 - \$3900	\$300 - \$350	\$650 - \$800	\$550 - \$700	\$1150 - \$1400	\$1100 - \$1350	\$250 - \$300
Monroe	\$1500 - \$1900	\$4600 - \$5800	\$1750 - \$2200	\$1750 - \$2200	\$2050 - \$2600	\$1500 - \$1900	\$2150 - \$2700	\$1700 - \$2100
Montcalm	\$1050 - \$1350	\$3800 - \$4750	\$450 - \$550	\$1300 - \$1600	\$1250 - \$1550	\$600 - \$750	\$1800 - \$2200	\$900 - \$1100
Montmorency	\$450 - \$550	\$2750 - \$3400	\$1050 - \$1300	\$250 - \$300	\$200 - \$250	\$1900 - \$2400	\$300 - \$400	\$650 - \$800
Muskegon	\$1500 - \$1850	\$4150 - \$5150	\$750 - \$950	\$1650 - \$2050	\$1550 - \$1950	\$250 - \$300	\$2100 - \$2600	\$1300 - \$1600
Newaygo	\$1100 - \$1400	\$3850 - \$4800	\$500 - \$650	\$1400 - \$1700	\$1250 - \$1550	\$450 - \$550	\$1750 - \$2200	\$900 - \$1150
Oakland	\$1100 - \$1400	\$4200 - \$5300	\$1350 - \$1700	\$1350 - \$1700	\$1650 - \$2100	\$1300 - \$1650	\$1750 - \$2250	\$1250 - \$1600
Oceana	\$1250 - \$1550	\$3800 - \$4750	\$600 - \$750	\$1400 - \$1750	\$1400 - \$1700	\$500 - \$600	\$1900 - \$2400	\$1050 - \$1300
Ogemaw	--	\$3200 - \$4050	\$650 - \$850	\$250 - \$300	\$650 - \$850	\$1650 - \$2050	\$650 - \$850	\$300 - \$350
Ontonagon	\$3200 - \$4050	--	\$3400 - \$4250	\$2950 - \$3700	\$2650 - \$3300	\$4300 - \$5350	\$2700 - \$3350	\$3000 - \$3750
Osceola	\$650 - \$850	\$3400 - \$4250	--	\$950 - \$1150	\$850 - \$1100	\$950 - \$1200	\$1400 - \$1750	\$500 - \$650
Oscoda	\$250 - \$300	\$2950 - \$3700	\$950 - \$1150	--	\$400 - \$450	\$1800 - \$2250	\$450 - \$550	\$400 - \$500
Otsego	\$700 - \$850	\$2650 - \$3300	\$850 - \$1100	\$350 - \$450	--	\$1750 - \$2150	\$500 - \$600	\$450 - \$600
Ottawa	\$1650 - \$2050	\$4300 - \$5350	\$950 - \$1150	\$1800 - \$2250	\$1750 - \$2150	--	\$2250 - \$2850	\$1450 - \$1800
Presque Isle	\$650 - \$850	\$2650 - \$3300	\$1400 - \$1750	\$450 - \$550	\$500 - \$600	\$2250 - \$2850	--	\$850 - \$1050
Roscommon	\$300 - \$350	\$3000 - \$3750	\$500 - \$650	\$400 - \$500	\$450 - \$600	\$1450 - \$1800	\$850 - \$1050	--
Saginaw	\$600 - \$750	\$3700 - \$4600	\$750 - \$950	\$850 - \$1050	\$1150 - \$1450	\$1100 - \$1350	\$1250 - \$1600	\$800 - \$950
St. Clair	\$1300 - \$1600	\$4400 - \$5500	\$1550 - \$1950	\$1550 - \$1950	\$1850 - \$2300	\$1550 - \$1950	\$1950 - \$2450	\$1450 - \$1850
St. Joseph	\$1900 - \$2400	\$4350 - \$5450	\$1400 - \$1750	\$2150 - \$2700	\$2100 - \$2650	\$850 - \$1050	\$2650 - \$3300	\$1750 - \$2200
Sanilac	\$1000 - \$1250	\$4100 - \$5150	\$1250 - \$1550	\$1250 - \$1550	\$1550 - \$1950	\$1700 - \$2100	\$1650 - \$2100	\$1200 - \$1450
Schoolcraft	\$1900 - \$2350	\$1450 - \$1800	\$2050 - \$2600	\$1600 - \$2000	\$1300 - \$1600	\$2950 - \$3650	\$1350 - \$1650	\$1650 - \$2100
Shiawassee	\$1000 - \$1250	\$4000 - \$5000	\$1050 - \$1300	\$1250 - \$1550	\$1450 - \$1800	\$900 - \$1150	\$1650 - \$2100	\$1150 - \$1450
Tuscola	\$800 - \$1000	\$3900 - \$4850	\$1050 - \$1300	\$1050 - \$1300	\$1350 - \$1700	\$1450 - \$1800	\$1450 - \$1800	\$950 - \$1200
Van Buren	\$2050 - \$2550	\$4250 - \$5300	\$1250 - \$1600	\$2150 - \$2650	\$2050 - \$2600	\$500 - \$600	\$2600 - \$3250	\$1750 - \$2200
Washtenaw	\$1250 - \$1550	\$4350 - \$5450	\$1500 - \$1850	\$1500 - \$1850	\$1800 - \$2250	\$1250 - \$1550	\$1900 - \$2400	\$1400 - \$1750
Wayne	\$1450 - \$1800	\$4600 - \$5650	\$1700 - \$2100	\$1700 - \$2100	\$2050 - \$2500	\$1500 - \$1800	\$2150 - \$2600	\$1650 - \$2000

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	Ogemaw	Ontonagon	Osceola	Oscoda	Otsego	Ottawa	Presque Isle	Roscommon
Wexford	\$700 - \$850	\$3200 - \$4000	\$300 - \$400	\$850 - \$1050	\$800 - \$1000	\$1050 - \$1350	\$1350 - \$1700	\$500 - \$600

### Saginaw County–Van Buren County

	Saginaw	St. Clair	St. Joseph	Sanilac	Schoolcraft	Shiawassee	Tuscola	Van Buren
Alcona	\$950 - \$1200	\$1650 - \$2050	\$2250 - \$2800	\$1350 - \$1700	\$1800 - \$2250	\$1350 - \$1700	\$1150 - \$1400	\$2400 - \$3000
Alger	\$2600 - \$3250	\$3300 - \$4150	\$3550 - \$4450	\$3000 - \$3750	\$300 - \$350	\$3000 - \$3750	\$2800 - \$3500	\$3500 - \$4400
Allegan	\$1200 - \$1500	\$1600 - \$2000	\$550 - \$700	\$1750 - \$2200	\$3000 - \$3750	\$950 - \$1200	\$1500 - \$1900	\$250 - \$350
Alpena	\$1150 - \$1450	\$1850 - \$2300	\$2450 - \$3100	\$1550 - \$1950	\$1550 - \$1950	\$1550 - \$1950	\$1350 - \$1650	\$2450 - \$3050
Antrim	\$1300 - \$1600	\$1950 - \$2450	\$1900 - \$2400	\$1650 - \$2100	\$1400 - \$1750	\$1650 - \$2050	\$1450 - \$1800	\$1800 - \$2250
Arenac	\$500 - \$650	\$1200 - \$1500	\$1800 - \$2250	\$900 - \$1150	\$2000 - \$2500	\$900 - \$1150	\$700 - \$850	\$1950 - \$2450
Baraga	\$3400 - \$4250	\$4100 - \$5150	\$4200 - \$5250	\$3850 - \$4800	\$1150 - \$1450	\$3800 - \$4750	\$3600 - \$4500	\$4050 - \$5100
Barry	\$950 - \$1200	\$1350 - \$1650	\$450 - \$550	\$1500 - \$1850	\$3050 - \$3800	\$700 - \$850	\$1250 - \$1550	\$450 - \$600
Bay	\$200 - \$300	\$900 - \$1150	\$1550 - \$1900	\$600 - \$800	\$2150 - \$2700	\$600 - \$750	\$400 - \$500	\$1650 - \$2100
Benzie	\$1200 - \$1500	\$1950 - \$2450	\$1800 - \$2250	\$1700 - \$2100	\$1800 - \$2300	\$1450 - \$1850	\$1450 - \$1800	\$1650 - \$2050
Berrien	\$1650 - \$2050	\$1950 - \$2450	\$450 - \$600	\$2150 - \$2650	\$3450 - \$4300	\$1350 - \$1700	\$1900 - \$2400	\$350 - \$400
Branch	\$1150 - \$1450	\$1500 - \$1900	\$200 - \$250	\$1650 - \$2050	\$3200 - \$4000	\$900 - \$1100	\$1450 - \$1800	\$650 - \$800
Calhoun	\$1000 - \$1250	\$1300 - \$1650	\$300 - \$350	\$1500 - \$1850	\$3050 - \$3800	\$700 - \$900	\$1250 - \$1600	\$500 - \$650
Cass	\$1500 - \$1850	\$1800 - \$2250	\$200 - \$250	\$2000 - \$2500	\$3450 - \$4300	\$1200 - \$1500	\$1750 - \$2200	\$250 - \$300
Charlevoix	\$1500 - \$1850	\$2150 - \$2700	\$2150 - \$2650	\$1900 - \$2350	\$1150 - \$1450	\$1850 - \$2350	\$1650 - \$2050	\$2000 - \$2500
Cheboygan	\$1450 - \$1800	\$2150 - \$2650	\$2350 - \$2950	\$1850 - \$2300	\$1100 - \$1350	\$1850 - \$2300	\$1600 - \$2000	\$2350 - \$2900
Chippewa	\$1900 - \$2350	\$2600 - \$3250	\$2850 - \$3550	\$2300 - \$2900	\$950 - \$1150	\$2300 - \$2850	\$2100 - \$2600	\$2800 - \$3500
Clare	\$550 - \$700	\$1350 - \$1650	\$1450 - \$1800	\$1050 - \$1300	\$1900 - \$2350	\$800 - \$1000	\$850 - \$1050	\$1450 - \$1800
Clinton	\$450 - \$600	\$950 - \$1200	\$800 - \$1000	\$1100 - \$1400	\$2500 - \$3100	\$250 - \$300	\$900 - \$1100	\$900 - \$1150
Crawford	\$1000 - \$1250	\$1650 - \$2050	\$1900 - \$2350	\$1350 - \$1700	\$1450 - \$1800	\$1350 - \$1700	\$1150 - \$1400	\$1850 - \$2300
Delta	\$2600 - \$3250	\$3300 - \$4150	\$3550 - \$4450	\$3000 - \$3800	\$350 - \$450	\$3000 - \$3750	\$2800 - \$3500	\$3500 - \$4400
Dickinson	\$3150 - \$3900	\$3850 - \$4800	\$3750 - \$4700	\$3550 - \$4450	\$900 - \$1100	\$3550 - \$4450	\$3300 - \$4150	\$3600 - \$4500
Eaton	\$750 - \$900	\$1100 - \$1350	\$600 - \$750	\$1250 - \$1550	\$2800 - \$3500	\$450 - \$550	\$1000 - \$1250	\$700 - \$900
Emmet	\$1550 - \$1950	\$2250 - \$2800	\$2250 - \$2850	\$1950 - \$2450	\$1000 - \$1250	\$1950 - \$2450	\$1700 - \$2150	\$2150 - \$2650
Genesee	\$350 - \$450	\$550 - \$650	\$1100 - \$1400	\$650 - \$800	\$2600 - \$3200	\$200 - \$250	\$450 - \$550	\$1250 - \$1550
Gladwin	\$450 - \$550	\$1200 - \$1500	\$1500 - \$1850	\$900 - \$1150	\$1950 - \$2450	\$700 - \$850	\$700 - \$850	\$1650 - \$2050
Gogebic	\$3950 - \$4950	\$4650 - \$5850	\$4300 - \$5400	\$4350 - \$5450	\$1700 - \$2150	\$4350 - \$5450	\$4150 - \$5200	\$4150 - \$5200
Grand Traverse	\$1200 - \$1500	\$1950 - \$2450	\$1750 - \$2200	\$1650 - \$2100	\$1600 - \$2000	\$1450 - \$1800	\$1450 - \$1800	\$1650 - \$2050
Gratiot	\$300 - \$350	\$1000 - \$1250	\$1050 - \$1300	\$850 - \$1050	\$2300 - \$2850	\$400 - \$500	\$600 - \$750	\$1150 - \$1450
Hillsdale	\$1100 - \$1350	\$1250 - \$1550	\$450 - \$550	\$1600 - \$2000	\$3150 - \$3950	\$800 - \$1000	\$1350 - \$1700	\$900 - \$1150
Houghton	\$3650 - \$4550	\$4350 - \$5450	\$4450 - \$5550	\$4100 - \$5100	\$1400 - \$1750	\$4050 - \$5100	\$3850 - \$4800	\$4300 - \$5400

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	Saginaw	St. Clair	St. Joseph	Sanilac	Schoolcraft	Shiawassee	Tuscola	Van Buren
Huron	\$650 - \$800	\$700 - \$900	\$1850 - \$2300	\$400 - \$500	\$2650 - \$3350	\$900 - \$1150	\$300 - \$400	\$1950 - \$2450
Ingham	\$600 - \$750	\$950 - \$1200	\$750 - \$950	\$1050 - \$1300	\$2700 - \$3350	\$350 - \$450	\$800 - \$1000	\$900 - \$1100
Ionia	\$650 - \$800	\$1150 - \$1450	\$700 - \$850	\$1300 - \$1600	\$2650 - \$3300	\$500 - \$650	\$1050 - \$1350	\$800 - \$1000
Iosco	\$700 - \$900	\$1400 - \$1750	\$2000 - \$2500	\$1100 - \$1400	\$2050 - \$2600	\$1100 - \$1400	\$900 - \$1100	\$2150 - \$2700
Iron	\$3450 - \$4300	\$4150 - \$5200	\$3900 - \$4850	\$3850 - \$4800	\$1200 - \$1500	\$3850 - \$4800	\$3650 - \$4550	\$3750 - \$4650
Isabella	\$450 - \$600	\$1250 - \$1550	\$1300 - \$1600	\$950 - \$1200	\$2100 - \$2650	\$650 - \$800	\$700 - \$900	\$1200 - \$1500
Jackson	\$850 - \$1050	\$1000 - \$1250	\$600 - \$750	\$1350 - \$1650	\$2900 - \$3600	\$550 - \$700	\$1100 - \$1400	\$750 - \$900
Kalamazoo	\$1150 - \$1400	\$1450 - \$1850	\$250 - \$300	\$1650 - \$2050	\$3200 - \$4000	\$850 - \$1050	\$1400 - \$1750	\$300 - \$350
Kalkaska	\$1100 - \$1400	\$1850 - \$2300	\$1700 - \$2150	\$1550 - \$1900	\$1700 - \$2100	\$1400 - \$1750	\$1300 - \$1650	\$1600 - \$2000
Kent	\$800 - \$1050	\$1400 - \$1700	\$750 - \$900	\$1550 - \$1900	\$2700 - \$3400	\$750 - \$950	\$1300 - \$1600	\$600 - \$750
Keweenaw	\$3900 - \$4900	\$4600 - \$5800	\$4700 - \$5900	\$4350 - \$5400	\$1650 - \$2100	\$4300 - \$5400	\$4100 - \$5150	\$4550 - \$5700
Lake	\$950 - \$1200	\$1750 - \$2200	\$1400 - \$1700	\$1450 - \$1800	\$2100 - \$2650	\$1250 - \$1550	\$1200 - \$1550	\$1250 - \$1550
Lapeer	\$600 - \$700	\$350 - \$450	\$1350 - \$1700	\$400 - \$500	\$2800 - \$3500	\$450 - \$550	\$300 - \$350	\$1500 - \$1850
Leelanau	\$1350 - \$1700	\$2150 - \$2650	\$1950 - \$2400	\$1850 - \$2300	\$1750 - \$2200	\$1600 - \$2050	\$1600 - \$2000	\$1800 - \$2250
Lenawee	\$1100 - \$1350	\$950 - \$1150	\$650 - \$800	\$1350 - \$1700	\$3200 - \$3950	\$700 - \$850	\$1150 - \$1450	\$1050 - \$1300
Livingston	\$750 - \$900	\$750 - \$950	\$1000 - \$1250	\$1000 - \$1300	\$2900 - \$3600	\$350 - \$450	\$800 - \$1000	\$1100 - \$1400
Luce	\$2200 - \$2750	\$2900 - \$3650	\$3150 - \$3950	\$2600 - \$3250	\$550 - \$700	\$2600 - \$3250	\$2400 - \$3000	\$3100 - \$3900
Mackinac	\$1800 - \$2250	\$2550 - \$3150	\$2750 - \$3450	\$2250 - \$2800	\$600 - \$750	\$2250 - \$2800	\$2000 - \$2500	\$2750 - \$3400
Macomb	\$800 - \$1000	\$250 - \$300	\$1400 - \$1700	\$700 - \$850	\$3050 - \$3750	\$650 - \$800	\$650 - \$800	\$1500 - \$1900
Manistee	\$1150 - \$1450	\$1950 - \$2400	\$1750 - \$2200	\$1650 - \$2050	\$2000 - \$2500	\$1400 - \$1800	\$1400 - \$1750	\$1450 - \$1800
Marquette	\$3000 - \$3750	\$3700 - \$4650	\$3950 - \$4950	\$3450 - \$4300	\$750 - \$950	\$3400 - \$4300	\$3200 - \$4000	\$3950 - \$4900
Mason	\$1100 - \$1400	\$1900 - \$2350	\$1500 - \$1900	\$1600 - \$2000	\$2200 - \$2750	\$1600 - \$2000	\$1350 - \$1700	\$1200 - \$1500
Mecosta	\$650 - \$850	\$1500 - \$1850	\$1150 - \$1450	\$1200 - \$1500	\$2300 - \$2850	\$850 - \$1100	\$950 - \$1200	\$1000 - \$1300
Menominee	\$3000 - \$3750	\$3700 - \$4650	\$3500 - \$4350	\$3400 - \$4250	\$750 - \$950	\$3400 - \$4250	\$3200 - \$4000	\$3350 - \$4200
Midland	\$300 - \$350	\$1050 - \$1350	\$1300 - \$1650	\$750 - \$950	\$2100 - \$2650	\$550 - \$650	\$550 - \$700	\$1400 - \$1750
Missaukee	\$850 - \$1050	\$1650 - \$2050	\$1600 - \$2000	\$1350 - \$1650	\$1750 - \$2200	\$1100 - \$1400	\$1150 - \$1450	\$1450 - \$1850
Monroe	\$1050 - \$1350	\$800 - \$1000	\$900 - \$1100	\$1250 - \$1550	\$3250 - \$4100	\$850 - \$1050	\$1150 - \$1400	\$1300 - \$1650
Montcalm	\$550 - \$650	\$1400 - \$1750	\$1050 - \$1350	\$1050 - \$1300	\$2450 - \$3050	\$700 - \$900	\$800 - \$1000	\$950 - \$1150
Montmorency	\$1050 - \$1300	\$1750 - \$2200	\$2300 - \$2850	\$1450 - \$1800	\$1400 - \$1700	\$1450 - \$1800	\$1200 - \$1550	\$2250 - \$2800
Muskegon	\$950 - \$1200	\$1750 - \$2150	\$1050 - \$1300	\$1900 - \$2350	\$2800 - \$3500	\$1100 - \$1400	\$1650 - \$2050	\$700 - \$850
Newaygo	\$850 - \$1100	\$1800 - \$2200	\$1050 - \$1350	\$1350 - \$1700	\$2500 - \$3100	\$1150 - \$1450	\$1150 - \$1450	\$950 - \$1200
Oakland	\$650 - \$850	\$400 - \$550	\$1200 - \$1500	\$750 - \$950	\$2850 - \$3600	\$500 - \$650	\$550 - \$700	\$1350 - \$1700
Oceana	\$1100 - \$1350	\$2000 - \$2500	\$1300 - \$1600	\$1750 - \$2150	\$2450 - \$3050	\$1350 - \$1700	\$1500 - \$1900	\$950 - \$1200
Ogemaw	\$600 - \$750	\$1300 - \$1600	\$1900 - \$2400	\$1000 - \$1250	\$1900 - \$2350	\$1000 - \$1250	\$800 - \$1000	\$2050 - \$2550
Ontonagon	\$3700 - \$4600	\$4400 - \$5500	\$4400 - \$5450	\$4100 - \$5150	\$1450 - \$1800	\$4100 - \$5100	\$3900 - \$4850	\$4250 - \$5300
Osceola	\$750 - \$950	\$1550 - \$1900	\$1400 - \$1750	\$1250 - \$1550	\$2050 - \$2600	\$1050 - \$1300	\$1000 - \$1250	\$1250 - \$1600

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Saginaw</b>	<b>St. Clair</b>	<b>St. Joseph</b>	<b>Sanilac</b>	<b>Schoolcraft</b>	<b>Shiawassee</b>	<b>Tuscola</b>	<b>Van Buren</b>
Oscoda	\$850 - \$1050	\$1550 - \$1950	\$2150 - \$2700	\$1250 - \$1550	\$1600 - \$2000	\$1250 - \$1550	\$1050 - \$1300	\$2150 - \$2650
Otsego	\$1200 - \$1500	\$1850 - \$2300	\$2100 - \$2600	\$1550 - \$1950	\$1300 - \$1600	\$1550 - \$1950	\$1350 - \$1650	\$2050 - \$2600
Ottawa	\$1100 - \$1350	\$1550 - \$1950	\$850 - \$1050	\$1700 - \$2150	\$2950 - \$3650	\$900 - \$1150	\$1450 - \$1850	\$500 - \$650
Presque Isle	\$1250 - \$1600	\$1950 - \$2450	\$2650 - \$3300	\$1650 - \$2100	\$1300 - \$1650	\$1650 - \$2050	\$1450 - \$1800	\$2600 - \$3250
Roscommon	\$750 - \$950	\$1450 - \$1850	\$1750 - \$2200	\$1150 - \$1450	\$1650 - \$2100	\$1150 - \$1450	\$950 - \$1200	\$1750 - \$2200
Saginaw	--	\$850 - \$1050	\$1250 - \$1550	\$550 - \$700	\$2350 - \$2950	\$350 - \$400	\$350 - \$400	\$1400 - \$1750
St. Clair	\$850 - \$1050	--	\$1550 - \$1950	\$400 - \$500	\$3050 - \$3800	\$700 - \$900	\$600 - \$750	\$1700 - \$2150
St. Joseph	\$1250 - \$1550	\$1600 - \$1950	--	\$1750 - \$2200	\$3300 - \$4150	\$1000 - \$1250	\$1550 - \$1900	\$450 - \$600
Sanilac	\$550 - \$700	\$400 - \$500	\$1750 - \$2200	--	\$2750 - \$3450	\$850 - \$1050	\$300 - \$350	\$1900 - \$2350
Schoolcraft	\$2350 - \$2950	\$3050 - \$3800	\$3300 - \$4100	\$2750 - \$3450	--	\$2750 - \$3450	\$2550 - \$3150	\$3250 - \$4050
Shiawassee	\$350 - \$450	\$700 - \$850	\$1000 - \$1200	\$850 - \$1050	\$2650 - \$3300	--	\$600 - \$750	\$1100 - \$1400
Tuscola	\$350 - \$400	\$600 - \$750	\$1500 - \$1900	\$300 - \$350	\$2550 - \$3200	\$600 - \$750	--	\$1650 - \$2050
Van Buren	\$1400 - \$1750	\$1700 - \$2150	\$450 - \$600	\$1900 - \$2400	\$3250 - \$4100	\$1100 - \$1400	\$1650 - \$2100	--
Washtenaw	\$800 - \$1000	\$750 - \$900	\$900 - \$1100	\$1100 - \$1350	\$3000 - \$3750	\$600 - \$750	\$850 - \$1100	\$1000 - \$1300
Wayne	\$1000 - \$1200	\$550 - \$600	\$1150 - \$1400	\$1000 - \$1150	\$3250 - \$4000	\$850 - \$1000	\$850 - \$1000	\$1300 - \$1600
Wexford	\$950 - \$1150	\$1700 - \$2150	\$1500 - \$1900	\$1400 - \$1800	\$1850 - \$2350	\$1200 - \$1500	\$1200 - \$1500	\$1400 - \$1750

### Washtenaw County–Wexford County

	<b>Washtenaw</b>	<b>Wayne</b>	<b>Wexford</b>
Alcona	\$1600 - \$2000	\$1800 - \$2200	\$1050 - \$1300
Alger	\$3250 - \$4050	\$3450 - \$4300	\$2100 - \$2650
Allegan	\$1100 - \$1400	\$1400 - \$1700	\$1150 - \$1450
Alpena	\$1800 - \$2250	\$2050 - \$2500	\$1150 - \$1450
Antrim	\$1900 - \$2350	\$2150 - \$2600	\$500 - \$650
Arenac	\$1150 - \$1450	\$1400 - \$1650	\$800 - \$1050
Baraga	\$4050 - \$5050	\$4300 - \$5300	\$2900 - \$3650
Barry	\$850 - \$1100	\$1150 - \$1350	\$1150 - \$1450
Bay	\$850 - \$1050	\$1100 - \$1300	\$900 - \$1100
Benzie	\$1900 - \$2400	\$2150 - \$2650	\$250 - \$350
Berrien	\$1250 - \$1550	\$1550 - \$1900	\$1600 - \$2000
Branch	\$700 - \$900	\$900 - \$1050	\$1700 - \$2100
Calhoun	\$600 - \$750	\$900 - \$1100	\$1550 - \$1950
Cass	\$1100 - \$1400	\$1400 - \$1700	\$1550 - \$1950
Charlevoix	\$2100 - \$2650	\$2350 - \$2900	\$700 - \$900
Cheboygan	\$2050 - \$2600	\$2300 - \$2800	\$1050 - \$1300

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Washtenaw</b>	<b>Wayne</b>	<b>Wexford</b>
Chippewa	\$2550 - \$3150	\$2750 - \$3400	\$1400 - \$1750
Clare	\$1250 - \$1600	\$1500 - \$1800	\$450 - \$550
Clinton	\$700 - \$850	\$900 - \$1100	\$1050 - \$1300
Crawford	\$1600 - \$2000	\$1850 - \$2250	\$600 - \$700
Delta	\$3250 - \$4050	\$3500 - \$4300	\$2100 - \$2650
Dickinson	\$3800 - \$4700	\$4000 - \$4950	\$2650 - \$3300
Eaton	\$650 - \$850	\$900 - \$1050	\$1300 - \$1650
Emmet	\$2200 - \$2700	\$2400 - \$2950	\$850 - \$1050
Genesee	\$450 - \$550	\$700 - \$800	\$1250 - \$1550
Gladwin	\$1150 - \$1450	\$1400 - \$1650	\$600 - \$750
Gogebic	\$4600 - \$5750	\$4850 - \$6000	\$3450 - \$4350
Grand Traverse	\$1900 - \$2400	\$2150 - \$2600	\$250 - \$300
Gratiot	\$850 - \$1100	\$1100 - \$1300	\$850 - \$1050
Hillsdale	\$550 - \$700	\$750 - \$850	\$1700 - \$2100
Houghton	\$4300 - \$5400	\$4550 - \$5650	\$3150 - \$3950
Huron	\$1150 - \$1450	\$1050 - \$1250	\$1300 - \$1650
Ingham	\$500 - \$600	\$700 - \$850	\$1250 - \$1550
Ionia	\$850 - \$1050	\$1100 - \$1300	\$900 - \$1100
Iosco	\$1350 - \$1650	\$1550 - \$1900	\$900 - \$1100
Iron	\$4100 - \$5100	\$4300 - \$5350	\$2950 - \$3700
Isabella	\$1100 - \$1400	\$1350 - \$1650	\$550 - \$700
Jackson	\$300 - \$400	\$600 - \$700	\$1450 - \$1800
Kalamazoo	\$750 - \$950	\$1050 - \$1250	\$1350 - \$1650
Kalkaska	\$1750 - \$2200	\$2000 - \$2450	\$300 - \$350
Kent	\$1050 - \$1350	\$1300 - \$1600	\$850 - \$1050
Keweenaw	\$4550 - \$5700	\$4800 - \$5950	\$3450 - \$4300
Lake	\$1700 - \$2100	\$1900 - \$2350	\$350 - \$400
Lapeer	\$650 - \$850	\$650 - \$750	\$1450 - \$1800
Leelanau	\$2050 - \$2600	\$2300 - \$2800	\$400 - \$500
Lenawee	\$250 - \$350	\$500 - \$600	\$1750 - \$2150
Livingston	\$250 - \$350	\$500 - \$600	\$1450 - \$1800
Luce	\$2850 - \$3550	\$3050 - \$3800	\$1700 - \$2150
Mackinac	\$2450 - \$3100	\$2700 - \$3300	\$1350 - \$1650
Macomb	\$550 - \$650	\$350 - \$400	\$1700 - \$2100
Manistee	\$1850 - \$2350	\$2100 - \$2550	\$200 - \$250
Marquette	\$3650 - \$4550	\$3900 - \$4800	\$2500 - \$3150

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>

	<b>Washtenaw</b>	<b>Wayne</b>	<b>Wexford</b>
Mason	\$1900 - \$2400	\$2050 - \$2500	\$450 - \$550
Mecosta	\$1350 - \$1650	\$1550 - \$1900	\$500 - \$650
Menominee	\$3650 - \$4550	\$3850 - \$4800	\$2500 - \$3150
Midland	\$1000 - \$1250	\$1250 - \$1500	\$650 - \$850
Missaukee	\$1550 - \$1950	\$1800 - \$2200	\$300 - \$350
Monroe	\$300 - \$400	\$400 - \$450	\$1950 - \$2400
Montcalm	\$1100 - \$1350	\$1350 - \$1600	\$700 - \$850
Montmorency	\$1700 - \$2100	\$1900 - \$2350	\$950 - \$1200
Muskegon	\$1450 - \$1800	\$1650 - \$2000	\$950 - \$1200
Newaygo	\$1450 - \$1850	\$1700 - \$2100	\$550 - \$700
Oakland	\$350 - \$450	\$300 - \$300	\$1550 - \$1950
Oceana	\$1700 - \$2100	\$1900 - \$2350	\$650 - \$850
Ogemaw	\$1250 - \$1550	\$1450 - \$1800	\$700 - \$850
Ontonagon	\$4350 - \$5400	\$4550 - \$5650	\$3200 - \$4000
Osceola	\$1450 - \$1850	\$1700 - \$2100	\$300 - \$400
Oscoda	\$1500 - \$1850	\$1700 - \$2100	\$850 - \$1050
Otsego	\$1800 - \$2250	\$2050 - \$2500	\$800 - \$950
Ottawa	\$1250 - \$1550	\$1500 - \$1800	\$1100 - \$1350
Presque Isle	\$1900 - \$2350	\$2150 - \$2600	\$1300 - \$1650
Roscommon	\$1400 - \$1750	\$1650 - \$2000	\$500 - \$600
Saginaw	\$750 - \$950	\$1000 - \$1200	\$950 - \$1150
St. Clair	\$700 - \$900	\$550 - \$600	\$1700 - \$2150
St. Joseph	\$900 - \$1100	\$1150 - \$1400	\$1500 - \$1900
Sanilac	\$1050 - \$1350	\$950 - \$1150	\$1450 - \$1800
Schoolcraft	\$3000 - \$3750	\$3250 - \$4000	\$1850 - \$2300
Shiawassee	\$600 - \$800	\$750 - \$900	\$1200 - \$1500
Tuscola	\$850 - \$1050	\$850 - \$1000	\$1200 - \$1500
Van Buren	\$1000 - \$1250	\$1300 - \$1600	\$1400 - \$1750
Washtenaw	--	\$300 - \$350	\$1650 - \$2100
Wayne	\$300 - \$350	\$50 - \$0	\$1900 - \$2300
Wexford	\$1650 - \$2050	\$1900 - \$2300	--

Note: internal and external audits question the veracity of these studies.

- [https://www.michigan.gov/documents/mdot/MDOT\\_AggregateReport\\_666910\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_AggregateReport_666910_7.pdf)

- <https://audgen.michigan.gov/complete-projects/procurement-michigan-aggregates-market-study/>



**PUBLIC SECTOR  
CONSULTANTS**

---

230 N. Washington Square  
Suite 300  
Lansing, MI 48933