



2023
**HEAVY CIVIL
CONSTRUCTION INDEX**
Third Quarter Report



August 2023

EXECUTIVE SUMMARY



The third quarter 2023 Heavy Civil Construction Index rose to 56.1 from 55.5, marking the third consecutive increase. All four economic measures (overall economy, economy where we do business, our engineering and construction business, and engineering and construction where we do business) showed improvement, with respondents' views on the overall U.S. economy showing the largest increase.

Positive expectations through next quarter can be seen across multiple segments, except for residential and commercial site development. Respondents view public utilities and highway/bridge most favorably through next quarter.

Backlog to burn rates are up slightly compared to last quarter, with approximately 47% of contractors responding that they are adding backlog quicker than they are burning it. More than half of respondents, or 61%, report that their backlogs are higher this quarter compared to a year ago, and 80% report that backlog levels are either meeting or exceeding what is needed (or anticipated) at this point in the year.

Nearly two-thirds of contractors reported their margins were higher than this time last year, up from 37% last quarter. More than 90% of respondents said margins were either up or about the same compared to last quarter.

Competitive pressures cooled slightly with 59% of contractors reporting increased pressure, down from 61% last quarter. There was a slight decrease in contractors seeing new competitors in their markets, with 14% indicating there was a new entrant to their market in the last six months, compared to 18% last quarter.

HCCI INDEX MOVEMENT			
Current Reading for Q3 2023		Previous Reading for Q2 2023	
56.1		Q3 2023	Q2 2023
Overall U.S. Economy	↑	52.9	42.4
Economy Where We Do Business	↑	54.0	46.8
Our Engineering and Construction Business	↑	68.4	64.1
Engineering and Construction Where We Do Business	↑	65.5	55.7
Backlog	↓	63.9	66.2
Book/Burn Rate	↓	63.7	65.3
Cost of Materials	↑	31.9	25.3
Cost of Labor	↑	20.5	16.7
Productivity	↑	50.0	48.0

Bid prices increased again this quarter, with 69% of respondents indicating a slight or significant increase, up from 66% last quarter.

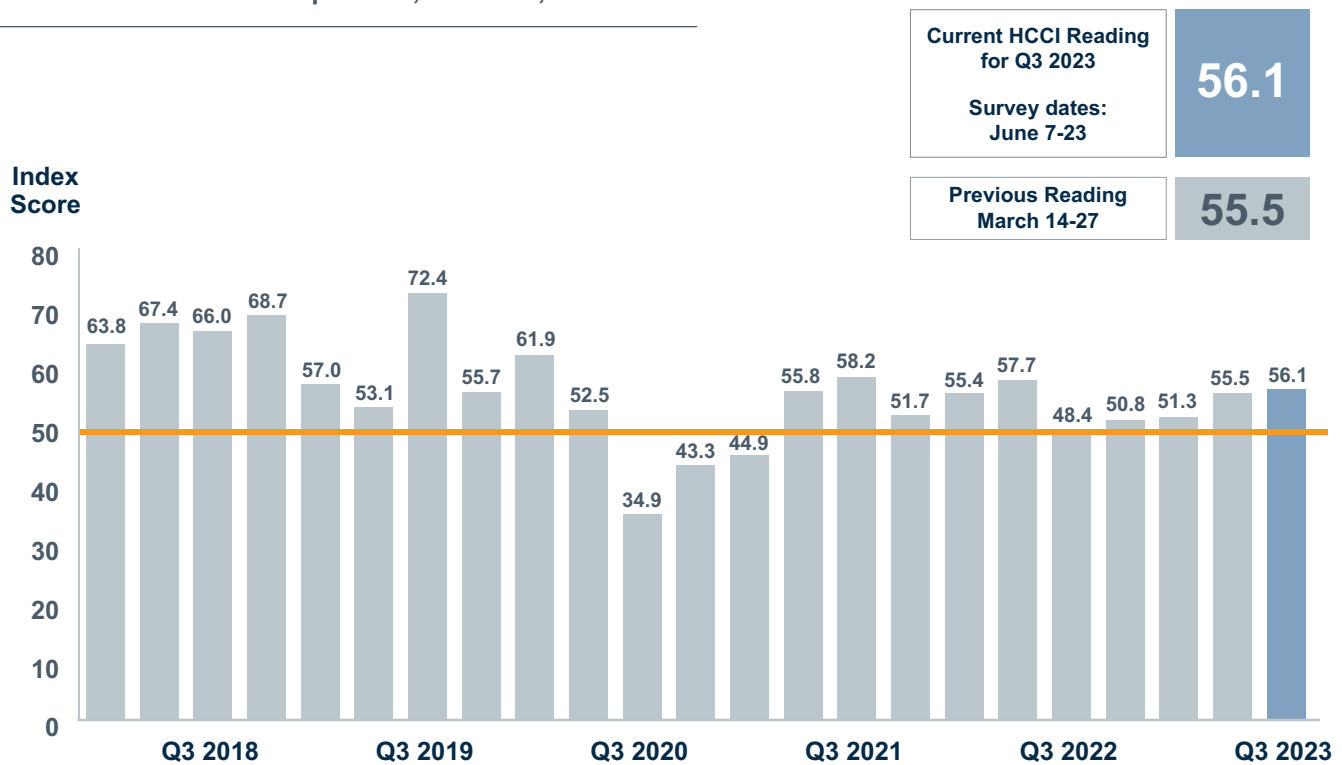
EXECUTIVE SUMMARY



Heavy Civil Construction Index (HCCI)

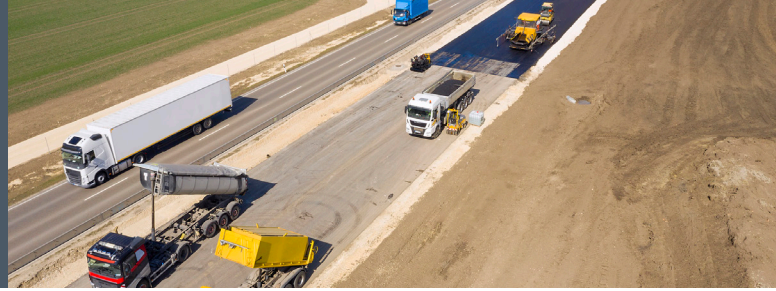
Q1 2018 to Q3 2023

Scores above 50 indicate expansion; below 50, contraction

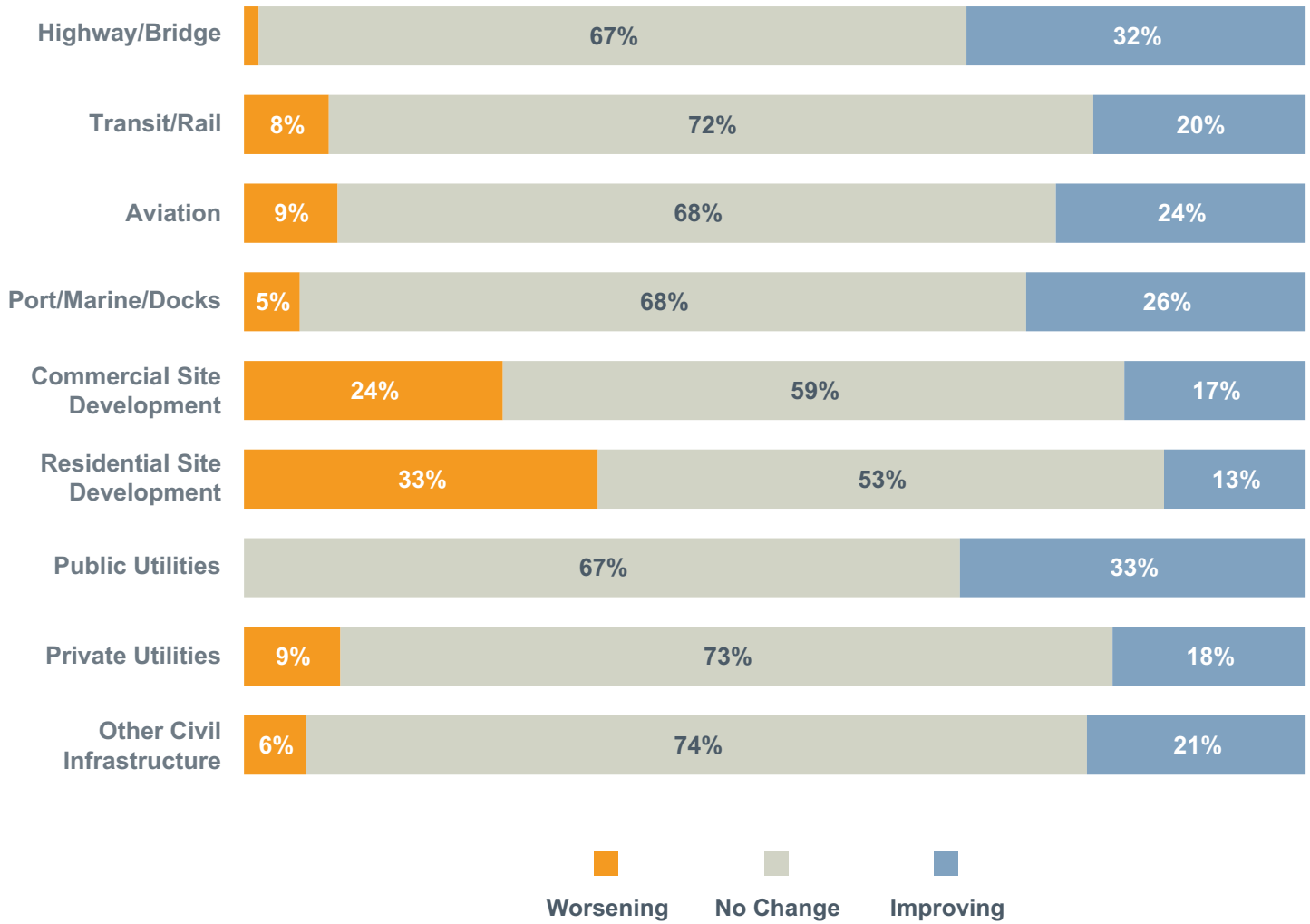


Source: FMI Heavy Civil Construction Survey Q3 2023

EXECUTIVE SUMMARY



Perception of Change by Segment for Next Quarter

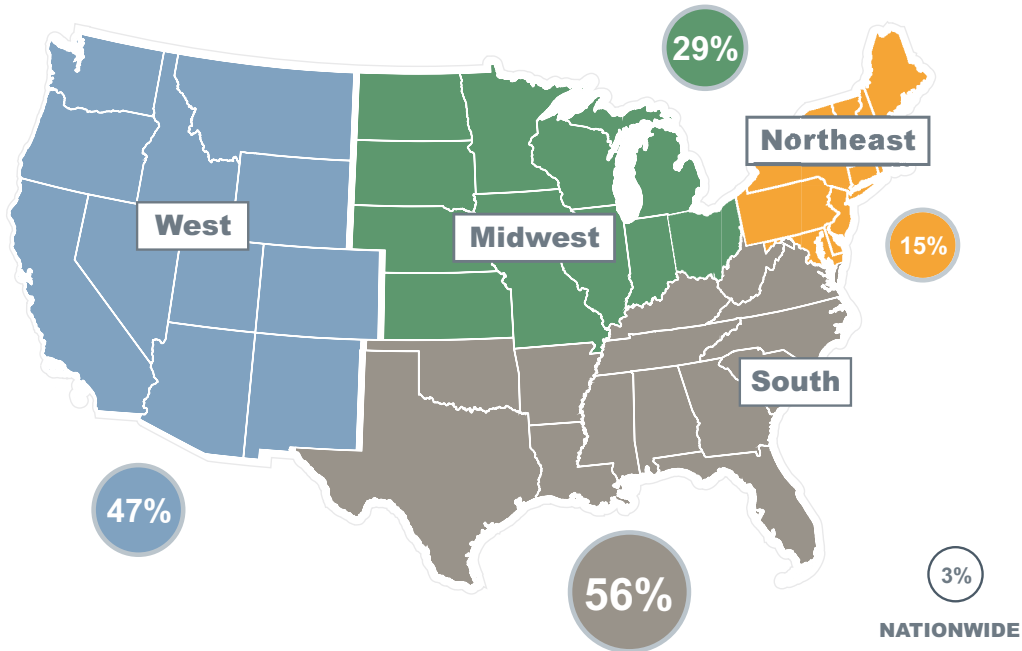


DEMOGRAPHIC INFORMATION

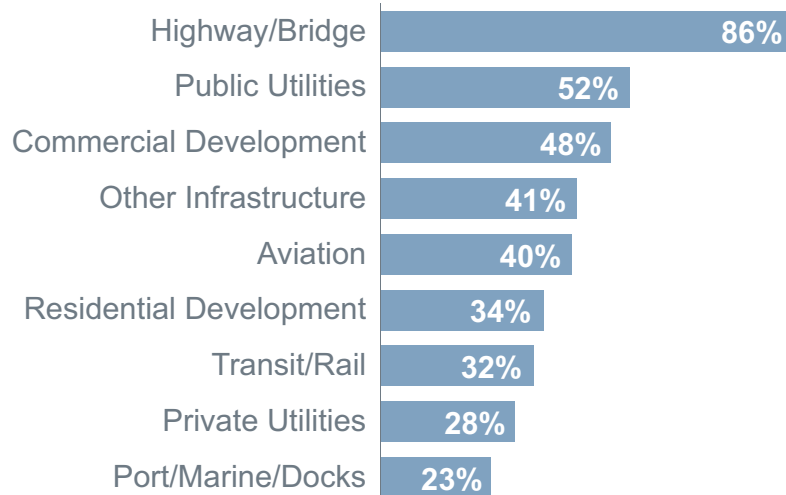


Where Survey Participants Work

By Geography



By Discipline



Respondents are able to select more than one option.



MARKET CONDITIONS

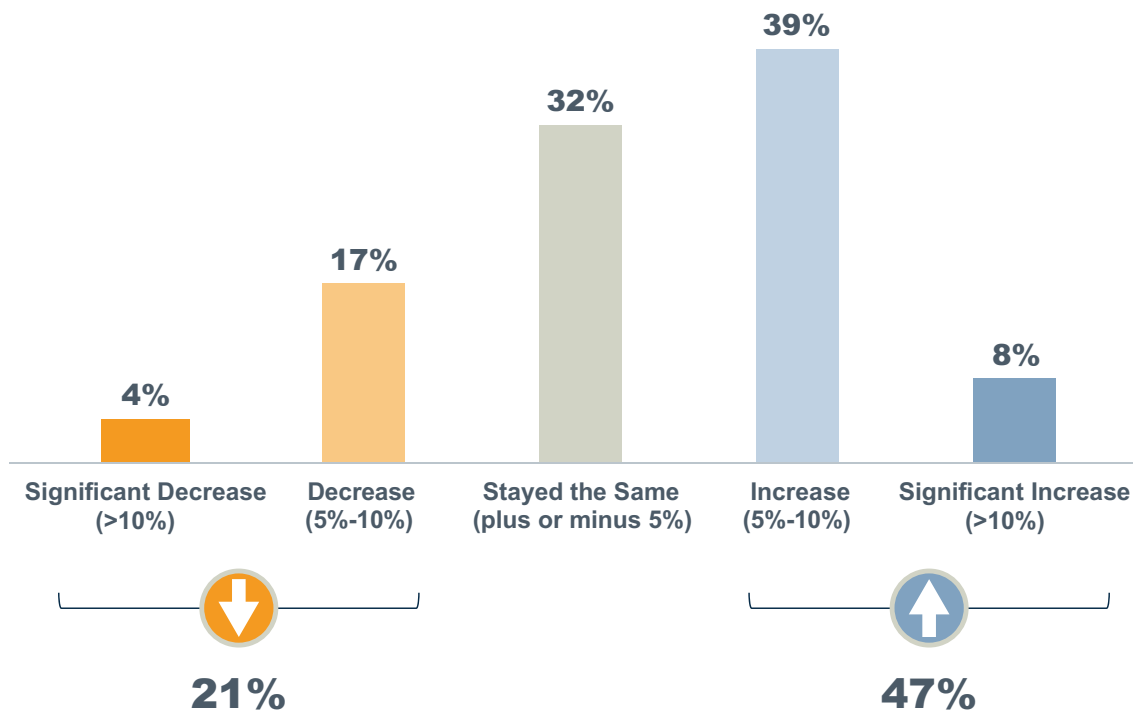
MARKET CONDITIONS

- Contractors are continuing to build backlog faster than they are burning it, though not as quickly as last quarter. Contractors reporting an increase in their backlog book to burn rate are down to 47% from 51% last quarter.
- Most respondents, or 61%, indicated their backlog levels are higher than this quarter last year, and 80% of respondents reported backlog levels either meeting or exceeding what is needed or anticipated at this point in the year. Respondents attributed elevated backlogs to seasonal impacts and an increase in projects put out to bid from public agencies.
- Nearly two-thirds of contractors reported that margins were higher than this time last year, up from 37% last quarter. More than 90% of respondents reported that margins were either up or about the same compared to last quarter.
- More than half of contractors, or 59%, reported an increase in competitors over the prior quarter. Additionally, 69% saw bid prices increase from the last quarter.
- The number of respondents experiencing increasing competition decreased slightly with approximately 14% of respondents having seen a new entrant into their market in the last six months, compared to 18% last quarter.

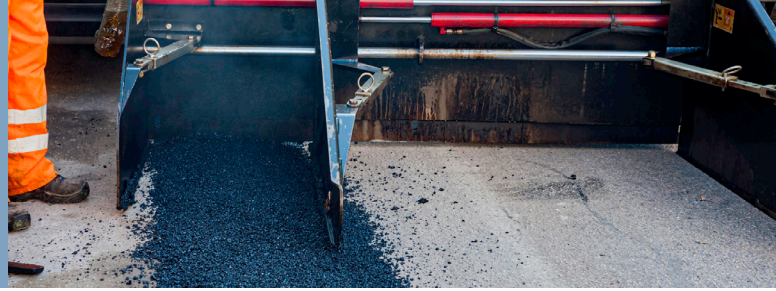
Backlog Book/Burn Rate

(Year Over Year)

Book/burn rate is the pace backlog is added compared to how quickly it is used.

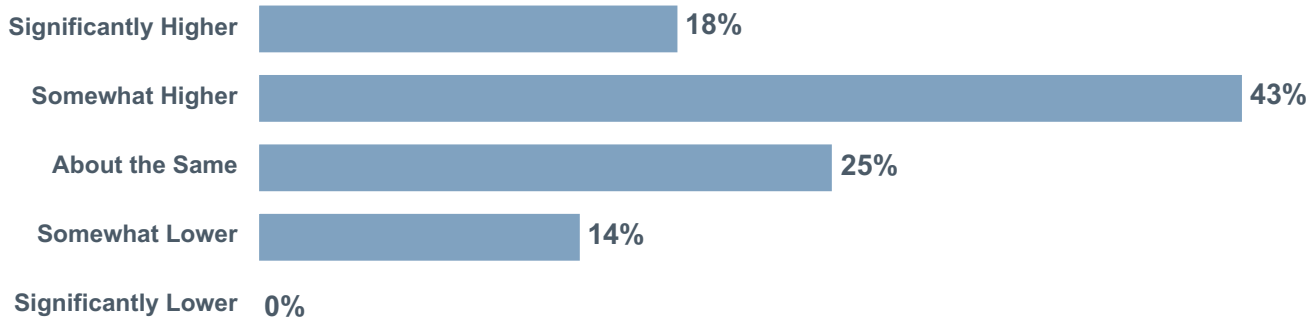


MARKET CONDITIONS

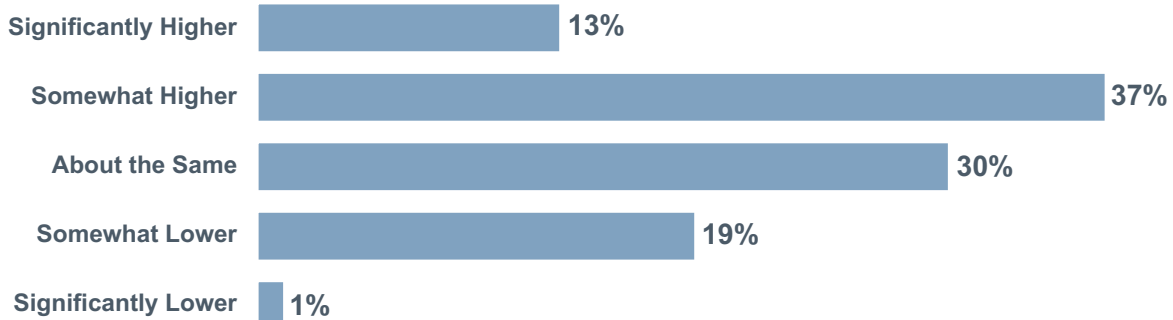


Backlog

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



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

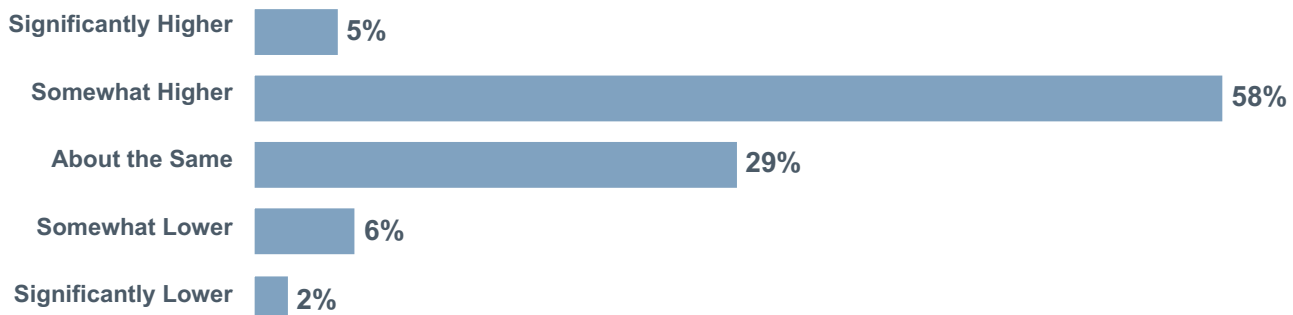


MARKET CONDITIONS

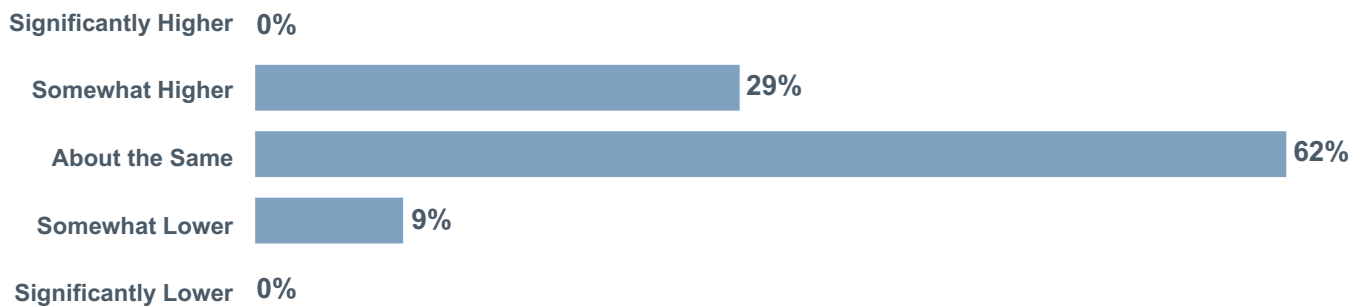


Margins

How would you compare margins on the work you have acquired in this quarter compared to the same quarter last year? (i.e., year-over-year change)



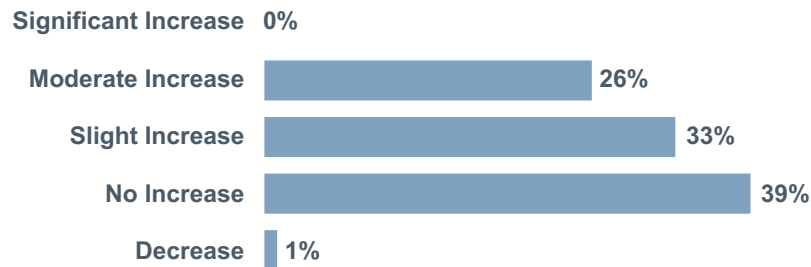
How would you compare margins on the work you have acquired in this quarter compared to the previous quarter?



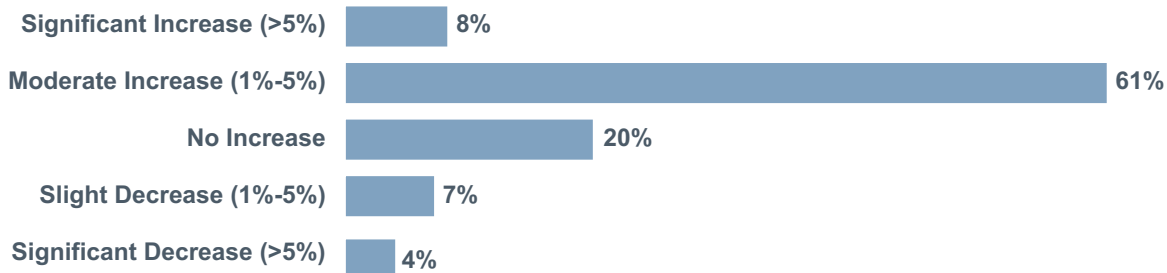


Competitive Landscape

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) in the market?





CURRENT ISSUES

Current issues questions this quarter addressed respondents' experiences with project awards and disruptions to project starts, owners' project management and administrative services, and anticipated impacts of recent banking failures. The same series of questions on project awards and start disruptions were compared to FMI's fourth quarter 2022 HCCI report.

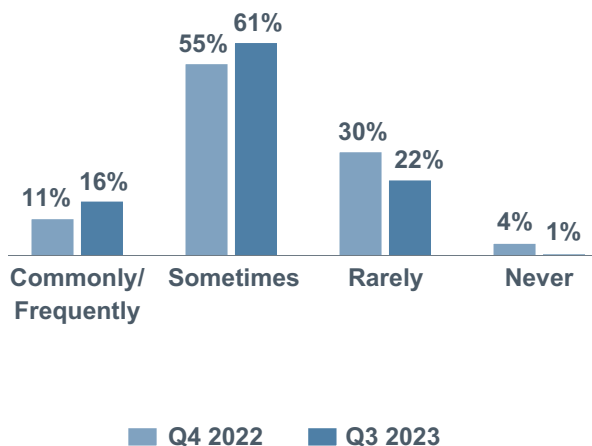


CURRENT ISSUES

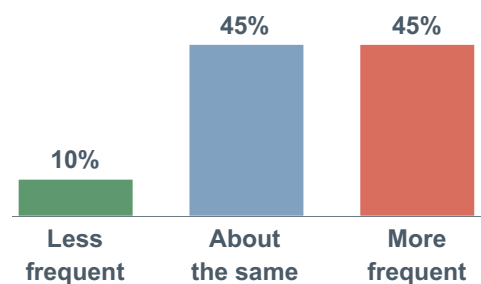
- This year slightly fewer contractors reported they occasionally experience project disruptions based on low bids being above the engineers' estimates, down from 77% last year. Of those projects not awarded, 55% were rebid as-is, up from 46% in 2022.
- Over the past year, owner-led factors (e.g., financing, economic issues and conditions) were the No. 1 reason respondents are experiencing project start delays, chosen by more than half, or 60%, of respondents. Last year, supply chain constraints and materials pricing and availability were the main reasons for start delays, selected by 47% of respondents.
- More than two-thirds, or 70%, of respondents' experiences this year and last observe public owners' project management and administration/oversight services as stretched thin and/or challenged.
- Looking to 2025, approximately half of survey participants, or 51%, expect increased challenges with public owners' project management and administrative services, with another 42% expecting little to no improvement. Further, respondents' performance scores on public owners' project administration services thus far in 2023 are generally poor (<3) across design, procurement and management of let work.
- Given recent banking failures, most respondents, or 84%, expect increasingly restrictive lending. By sector the highest impact is expected in private commercial and private institutional, and the lowest impact, in public institutional and infrastructure/heavy civil.

Project Disruptions

Over the past year, how often have you seen projects not awarded because the low bid was above engineers' estimates?



Has this situation become more or less frequent within the past year?

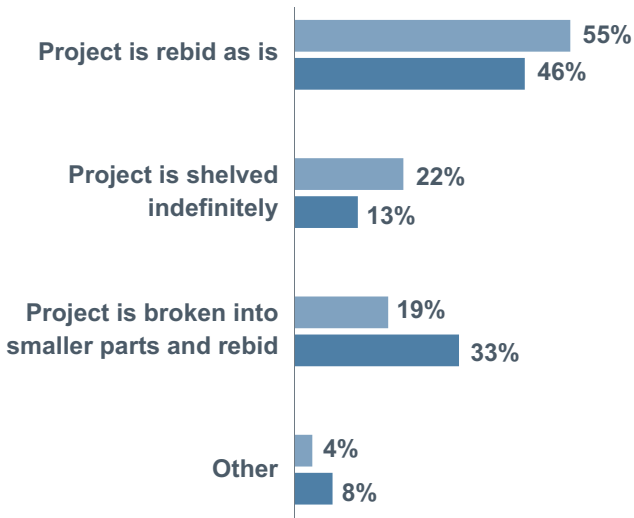


CURRENT ISSUES

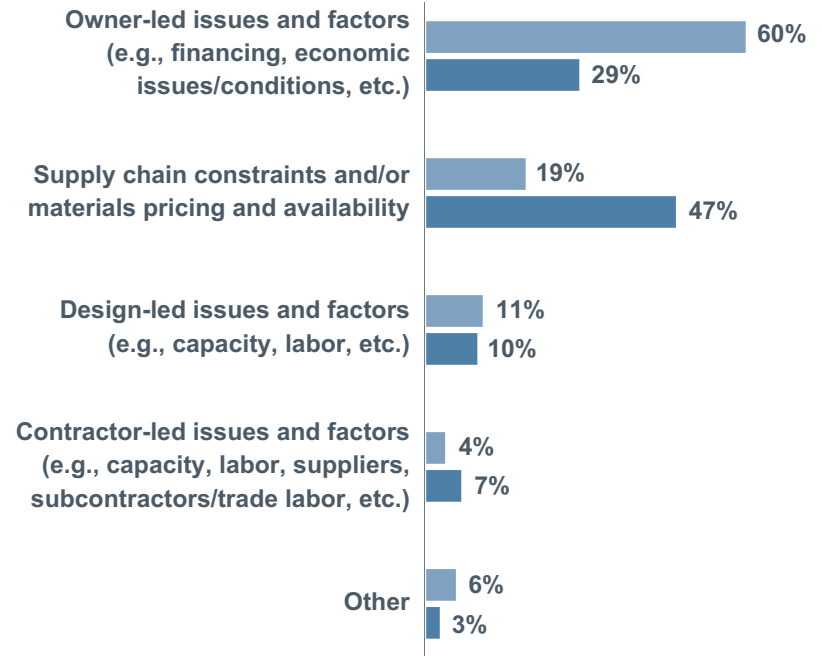


Project Disruptions *continued ...*

For those that were not awarded, what is the most common outcome?



Over the past year, what was the most common reason for the project start delays? (i.e., delays occurring prior to construction)



■ Q4 2022 ■ Q3 2023

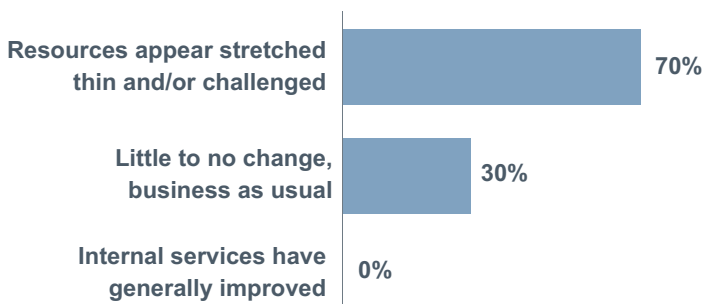
CURRENT ISSUES



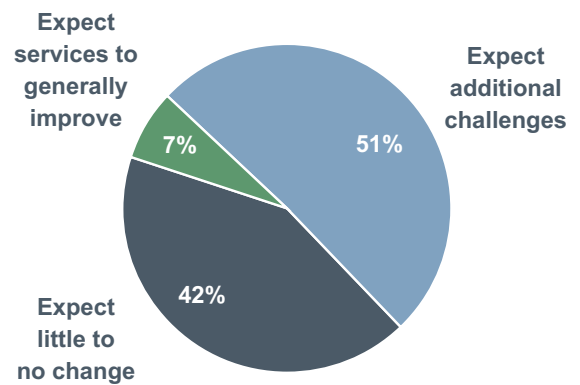
Owners' Project Management and Administrative Services

In thinking about working with public owners and considering the additional inflows of Infrastructure Investment and Jobs Act (IIJA) funds, new programs, ongoing resource constraints and heightened construction costs, what are your organization's observations and expectations regarding the following:

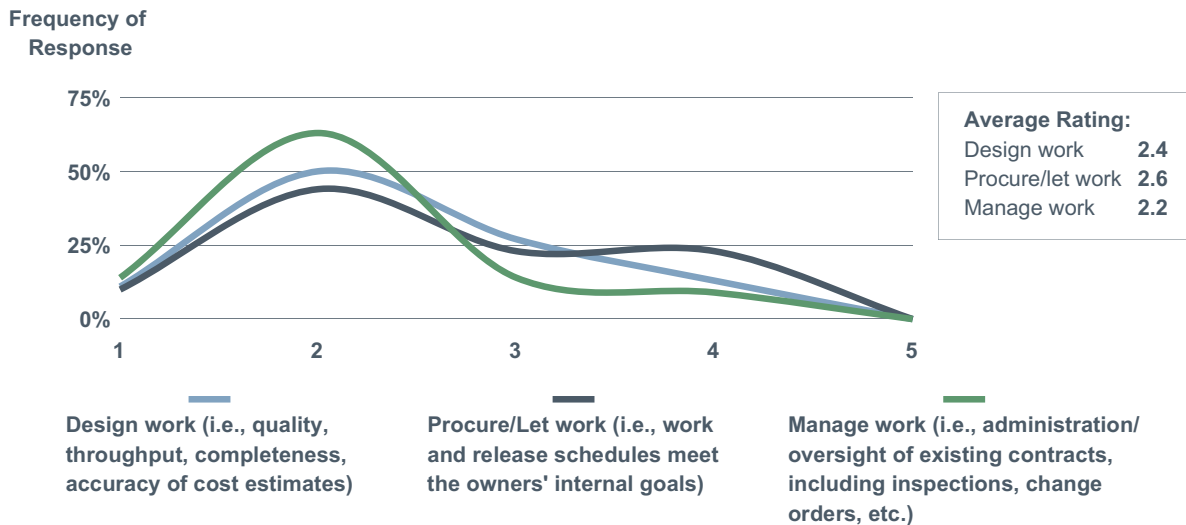
Considering 2022 and 2023, what are your observations on public owners' abilities to provide project management and administration/oversight services?



Looking forward to 2025, what are your expectations on these same public owners' project management and administration/oversight services?



Based on what you have seen in 2023, how would you rate public owners' project administration services, given the context of the following: (Scale: 1 = poor, 5 = excellent)

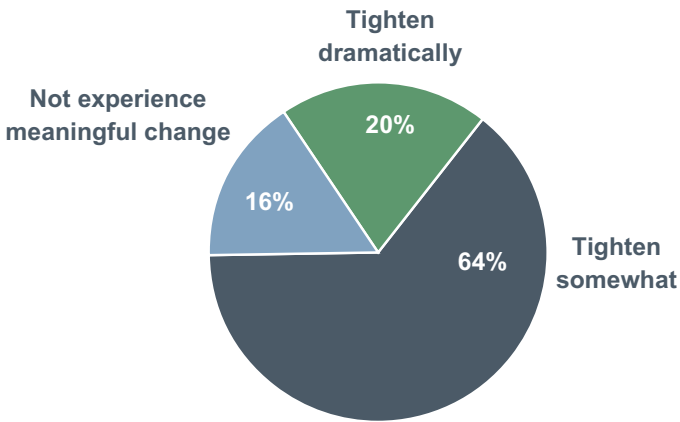




Banking Failures

Considering recent banking failures highlighting risk exposure in commercial real estate and the potential for tightening lending standards, what are your organization's expectations regarding the following impact on private owners and developers:

Lending standards across private owners and developers will:



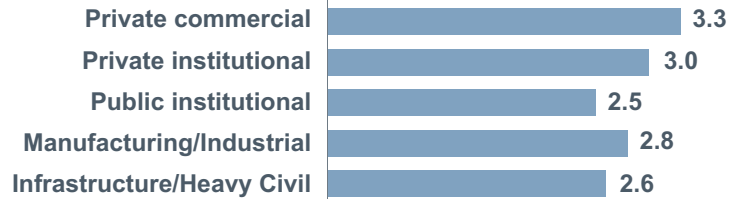
Expectations of tightening lending standards on the industry: (Scale: 1 = no impact, 5 = high impact)

FUTURE WORK

Response Average



INDUSTRY SECTOR





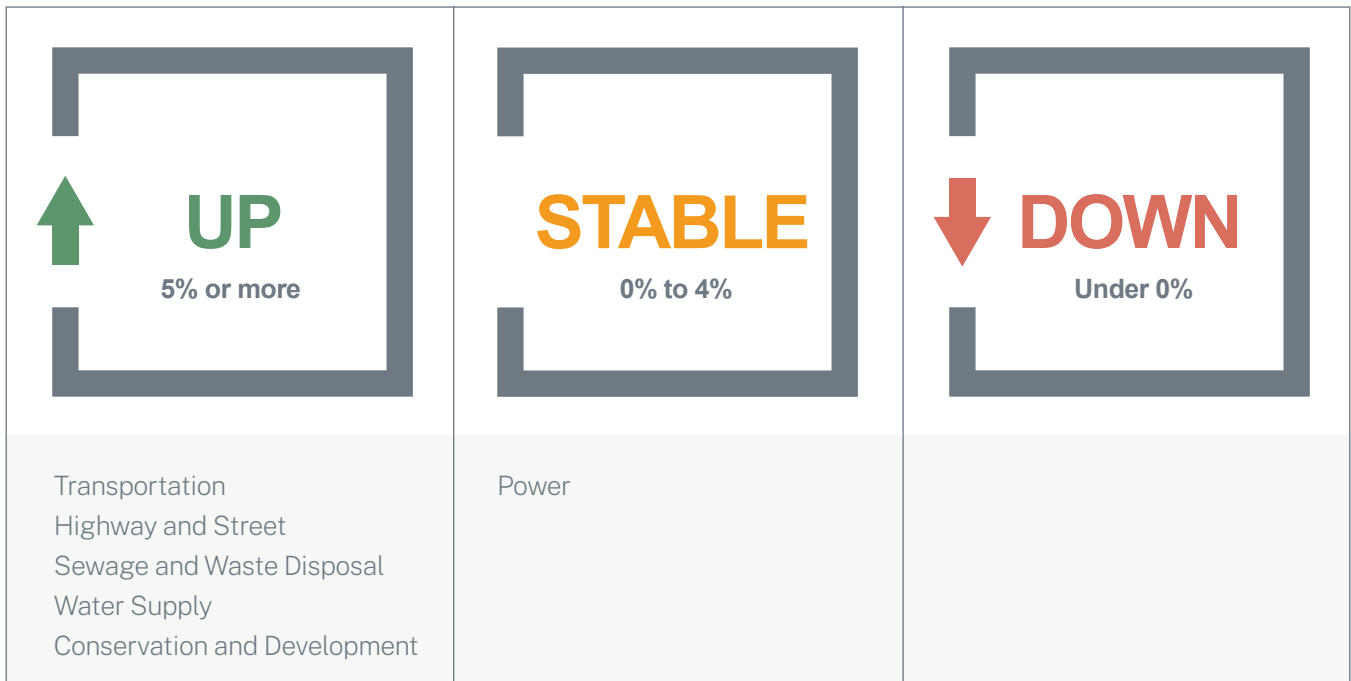
HEAVY CIVIL CONSTRUCTION OUTLOOK



Key Findings

- Total heavy civil construction put in place is anticipated to grow significantly through the remainder of 2023, up 6.7%, with most segments increasing more than 5%.
- Growth will be led by conservation and development investment, expanding more than 20% in 2023.
- Through the end of the year, both sewage and waste disposal and water supply will post double-digit growth. Next year bridge construction spending will pick up, reaching double-digit growth rates between 2024 and 2026, supported by new infrastructure grant programs. Similarly, both air and rail/transit will see double-digit growth rates in 2024 and 2025.
- Though conservation and development will realize high annual growth rates in the near term through 2025, the segment is expected to cool in the later years of the forecast period, between 2026 and 2027.

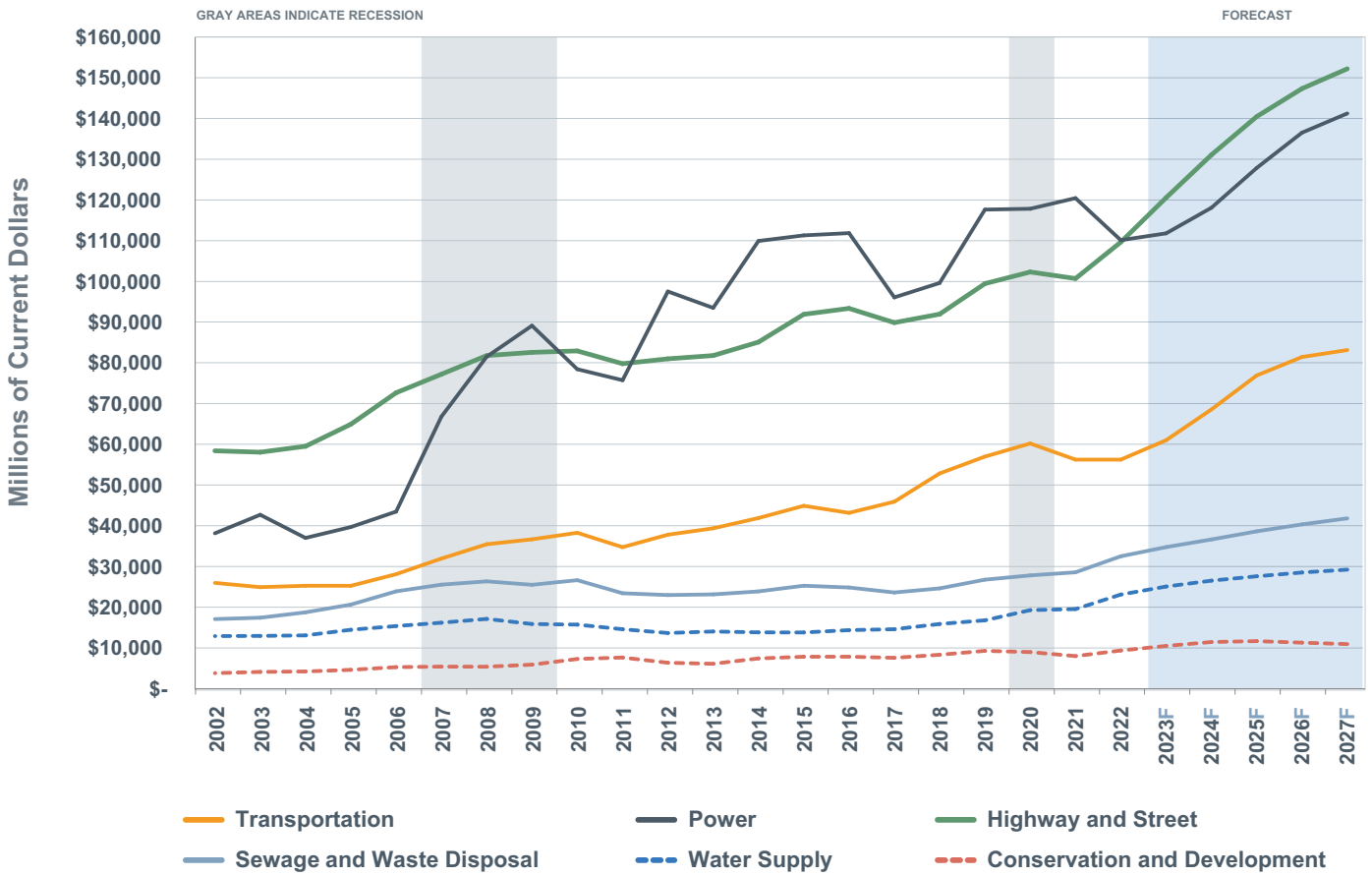
U.S. 2023 Segment Performance 2023/2022 Comparison



HEAVY CIVIL CONSTRUCTION OUTLOOK



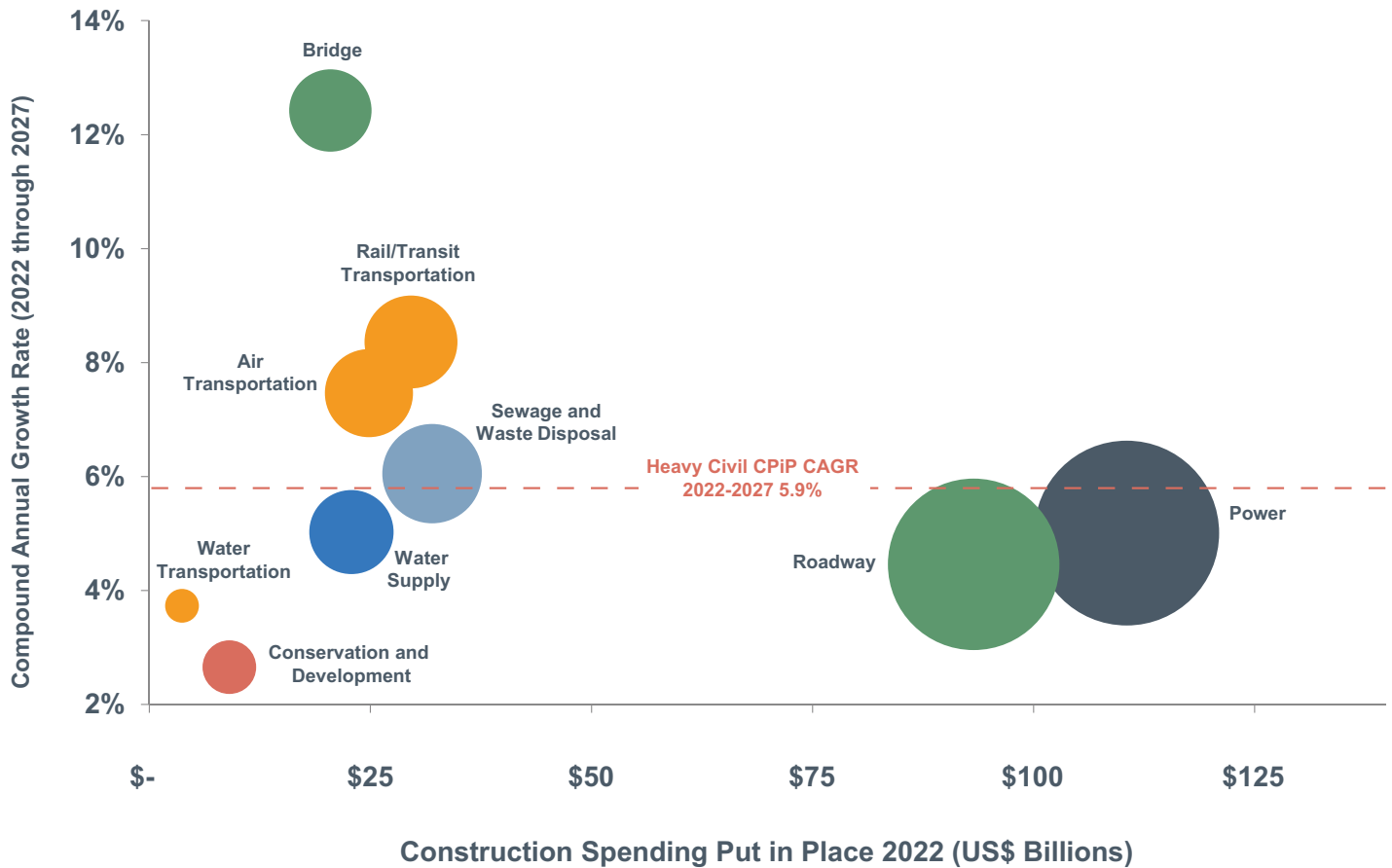
Heavy Civil Construction Put in Place



HEAVY CIVIL CONSTRUCTION OUTLOOK



Heavy Civil Construction Spending Put in Place 2022 and Forecast Growth (2022 through 2027) by Segment



HEAVY CIVIL CONSTRUCTION OUTLOOK



Heavy Civil Construction Put in Place Estimated for the United States

Millions of Current Dollars

3rd Quarter 2023 Forecast, Based on 1st Quarter 2023 Actuals and 2nd Quarter 2023 Assumptions

	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
TRANSPORTATION	53,218	57,449	60,733	59,075	58,726	62,004	69,827	78,308	83,046	85,008
Air	22,008	24,428	27,736	26,817	24,920	26,518	30,257	33,545	35,094	35,732
Rail/Transit	28,200	28,898	28,874	28,358	29,701	31,210	34,951	39,952	43,042	44,346
Port/Water	3,010	4,123	4,123	3,901	4,105	4,277	4,619	4,812	4,910	4,930
POWER	99,569	117,960	118,168	120,834	110,355	113,879	120,478	129,623	137,317	140,981
HIGHWAY AND STREET	91,745	99,402	102,321	103,381	114,107	122,487	132,712	141,486	148,317	153,193
Roadway	63,344	72,675	80,332	80,769	93,414	99,232	105,861	110,708	113,571	116,075
Bridge	28,401	26,727	21,989	22,612	20,693	23,255	26,851	30,778	34,746	37,118
SEWAGE AND WASTE DISPOSAL	23,931	26,119	27,189	27,968	32,051	35,888	38,357	40,281	41,536	42,959
WATER SUPPLY	15,477	16,397	18,952	19,214	22,910	25,281	26,749	27,792	28,625	29,274
CONSERVATION AND DEVELOPMENT	8,229	9,207	8,903	7,893	9,278	11,198	12,315	12,401	11,377	10,578
TOTAL HEAVY CIVIL PUT IN PLACE	\$292,169	\$326,534	\$336,266	\$338,365	\$347,427	\$370,738	\$400,437	\$429,891	\$450,217	\$461,993

Heavy Civil Construction Put in Place Estimated for the United States

Change From Prior Year/Current Dollar Basis

3rd Quarter 2023 Forecast, Based on 1st Quarter 2023 Actuals and 2nd Quarter 2023 Assumptions

	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
TRANSPORTATION	15.3%	8.0%	5.7%	-2.7%	-0.6%	5.6%	12.6%	12.1%	6.1%	2.4%
Air	28.0%	11.0%	13.5%	-3.3%	-7.1%	6.4%	14.1%	10.9%	4.6%	1.8%
Rail/Transit	6.1%	2.5%	-0.1%	-1.8%	4.7%	5.1%	12.0%	14.3%	7.7%	3.0%
Port/Water	27.8%	37.0%	0.0%	-5.4%	5.2%	4.2%	8.0%	4.2%	2.0%	0.4%
POWER	3.8%	18.5%	0.2%	2.3%	-8.7%	3.2%	5.8%	7.6%	5.9%	2.7%
HIGHWAY AND STREET	2.4%	8.3%	2.9%	1.0%	10.4%	7.3%	8.3%	6.6%	4.8%	3.3%
Roadway	7.0%	14.7%	10.5%	0.5%	15.7%	6.2%	6.7%	4.6%	2.6%	2.2%
Bridge	-6.7%	-5.9%	-17.7%	2.8%	-8.5%	12.4%	15.5%	14.6%	12.9%	6.8%
SEWAGE AND WASTE DISPOSAL	4.5%	9.1%	4.1%	2.9%	14.6%	12.0%	6.9%	5.0%	3.1%	3.4%
WATER SUPPLY	9.2%	5.9%	15.6%	1.4%	19.2%	10.4%	5.8%	3.9%	3.0%	2.3%
CONSERVATION AND DEVELOPMENT	10.2%	11.9%	-3.3%	-11.3%	17.5%	20.7%	10.0%	0.7%	-8.3%	-7.0%
TOTAL HEAVY CIVIL PUT IN PLACE	5.8%	11.8%	3.0%	0.6%	2.7%	6.7%	8.0%	7.4%	4.7%	2.6%

ABOUT THE AUTHORS



Brian Moore is a partner at FMI, focusing on consulting with contractors on various strategic, organizational and operational issues. Brian works in identifying future construction trends, market conditions and competitive issues that impact strategic decisions. Brian's clients count on him as a thought leader and trusted advisor as they plan the future of their business. Often this involves combining in-depth market and company analysis with judgment and experience to chart the organization's future. He works with clients to help them develop the organizational capabilities that match their chosen strategy so they can achieve desired results. Brian can be reached at [***brian.moore@fmicorp.com***](mailto:brian.moore@fmicorp.com).



Brian Strawberry is chief economist at FMI. Brian leads FMI's efforts in market sizing, forecasting, building products and construction material pricing, and consumption trends. He focuses on primary research methods, including the implementation and analysis of surveys and interviews. Brian also leads and manages various external market research engagements and constructs tools and models for efficiently performing high-quality analyses. He can be reached at [***brian.strawberry@fmicorp.com***](mailto:brian.strawberry@fmicorp.com).



Jackson Mathis conducts primary and secondary research for FMI's clients across the engineering and construction industry. He is responsible for conducting interviews with subject matter experts, designing surveys and analyzing market research data. Jackson works with partners and consultants to deliver quality projects that help drive growth and solve business problems. He can be reached at [***jackson.mathis@fmicorp.com***](mailto:jackson.mathis@fmicorp.com).



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