

# Heavy Civil Construction Index

**Second Quarter** 





INDEX MOVEMENT									
		Q2 2021	Q1 2021						
Overall U.S. Economy	•	68.97	45.31						
Economy Where We Do Business	1	68.97	44.62						
Our Engineering and Construction Business	1	62.61	46.92						
Engineering and Construction Where We Do Business	1	60.34	47.31						
Backlog	1	53.45	37.50						
Book/Burn Rate	1	55.00	51.23						
Cost of Materials	•	5.45	25.61						
Cost of Labor	•	21.17	28.86						
Productivity	1	52.25	45.53						

The second quarter 2021 Heavy Civil Construction Index shows contractor sentiment has returned to positive territory for the first time in a year. This seems to align with much of the general economic news making headlines recently. In the third quarter of last year, the index fell below 50 for the first time in at least three years, plunging to 34.9. Since then, it has gradually improved to its current level of 55.8.

When reviewing the individual components that comprise the index, it's worth noting that contractors are more optimistic about the broader economy. Index scores are greatest for the overall U.S. economy and the economy where respondents do business and somewhat lower in the particular markets in which they operate. This is a shift from last quarter where optimism decreased for the broader perspectives.

All components are trending positive, except for cost of materials and labor, both of which are of growing concern for contractors where they do not have opportunities to protect against price escalation. These items are both important risk factors to pay attention to this coming year.

Compared to last quarter, optimism across all sectors has increased substantially. Residential site development continues to lead with strong ongoing expectations, followed by highway/

bridge and commercial site development. Respondents were generally less optimistic across other transportation segments, including port/marine/docks, aviation and transit/rail.

When asked to compare backlog to the same quarter last year and to evaluate current backlog with what is anticipated or needed, the responses are skewed slightly negative. Contractors are building backlog, as more indicate that they are booking backlog at a faster rate than they are burning it.

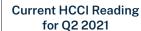
However, while backlog is slightly below the same quarter as a year ago and compared to expectations, margins on work acquired are down significantly when compared to last year. Margins are down only slightly when compared to last quarter, perhaps indicating a positive trend. Declining margins are the result of an identified increase in competitors, including from new entrants to the market, which has resulted in lower bid prices.

Although respondents are seeing somewhat more project opportunities, both in the number of projects available and the total dollar volume of opportunities, the forecast for total heavy civil construction is for slow growth in 2021 and 2022 compared with 2020 construction put in place numbers. The only segment with substantial growth this year is the water supply segment, which will see declines next year. Other segments, like roadways, bridges and conservation/development, will likely return to growth later this year and next.



## Heavy Civil Construction Index (HCCI) Q1 2018 to Q2 2021

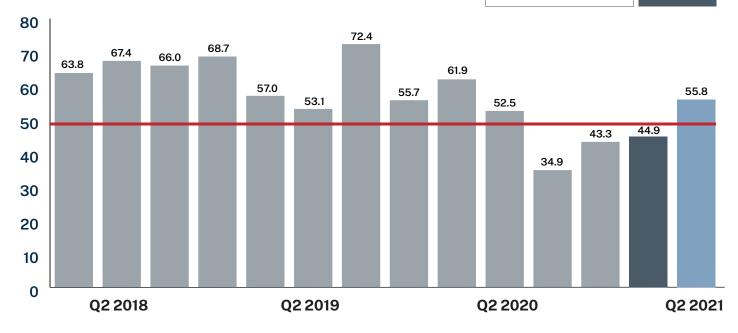
HCCI scores are based on a diffusion index where scores above 50 represent improving or expanding industry conditions, a score of 50 represents conditions remaining the same, and a score below 50 represents worse conditions than last quarter (or contraction).



Survey dates: March 24-April 14, 2021 55.8

**Previous Reading** 

44.9

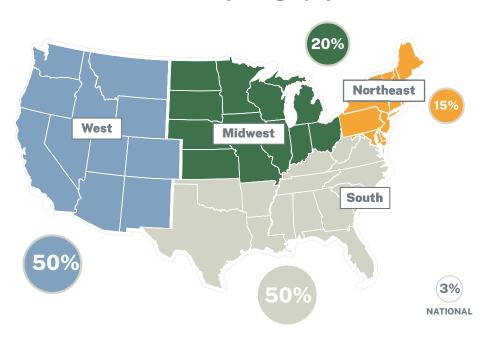


Source: FMI Heavy Civil Construction Index Q2 2021

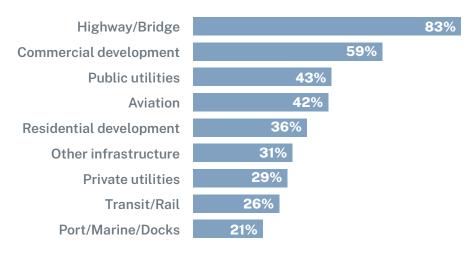


## **Where Participants Work**

#### By Geography



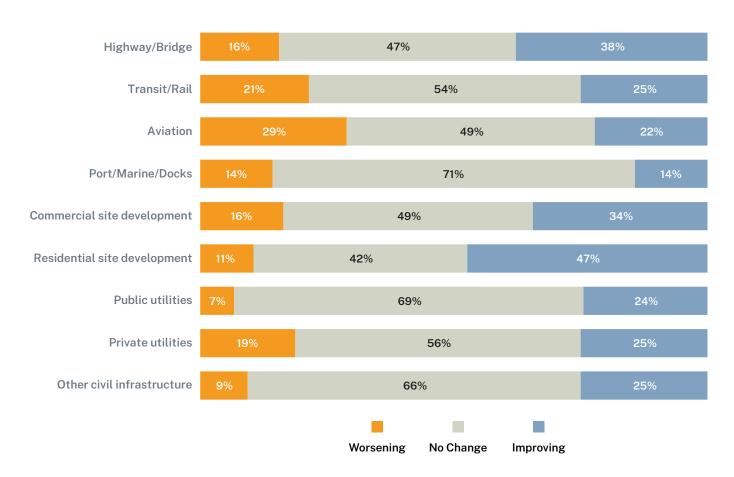
#### **By Discipline**



Respondents are able to select more than one option.



## **Perception of Change for Next Quarter**





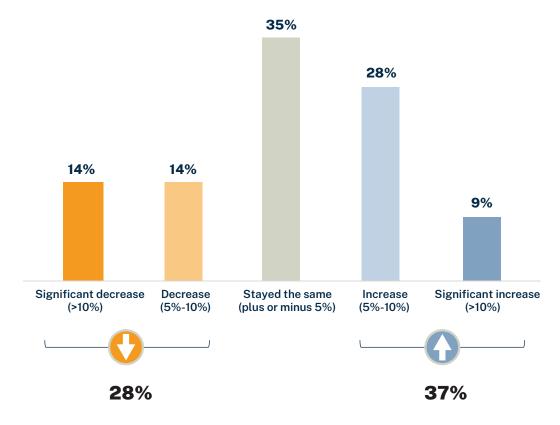
## Heavy Civil Market Conditions

- More contractors are booking backlog faster than they are burning it, an improvement over last quarter when the effects of winter slowdown were still weighing on contractors' ability to execute work.
- Although contractors are booking backlog faster than they are burning it, backlog levels are still below this time last year and below what is expected.
- Contractors seem to be cutting bid margins to build backlogs back to a more normal level.
- Adding additional strain on bid margins is the number of respondents indicating an increase in competitiveness and in the number of nontraditional competitors pursuing work in predominantly hard-bid construction markets.
- Contractors are reporting more opportunities than one year ago, a positive signal for the market.

## **Backlog Book/Burn Rate**

(Year over Year)

Book/burn rate is the rate at which you add backlog compared to the rate at which you burn backlog.

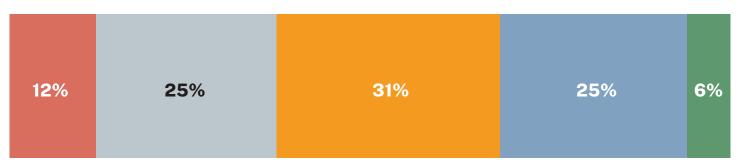


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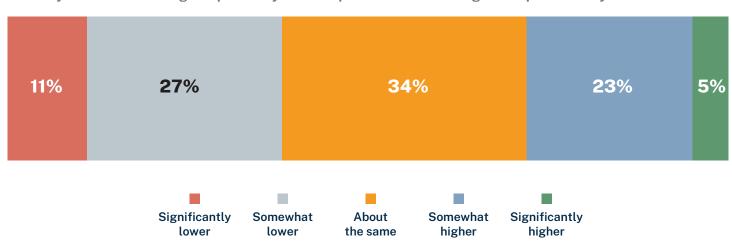


## **Backlog**

How does your backlog in the most recent quarter compare to the same quarter last year?



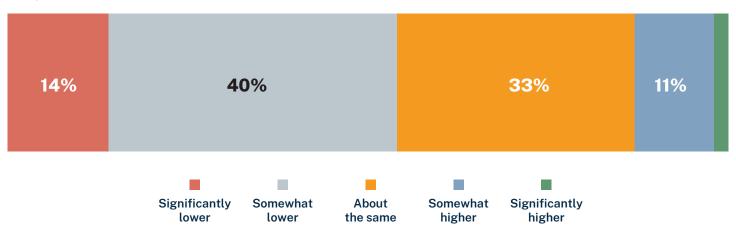
What is your current backlog compared to your anticipated/needed backlog at this point in the year?



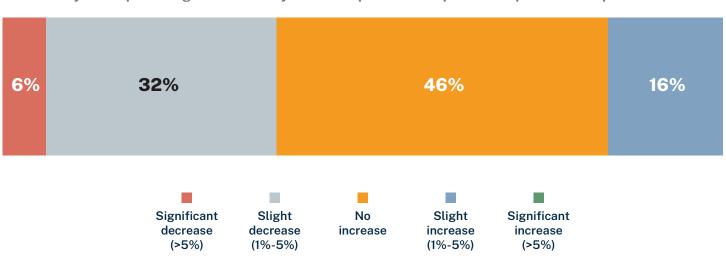


## Margin

How would you compare margin on the work you have acquired in this quarter compared to the same quarter last year?



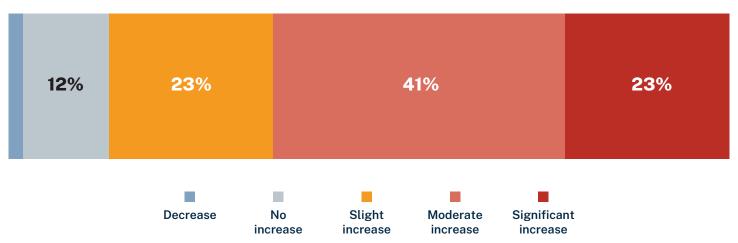
How would you compare margin on the work you have acquired in this quarter compared to last quarter?



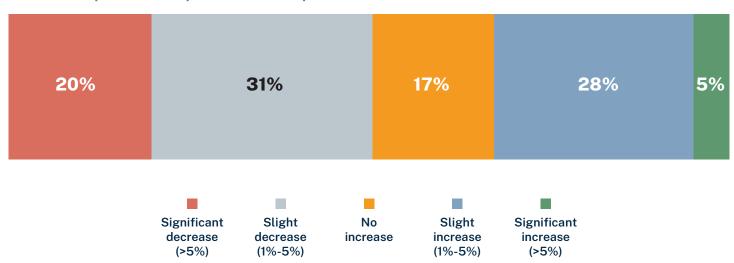


## **Competitive Landscape**

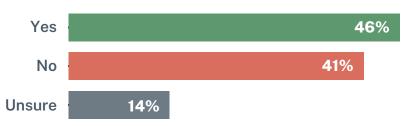
How has the competitive landscape changed in the last quarter in terms of the number of competitors?



How have bid prices been impacted in the last quarter?



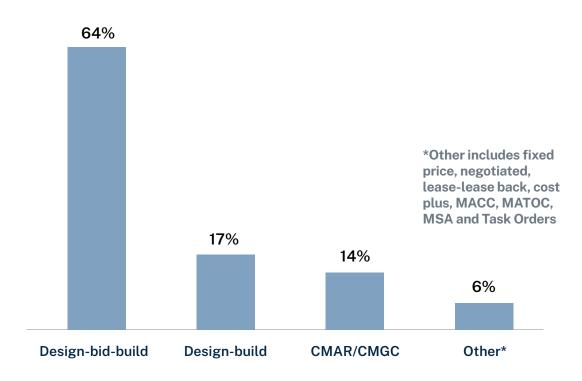
In the past six months, have you experienced an increase in nontraditional civil firms (new entrants) entering the market?





## **Project Delivery**

What percentage of the work available in your market is distributed across the following delivery methods?



CMAR/CMGC: Construction Manager at Risk - Construction Manager/General Contractor

MACC: Multiple Award Construction Contract MATOC: Multiple Award Task Order Contract

**MSA: Master Service Agreement** 



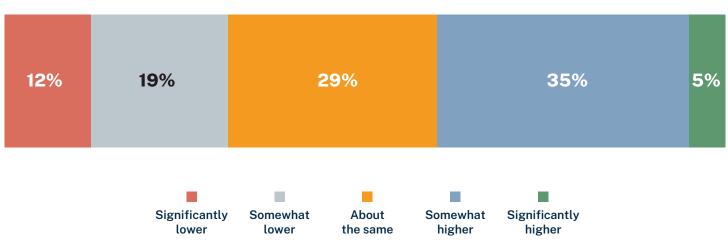
## **Current Issues: Available Opportunities**

How would you characterize the opportunity available in the markets you serve today compared to this time last year?

#### **Number of Projects**



#### Value of Projects (\$)

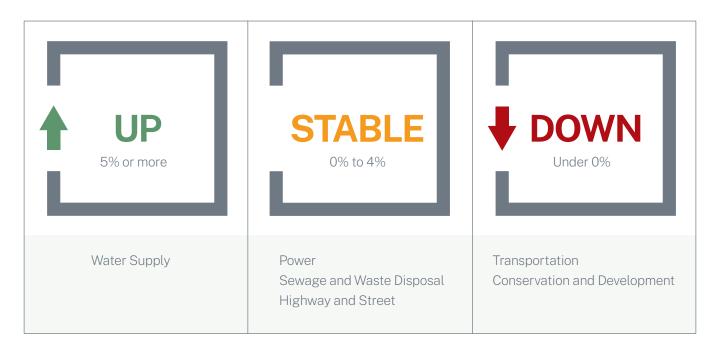


## **CONSTRUCTION SPENDING**

- The water supply segment is expected to see significant growth in 2021 before declining.
- Transportation construction continues its decline for the next two to three years before it returns.
- Roadways will see modest growth this year and larger increases in future years.
- Bridge construction will be stagnant this year but will see big jumps the following two years.

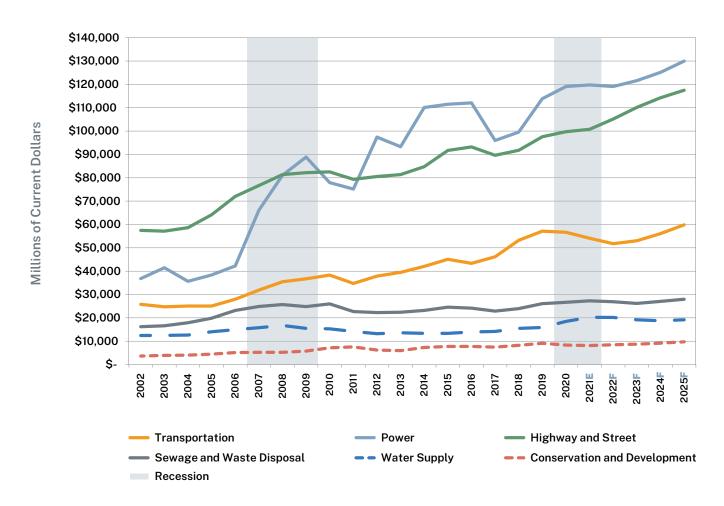
## **U.S. 2021 Segment Performance**

2021/2020 Comparison





## **Heavy Civil Construction Put in Place**



## **Construction Put in Place Estimated for the United States**

Millions of Current Dollars

First Quarter 2021 Forecast (based on Q4 2020 Actuals)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
TRANSPORTATION	43,340	46,138	53,218	57,154	56,638	54,075	51,763	53,026	56,058	59,827
Air	14,232	17,194	22,008	23,873	24,397	23,524	22,144	21,986	22,594	23,521
Rail/Transit	26,794	26,588	28,200	29,287	28,532	27,079	26,287	27,624	29,792	32,240
Port/Water	2,314	2,356	3,010	3,994	3,709	3,472	3,332	3,416	3,672	4,066
POWER	112,067	95,951	99,569	113,885	119,070	119,757	119,071	121,612	125,130	129,958
HIGHWAY AND STREET	93,187	89,620	91,745	97,559	99,728	100,768	105,171	110,150	114,228	117,492
Roadway	60,679	59,188	63,344	71,259	76,062	77,321	79,526	82,078	86,217	88,682
Bridge	32,508	30,432	28,401	26,300	23,666	23,447	25,645	28,072	28,010	28,811
SEWAGE AND WASTE DISPOSAL	24,151	22,901	23,931	26,089	26,666	27,288	26,906	26,171	27,035	27,990
WATER SUPPLY	13,940	14,168	15,477	15,882	18,510	20,250	20,160	19,168	18,770	19,181
CONSERVATION AND DEVELOPMENT	7,745	7,464	8,229	9,126	8,358	8,143	8,481	8,737	9,180	9,741
Total Heavy Civil Put in Place	\$294,430	\$276,242	\$292,169	\$319,695	\$328,970	\$330,281	\$331,552	\$338,865	\$350,400	\$364,188

#### **Construction Put in Place Estimated for the United States**

Change From Prior Year – Current Dollar Basis First Quarter 2021 Forecast (based on Q4 2020 Actuals)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
TRANSPORTATION	-3.9%	6.5%	15.3%	7.4%	-0.9%	-4.5%	-4.3%	2.4%	5.7%	6.7%
Air	8.0%	20.8%	28.0%	8.5%	2.2%	-3.6%	-5.9%	-0.7%	2.8%	4.1%
Rail/Transit	-9.1%	-0.8%	6.1%	3.9%	-2.6%	-5.1%	-2.9%	5.1%	7.8%	8.2%
Port/Water	-6.4%	1.8%	27.8%	32.7%	-7.1%	-6.4%	-4.0%	2.5%	7.5%	10.7%
POWER	0.5%	-14.4%	3.8%	14.4%	4.6%	0.6%	-0.6%	2.1%	2.9%	3.9%
HIGHWAY AND STREET	1.6%	-3.8%	2.4%	6.3%	2.2%	1.0%	4.4%	4.7%	3.7%	2.9%
Roadway	3.0%	-2.5%	7.0%	12.5%	6.7%	1.7%	2.9%	3.2%	5.0%	2.9%
Bridge	-0.9%	-6.4%	-6.7%	-7.4%	-10.0%	-0.9%	9.4%	9.5%	-0.2%	2.9%
SEWAGE AND WASTE DISPOSAL	-1.8%	-5.2%	4.5%	9.0%	2.2%	2.3%	-1.4%	-2.7%	3.3%	3.5%
WATER SUPPLY	4.4%	1.6%	9.2%	2.6%	16.5%	9.4%	-0.4%	-4.9%	-2.1%	2.2%
CONSERVATION AND DEVELOPMENT	0.1%	-3.6%	10.2%	10.9%	-8.4%	-2.6%	4.1%	3.0%	5.1%	6.1%
Total Heavy Civil Put in Place	0.2%	-6.2%	5.8%	9.4%	2.9%	0.4%	0.4%	2.2%	3.4%	3.9%

#### **ABOUT THE AUTHORS**



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