Recent Estimating Trends (November 2023)



Considerations in Estimate Development

Review FDM 19-5 Estimates. The chapter has been updated to better guide estimators through the estimating process. Every project has unique factors that impact the cost of the overall projects. Being aware of how these factors impact the project you are using as a reference as well at the project you are estimating will lead to a more accurate total estimate. Review referenced project characteristics that may have impacted historic prices compared to your current contract.

- Contract requirements impact costs (location, anticipated construction schedule, staging, interim completion dates, schedule/paving restrictions, environmental restrictions, etc.). If the historical bid data is not being pulled for projects with similar characteristics the unit prices will need to be adjusted.
- Bid history more than 6 months old should be used with caution. The <u>WisDOT Chained Fisher Construction Cost</u> <u>Index (WisDOT CF CCI)</u> can be used to adjust unit prices, <u>FDM 19-5-5.6.4</u> page 22.
- Regression prices **do not** consider the unique factors of the source project or the project being estimated.

Bid Items

Various commodity prices have increased and remain high. Average and above average historical prices are recommended for estimating.

- The <u>WisDOT CF CCI</u> has increased an estimated 19.0% in the last year. While the trend still indicates an upward trajectory, there are signs that it is beginning to level off. Many of the commodity indexes have stopped decreasing.
 National steel commodities and Wisconsin diesel prices have stopped increasing.
 - For piling, rebar, steel rail, guardrail, reinforced concrete culvert pipes and other steel items, Proposal Management recommends using bid history six months or less.
 - World crude oil prices have returned to lower prices from 2015 to 2019. Wisconsin diesel prices will hopefully
 decrease and follow national trends after the Superior Refinery is scheduled to be <u>back online in QTR2 of 2023</u>.
 Until then, items with a significant amount of equipment and hauling are experiencing higher bid prices.

Asphalt Pavement Items

Asphaltic material commodity is back down to 2018, 2019, and 2021 values from the spike experienced in 2022. Like diesel, asphaltic material prices in Wisconsin will likely remain high until the Superior Refinery is online.

For HMA Pavement estimating guidance, please review <u>FDM 19-5-5.6.3</u> Bid Item Estimating Guidance (pages 19 and 20).

- Asphalt projects in south-central Wisconsin are seeing lower prices because of more, competition in Jefferson, Dane, Rock, Walworth and western Waukesha Counties since Dec. 2019.
- In the last few months, smaller, local asphalt projects saw lower prices and additional competition across much of the state. However, complex proposals received much higher bids.
- As shown below, Gradation 5, Binder 58-34 or SMA asphalt mixes cost more than other mix designs. The Asphalt Pricing Map includes an average of all mix designs.

Also, review FDM 19-5-5.6.3 Bid Item Estimating Guidance (page 19) and FDM 19-5-5.5.1, Primary Tools (page 14).

HMA pavement has about 80 items. Some mix designs do not have a large difference in unit prices between each other, and broader searches may be used. Below, the unit price difference for the HMA pavement mixture characteristics from November 2022 to November 2023 are shown. Estimates may be adjusted with more common items, but only one characteristic price difference or an average of multiple characteristics should be used to adjust prices.

Gradation	3 4		4	5				Binder	5	58-28	58	3-34	
Unit Price Difference	\$7		7	\$	\$12				Unit Price Difference		\$2	24	
Traffic	LT MT		HT SM/		٨N	Designation		; F	1	۷			
Unit Price Difference		\$-	-1	\$2	20	\$	16		Unit Price Difference		\$19	\$10	

Other Items

For additional guidance of the items below, please review <u>FDM 19-5-5.6.3</u> Bid Item Estimating Guidance (pages 19 to 21 of FDM 19-5).

- Mobilization makes up a larger percentage of the work in small and large proposals. Mobilization is a top item on both the items bid above and below the estimate tables below. Mobilization percentages recently have increased. Use the <u>Similar Projects Tool</u> for more recent Mobilization percentages.
- Removing Asphaltic Surface Milling often shows up on the top items bid above and below the estimate tables below. Milling prices have generally increased since January 2022. Milling is more expensive in contracts in urban areas, with staged work or in areas with a single asphalt bidder.
- Concrete Masonry Bridges is often in the top items bid below or above estimate, and regression prices should not be used. The two main factors that influence prices is the bridge type and the contractor. These factors are discussed in FDM 19-5-5.6.3 Bid Item Estimating Guidance (page 20 of FDM 19-5).

Recent Estimating Trends (November 2023)



Top Items Bid Above Estimate (August 2023 to November 2023)

Rank	ltem Number	Item description	ltem Freq.	ltem Freq. >1%	Estimate Item Amount	Bid Item Amount	ltem Difference	Perc. Diff. (by Est.)
1	619.1000	Mobilization	32	27	\$9,676,919	\$15,331,466	\$5,654,547	58%
2	SPV.0060	Special	350	25	\$8,466,689	\$13,659,719	\$5,193,031	61%
3	206.1001	Excavation for Structures Bridges (structure)	15	4	\$130,000	\$5,068,964	\$4,938,964	3799%
4	204.0120	Removing Asphaltic Surface Milling	19	10	\$3,517,444	\$5,271,932	\$1,754,488	50%
5	643.5000	Traffic Control	29	6	\$827,000	\$2,401,336	\$1,574,336	190%
6	SPV.0180	Special	14	1	\$12,904,659	\$14,454,807	\$1,550,147	12%
7	SPV.0090	Special	75	9	\$3,203,640	\$4,377,449	\$1,173,809	37%
8	502.0100	Concrete Masonry Bridges	6	3	\$6,601,235	\$7,692,930	\$1,091,695	17%
9	205.0100	Excavation Common	21	7	\$3,120,997	\$4,204,990	\$1,083,993	35%

Top Items Bid Below Estimate (August 2023 to November 2023)

Rank	ltem Number	Item description	ltem Freq.	ltem Freq. >1%	Estimate Item Amount	Bid Item Amount	ltem Difference	Perc. Diff. (by Est.)
1	305.0120	Base Aggregate Dense 1 1/4-Inch	41	8	\$10,245,070	\$4,675,205	-\$5,569,865	-54%
2	205.0100	Excavation Common	36	12	\$11,328,722	\$7,666,051	-\$3,662,671	-32%
3	460.6223	HMA Pavement 3 MT 58-28 S	17	12	\$15,751,582	\$13,780,830	-\$1,970,752	-13%
4	460.6224	HMA Pavement 4 MT 58-28 S	17	9	\$13,298,846	\$11,817,104	-\$1,481,742	-11%
5	311.0110	Breaker Run	10	2	\$1,260,412	\$279,363	-\$981,049	-78%
6	390.0405	Base Patching Concrete SHES	3	2	\$1,536,441	\$650,886	-\$885,555	-58%

• Item Freq.: Number of times the bid item was bid above or below the estimate.

• Item Freq. >1% or Freq. <-1%: Number of times the bid item was bid significantly higher or low than the estimate. The difference between the total cost of the item bid and estimate, expressed as a percent of the total estimate, is greater than 1%.

- Estimate and Bid Amounts: Estimate amount and low bid amount for bid items bid above or below the estimate.
- Item Difference: Bid item difference amount between the estimate and bid (Bid Column Estimate Column).
- Perc. Diff. (by Est.): Percent of item difference by estimate (Item Difference Column/Estimate Column)

Tables above are statewide totals, and rejected bids are included, which provide a better picture for what items are estimated low. **Trends will vary in** each region and program. Programs and regions with higher budgets will greatly impact these lists.