Recent Estimating Trends (April 2024)



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 Index</u> (WisDOT CF CCI) can be used to adjust unit prices, FDM 19-5-5.6.4 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 decreased an estimated 6.8% in the last year. The index peaked in 2023 Q2 and has showed signs of decreasing in the second half of 2023.
- National steel commodities and Wisconsin diesel prices have stopped increasing.
 - o 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 have decreased
 this year and will hopefully decrease more and follow national trends after the Superior Refinery has been rebuilt
 and restarted.

Asphalt Pavement Items

Gradation

Asphaltic material commodity is back down to 2018, 2019, and 2021 values from the spike experienced in 2022 and 2023. It has decreased in the last year and bids have frequently come in below estimate as shown on the second page. The completion of the Superior refinery has also led to asphalt prices decreasing.

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 HT 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 April 2023 to April 2024 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.

Unit Price Difference		\$11		\$11						Unit Price D
Traffic	LT M		т нт		SI	SMA		Des		
Unit Price Difference		\$		\$	9	\$	15			Unit Price D

Binder		58-2	28		58-34	
Unit Price Difference		\$29				
Designation	5	}	Н			٧
Unit Price Difference		\$1	14	\$	8	

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 Similar Projects Tool 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 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 (April 2024)



Top Items Bid Above Estimate (February 2024 to April 2024)

Rank	Item Number	Item description	Item Freq.	Item Freq. >1%	Estimate Item Amount	Bid Item Amount	Item Difference	Perc. Diff. (by Est.)
1	SPV.0060	Special	350	16	\$10,367,011	\$18,748,925	\$8,381,914	81%
2	619.1000	Mobilization	35	28	\$13,044,325	\$20,956,634	\$7,912,309	61%
3	SPV.0035	Special	14	2	\$10,746,461	\$15,237,854	\$4,491,393	42%
4	SPV.0090	Special	77	6	\$3,459,411	\$5,227,692	\$1,768,281	51%
5	502.0100	Concrete Masonry Bridges	8	3	\$11,682,387	\$13,339,100	\$1,656,713	14%
6	390.0100	Removing Pavement for Base Patching	5	3	\$521,333	\$1,968,702	\$1,447,369	278%
7	206.1001	Excavation for Structures Bridges (structure)	16	7	\$1,227,000	\$2,207,547	\$980,547	80%
8	502.1100	Concrete Masonry Seal	1	0	\$2,099,300	\$2,999,000	\$899,700	43%
9	203.0220	Removing Structure (structure)	18	3	\$1,738,000	\$2,607,843	\$869,843	50%

Top Items Bid Below Estimate (February 2024 to April 2024)

Rank	Item Number	Item description	Item Freq.	Item Freq. >1%	Estimate Item Amount	Bid Item Amount	Item Difference	Perc. Diff. (by Est.)
1	SPV.0090	Special	109	15	\$30,364,157	\$17,342,101	-\$13,022,056	-43%
2	619.1000	Mobilization	57	46	\$17,574,864	\$10,002,420	-\$7,572,444	-43%
3	205.0100	Excavation Common	49	24	\$13,976,772	\$8,729,167	-\$5,247,605	-38%
4	SPV.0060	Special	300	10	\$10,925,724	\$6,958,491	-\$3,967,233	-36%
5	204.0120	Removing Asphaltic Surface Milling	30	13	\$6,648,478	\$3,018,957	-\$3,629,521	-55%
6	460.6224	HMA Pavement 4 MT 58-28 S	19	13	\$20,294,581	\$17,135,698	-\$3,158,883	-16%

- 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.