DEPARTMENT OF TRANSPORTATION

Minnesota Highway Construction Cost Index 4th Quarter and Calendar Year 2020

Minnesota Highway Construction Cost Index

The Minnesota Highway Construction Cost Index is an indicator of price trends for highway construction. Each quarter, an average unit price is computed for six indicator items. The unit prices are based upon bids from projects let during that quarter. Prices from projects which cost less than \$100,000, and projects which use Design Build, Contract Manager/General Contractor (CMGC), Indefinite Delivery/Indefinite Delivery (IDIQ) and Emergency Order Project methods of contracting are not included in the Cost Index. The average unit price and quantity for these six indicator items along with the corresponding 1987 Base Year data is used to compute three sub-indices and the composite index. Each index and the associated indicator items are listed in Table 1.

Table 1/Indices and Indicator Items

Index	Indicator Items
Excavation Index	Excavation
Surfacing Index	Plant-Mixed Bituminous Pavement, Concrete Pavement
Structures Index	Structural Concrete, Reinforcing Steel, Structural Concrete
Composite Index	All Indicator Items

4th Quarter 2020 Indices

The Composite Minnesota Highway Construction Cost Index for the 4th Quarter 2020 was not computed due to the absence of data for the Concrete Pavement and Structural Steel Indicator Items. Without a unit price for each indicator item, the resulting index is not comparable to previous indices. The other 4th Quarter 2020 Indices are compared to the 4th Quarter 2019 Indices in Table 2.

Table 2/4th Quarter 2019 and 2020 Indices

Index	4 th Quarter 2019	4 th Quarter 2020	
Excavation Index	902.48	439.97	
Surfacing Index	344.09	Insufficient data to compute index.	
Structures Index	Insufficient data to compute index.	Insufficient data to compute index.	
Composite Index	Insufficient data to compute index.	Insufficient data to compute index.	

The average number of bidders per project in the 4th Quarter of 2020 was 4.55. In comparison, the average number of bidders per project in the 4th Quarter of 2019 was 3.21. Additional project data about the 4th Quarter of 2019 and 2020 are included in Table 3.

Table 3/4th Quarter 2019 and 2020 Project Data

Description	4 th Quarter 2019	4 th Quarter 2020
Number of Awarded Projects	29	29
Cost of Awarded Projects	\$250,387,508.64	\$83,786,781.18
Number of Bidders	93	132
Average Number of Bidders	3.21	4.55
Number of Cost Index Projects	17	14
Cost of Cost Index Projects	\$36,060,051.23	\$22,977,389.88

The 4th Quarter 2020 Unit Prices for each indicator Item are compared to the 4th Quarter 2019 Unit Prices in Table 4.

Indicator Item (Unit)	4 th Quarter 2019 Quantity	4 th Quarter 2019 Cost	4 th Quarter 2019 Unit Price	4 th Quarter 2020 Quantity	4 th Quarter 2020 Cost	4 th Quarter 2020 Unit Price
Excavation (CY)	97,890	\$1,771,184.00	\$18.09	131,871	\$1,163,216.68	\$8.82
Plant-Mixed Bituminous Pavement (Ton)	396,354	\$24,882,711.68	\$62.78	291,589	\$19,387,776.93	\$66.49
Concrete Pavement (CY)	25,879	\$3,895,905.60	\$150.54	0	\$0.00	NA
Structural Concrete (CY)	5,070	\$4,575,949.95	\$902.55	2,454	\$2,125,930.00	\$866.31
Reinforcing Steel (lb.)	693,436	\$934,300.00	\$1.35	230,037	\$300,466.27	\$1.31
Structural Steel (Ib.)	0.00	\$0.00	NA	0.00	\$0.00	NA

Table 4/4th Quarter 2019 and 2020 Indicator Item Unit Prices

Excavation

The average Excavation cost was \$8.82/CY, down \$9.27/CY from the 4th Quarter of 2019. Two (2) projects were considered this quarter.

Plant Mixed Bituminous Pavement

The average Plant Mixed Bituminous cost was \$66.49/ton, up \$3.71/ton from the 4th Quarter of 2019. Nine (9) projects were considered this quarter.

Concrete Pavement

There were no eligible projects with Concrete Pavement this quarter.

Structural Concrete

The average Structural Concrete cost was \$866.31/CY, down \$36.24/CY from the 4th Quarter of 2019. Six (6) projects were considered this quarter.

Reinforcing Steel

The average Reinforcing Steel cost was \$1.31/lb, down \$0.04/lb from the 4th Quarter of 2019. Three (3) projects were considered this quarter.

Structural Steel

There were no eligible projects with Structural Steel this quarter.

Calendar Year 2020 Indices

The Composite Minnesota Highway Construction Cost Index for Calendar Year 2020 was not computed due to the absence of data for the Structural Steel Indicator Item. Without a unit price for each indicator item, the resulting index is not comparable to previous indices. The other Calendar Year 2020 Indices are compared to the Calendar Year 2019 Indices in Table 5.

Table 5/Calendar Year 2019 and 2020 Indices

Index	Calendar Year 2019	Calendar Year 2020
Excavation Index	530.81	414.53
Surfacing Index	337.90	339.71
Structures Index	Insufficient data to compute index.	Insufficient data to compute index.
Composite Index	Insufficient data to compute index.	Insufficient data to compute index.

The average number of bidders per project in Calendar Year 2020 was 3.93. In comparison, the average number of bidders per project in Calendar Year 2019 was 2.98. Additional data about the Calendar Year 2019 and 2020 are included in Table 6.

Table 6/Calendar Y	(ear 2019	and 2020 Dat	а
--------------------	-----------	--------------	---

Description	Calendar Year 2019	Calendar Year 2020
Number of Awarded Projects	167	148
Cost of Awarded Projects	\$991,069,771.53	\$919,220,225.85
Number of Bidders	497	582
Average Number of Bidders	2.98	3.93
Number of Cost Index Projects	71	52
Cost of Cost Index Projects	\$191,307,602.33	\$171,345,402.06

The Calendar Year 2020 Unit Prices for each indicator Item are compared to the Calendar Year

2019 Unit Prices in Table 7.

Indicator Item (Unit)	Calendar Year 2019 Quantity	Calendar Year 2019 Cost	Calendar Year 2019 Unit Price	Calendar Year 2020 Quantity	Calendar Year 2020 Cost	Calendar Year 2020 Unit Price
Excavation (CY)	1,393,473	\$14,829,486.78	\$10.64	1,718,583	\$14,282,719.75	\$8.31
Plant-Mixed Bituminous Pavement (Ton)	2,276,348	\$137,582,055.68	\$60.44	1,756,774	\$106,523,746.07	\$60.64
Concrete Pavement (CY)	164,017	\$26,712,187.44	\$162.86	230,265	\$38,068,036.25	\$165.32
Structural Concrete (CY)	12,040	\$10,256,762.93	\$851.89	10,997	\$10,449,636.16	\$950.23
Reinforcing Steel (Ib.)	1,377,298	\$1,927,109.50	\$1.40	1,452,739	\$2,021,263.83	\$1.39
Structural Steel (lb.)	0	\$0.00	NA	0	\$0.00	NA

Table 7/Calendar Year 2019 and 2020 Indicator Item Unit Prices

Excavation

The average Excavation cost was \$8.31/CY, down \$2.33/CY from Calendar Year 2019. Nineteen (19) projects were considered this Calendar Year.

Plant Mixed Bituminous Pavement

The average Plant Mixed Bituminous cost was \$60.64/ton, up \$0.20/ton from Calendar Year 2019. Forty-eight (48) projects were considered this Calendar Year.

Concrete Pavement

The average Concrete Pavement cost was \$165.32/CY, up \$2.46/CY from Calendar Year 2019. Eight (8) projects were considered this Calendar Year.

Structural Concrete

The average Structural Concrete cost was \$950.23/CY, up \$98.34/CY from Calendar Year 2019. Twenty (20) projects were considered this Calendar Year.

Reinforcing Steel

The average Reinforcing Steel cost was \$1.39/lb, down \$0.01/lb from Calendar Year 2019. Fourteen (14) projects were considered this Calendar Year.

Structural Steel

There were no eligible projects with Structural Steel this Calendar Year.

Calendar Year 2020 Quarterly Data Summary

The 2020 Quarterly Indices, Quarterly Project Data and Quarterly Unit Prices are summarized in Tables 8, 9 and 10.

Table 8/2020 Quarterly Indices

Index	1 st Quarter 2020	2 nd Quarter 2020	3 rd Quarter 2020	4 th Quarter 2020	Calendar Year 2020
Excavation Index	448.30	513.68	281.90	439.97	414.53
Surfacing Index	333.64	NA	281.23	NA	339.71
Structures Index	NA	NA	NA	NA	NA
Composite Index	NA	NA	NA	NA	NA

Table 9/2020 Quarterly Project Data

Description	1st Quarter 2020	2nd Quarter 2020	3rd Quarter 2020	4th Quarter 2020	Calendar Year 2020
Number of Awarded Projects	59	31	29	29	148
Cost of Awarded Projects (millions)	\$365.59	\$136.00	\$333.84	\$83.79	\$919.22
Number of Bidders	184	133	133	132	582
Average Number of Bidders	3.12	4.29	4.59	4.55	3.93
Number of Cost Index Projects	28	6	4	14	52
Cost of Cost Index Projects (millions)	\$85.45	\$42.29	\$20.63	\$22.98	\$171.35

Table 10/2020 Quarterly Indicator Item Unit Prices

Indicator Item (Unit)	1st Quarter 2020 Unit Price	2nd Quarter 2020 Unit Price	3rd Quarter 2020 Unit Price	4th Quarter 2020 Unit Price	Calendar Year 2020 Unit Price
Excavation (CY)	\$8.99	\$10.30	\$5.65	\$8.82	\$8.31
Plant-Mixed Bituminous Pavement (Ton)	\$59.31	\$63.10	\$47.81	\$66.49	\$60.64
Concrete Pavement (CY)	\$165.33	NA	\$165.29	NA	\$165.32
Structural Concrete (CY)	\$945.13	\$1,162.04	\$897.84	\$866.31	\$950.23
Reinforcing Steel (Ib.)	\$1.40	\$1.53	\$1.25	\$1.31	\$1.39
Structural Steel (lb.)	NA	NA	NA	NA	NA