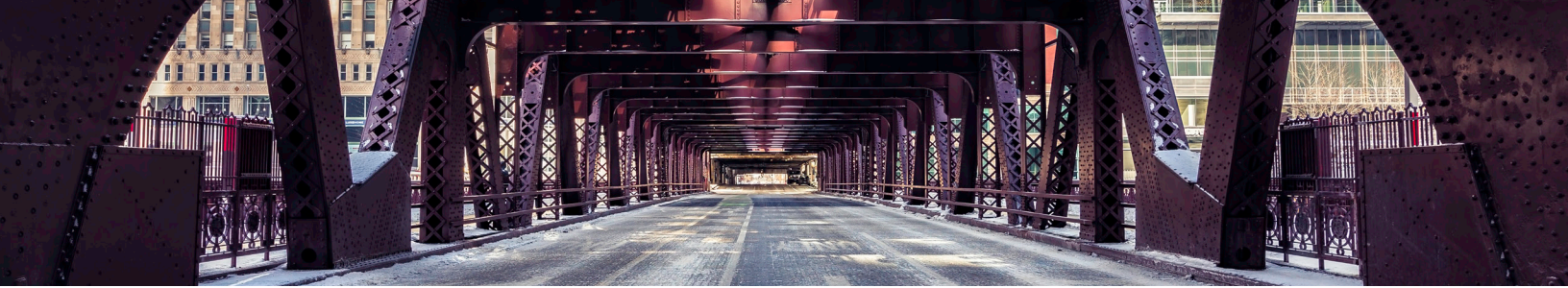




2021
**HEAVY CIVIL
CONSTRUCTION INDEX**
Third Quarter



August 2021



INDEX MOVEMENT			
		Q3 2021	Q2 2021
Overall U.S. Economy	↑	73.33	68.97
Economy Where We Do Business	↑	73.33	68.97
Our Engineering and Construction Business	↑	67.78	62.61
Engineering and Construction Where We Do Business	↑	66.79	60.34
Backlog	↑	54.20	53.45
Book/Burn Rate	↑	56.59	55.00
Cost of Materials	↓	4.23	5.45
Cost of Labor	↓	10.00	21.17
Productivity	↓	47.67	52.25

The 2021 third quarter Heavy Civil Construction Index continues its upward trend for the fourth consecutive quarter, improving from 55.8 in the second quarter to 58.2. The index again features a score greater than 50, which suggests forthcoming industry expansion.

Though contractors remain generally more optimistic about the national economy compared to their local markets, very few (or fewer than 1 in 10) expect contraction over the coming months across heavy civil segments. Segment strength over the next quarter is anticipated to be led by improving outlooks for ports, marines and docks, residential site development and public utilities.

Another key strength in the index is that backlogs appear healthy, with most respondents adding to their backlogs faster than they are completing work. Of those surveyed, only 25% are finding some decline in book/burn while most, or 38%, are experiencing growth.

Despite broad optimism, respondents are most concerned with costs for materials and labor. Similarly, third quarter index component scores indicate some regression in productivity alongside increasing virus/pandemic activity and ongoing supply chain and labor constraints.

Considering other heavy civil market conditions, mixed messages emerge. Though backlogs are expanding, there is some concern that nearly 45% of respondents suggest backlogs remain below anticipated levels from this time last year. Also, approximately 1 in 4 respondents suggest that margins are lower this quarter compared to last quarter. Comparably more, or 38%, report that margins have fallen on a year-over-year basis. Additionally, the competitive landscape continues to swell with most, or 77%, reporting some increase in competitors within the past quarter and only half, or 52%, reporting increasing bid prices. Over the past six months, approximately 1 in 3 respondents have experienced an increase of nontraditional civil firms entering their market.

This quarter's current issues questions focused on cybersecurity, highlighting national news coverage of various recent threats. As a result, most respondents, or 69%, report heightened concerns over cybersecurity-related incidents. Respondents' concerns are concentrated in ransomware attacks and overall office network security.

Total heavy civil construction put in place is anticipated to fall 1% in 2021. Short-term declines will be seen across conservation and development, power and transportation (particularly in water and air). Growth expectations through 2025 have increased this quarter due to ongoing negotiations and pressing requests for higher federal investment across all heavy civil segments. Based on recently proposed infrastructure funding levels, longer-term growth expectations in spending will be led by water supply, transportation, and sewage and waste disposal investment.



Heavy Civil Construction Index (HCCI) Q1 2018 to Q3 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).

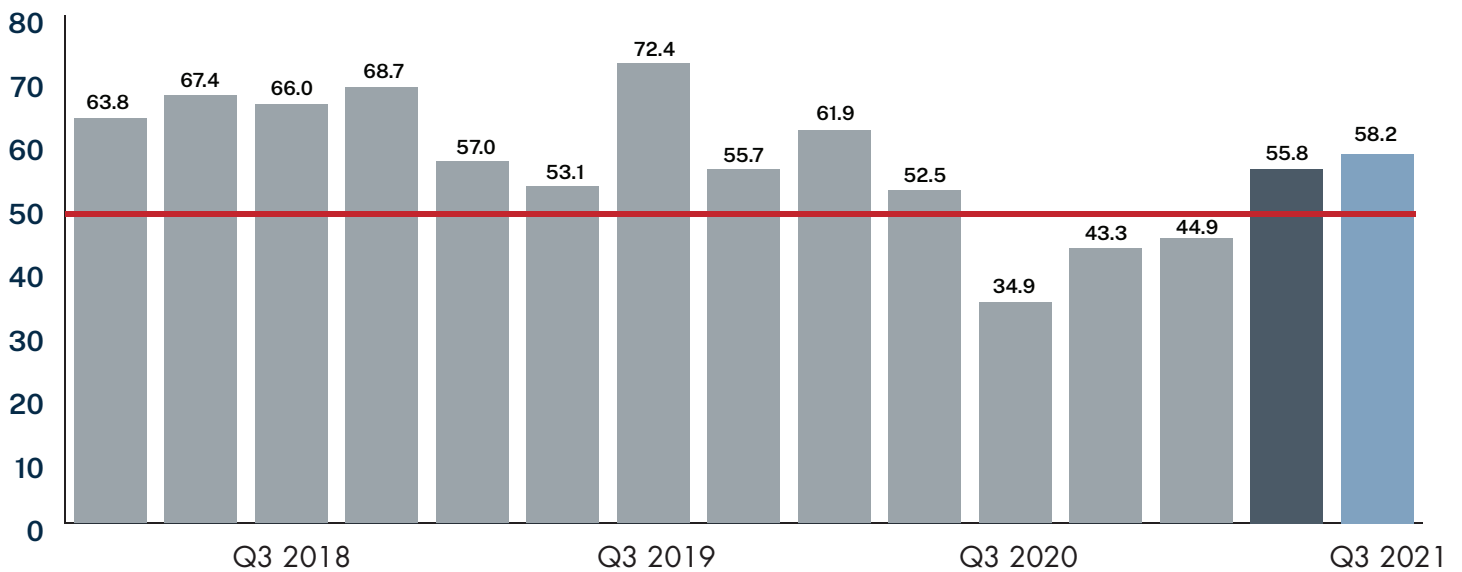
**Current HCCI Reading
for Q3 2021**

58.2

Survey dates:
July 8-12

**Previous Reading
March 24-April 14**

55.8

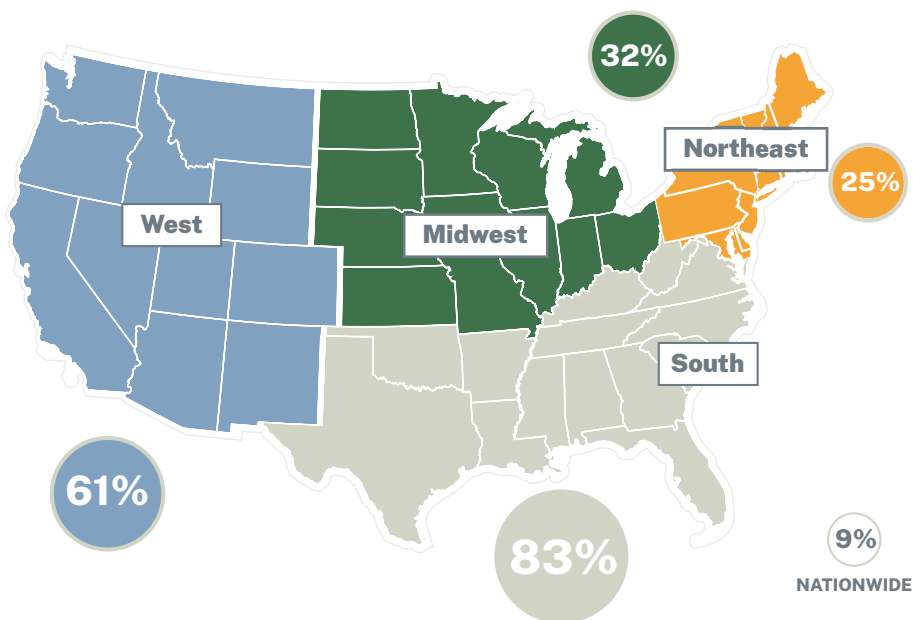


Source: FMI Heavy Civil Construction Index Q3 2021

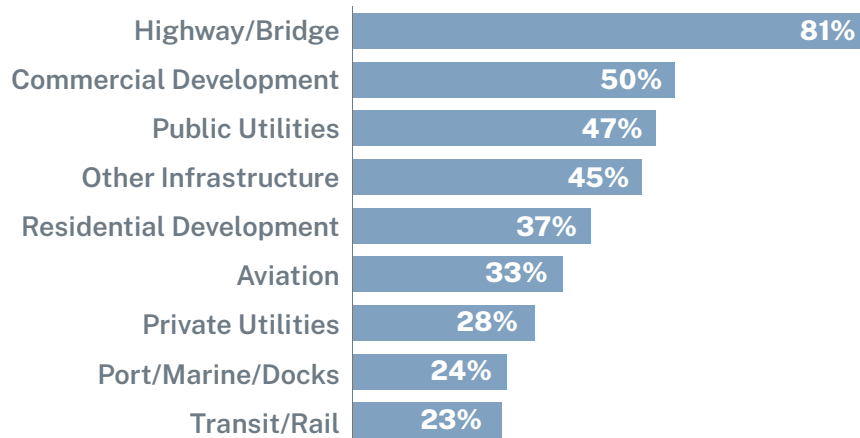


Where Survey Participants Work

By Geography



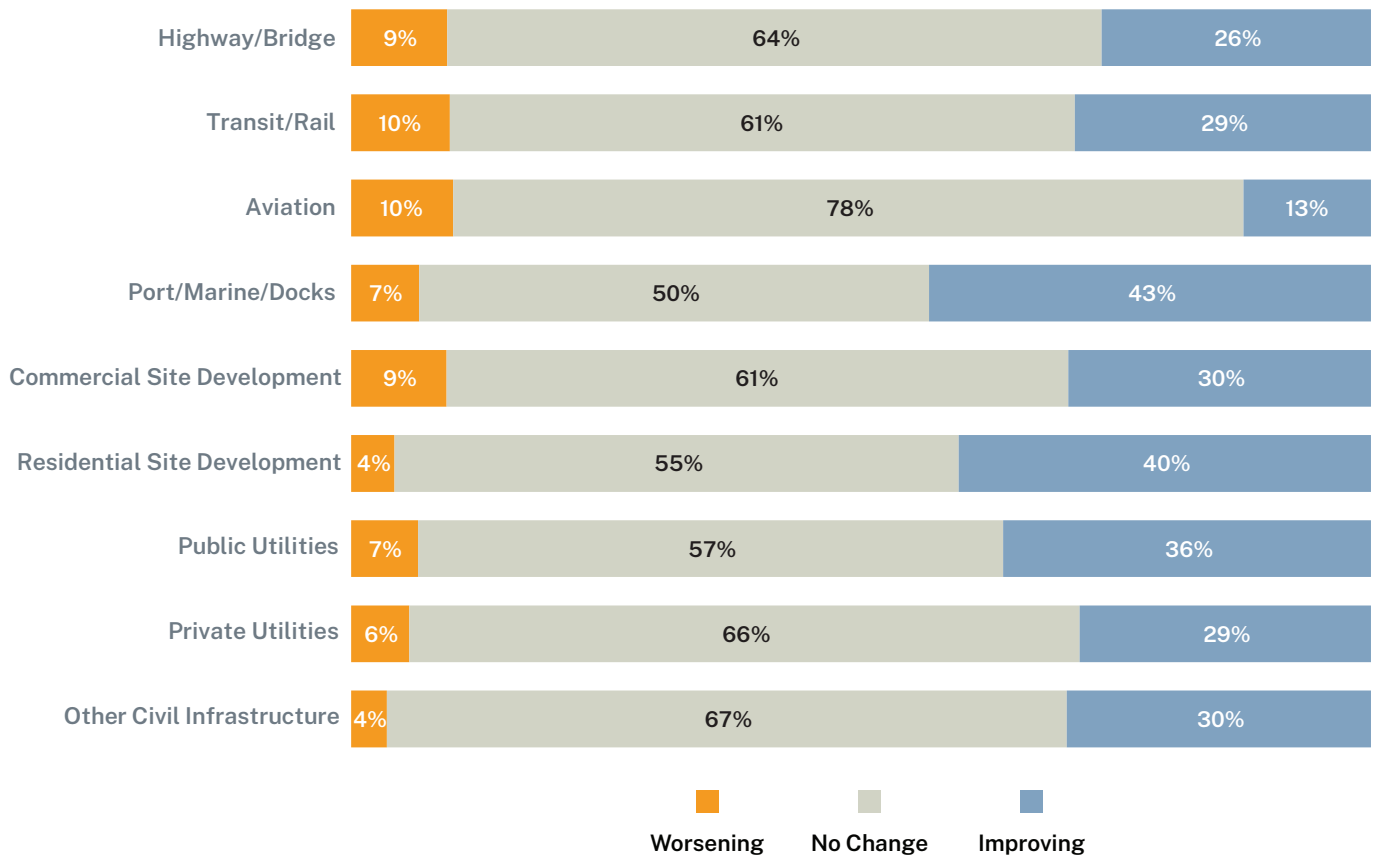
By Discipline



Respondents are able to select more than one option.



Perception of Change for Next Quarter



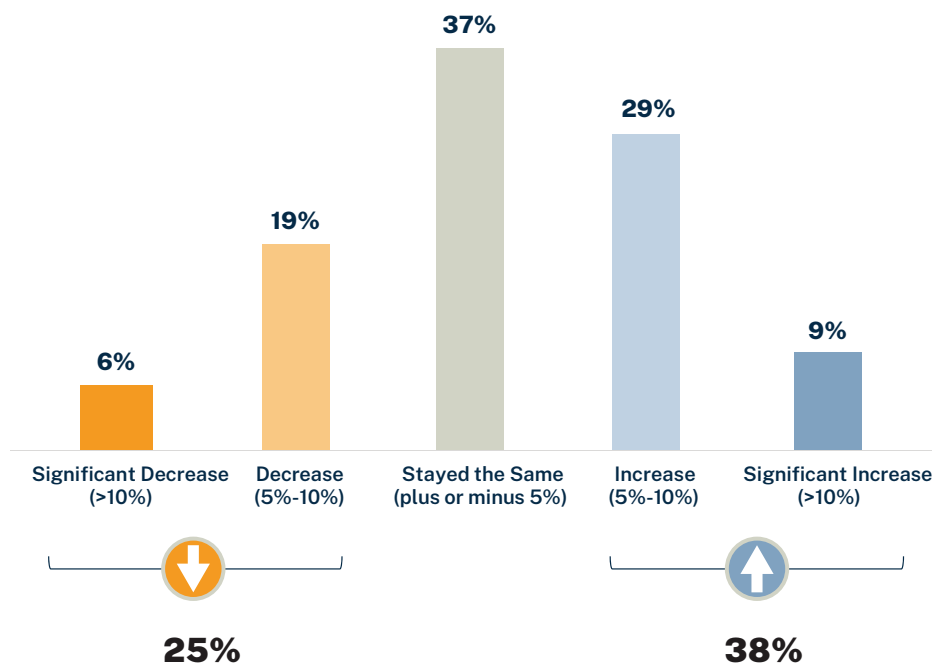


Heavy Civil Market Conditions

- Most contractors are booking backlog faster than they are burning it, an ongoing improvement over last quarter. However, still 25% report declining backlogs, and 45% say backlogs are below anticipated levels from this time last year.
- Approximately 24% suggest that margins are lower this quarter compared to last quarter. Comparably more, or 38%, report that margins have fallen on a year-over-year basis.
- Competition continues to intensify with most, or 77%, reporting an increase in competitors within the past quarter, and only half, or 52%, seeing increasing bid prices.
- Over the past six months, approximately 1 in 3 respondents have experienced an increase of nontraditional civil firms entering their market.
- Most respondents, or 69%, report heightened concerns over cybersecurity-related incidents. Concerns are concentrated in ransomware attacks and overall office network security.

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.

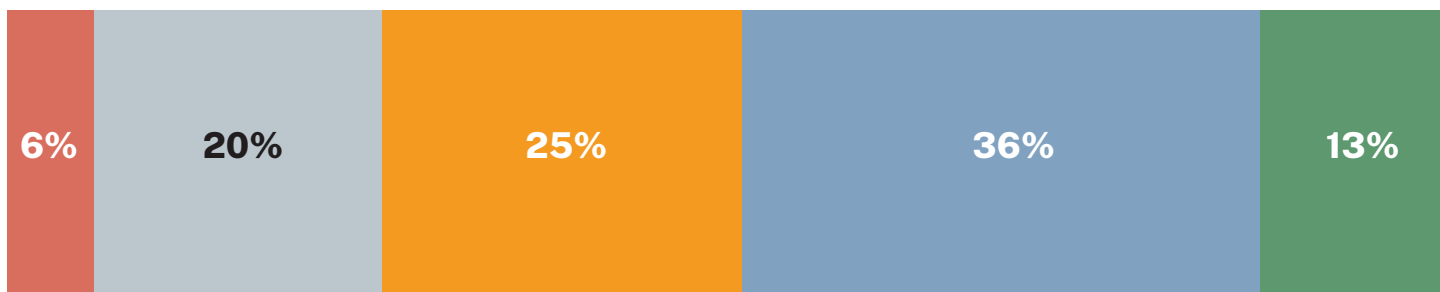


Source: FMI Heavy Civil Construction Index Q3 2021

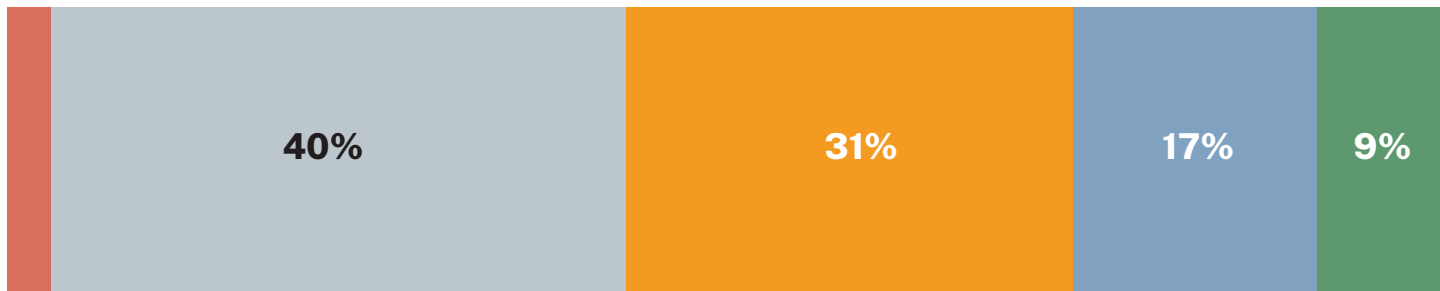


Backlog

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?

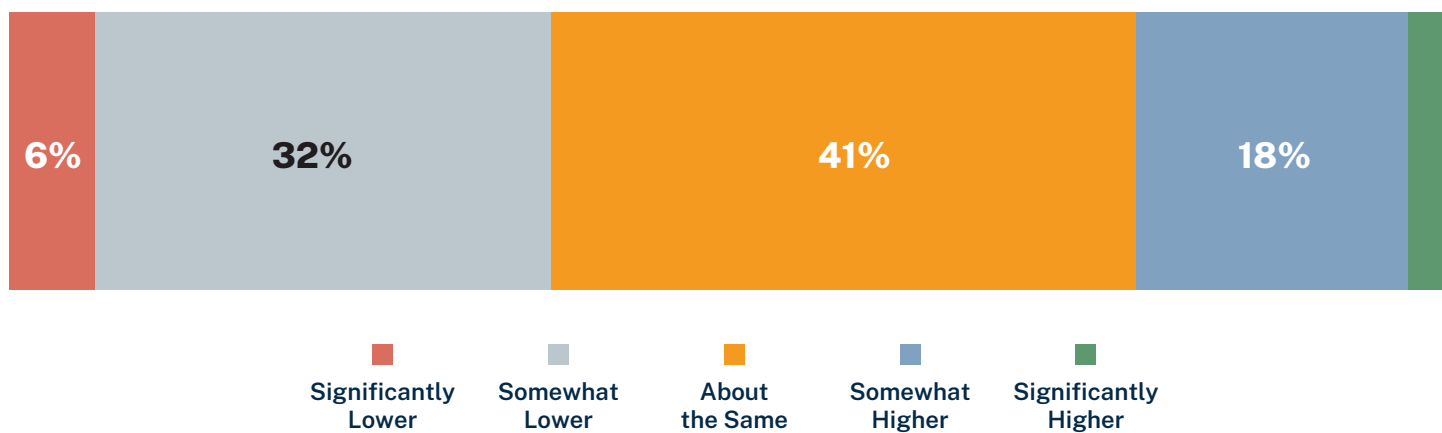


■ Significantly Lower ■ Somewhat Lower ■ About the Same ■ Somewhat Higher ■ Significantly Higher

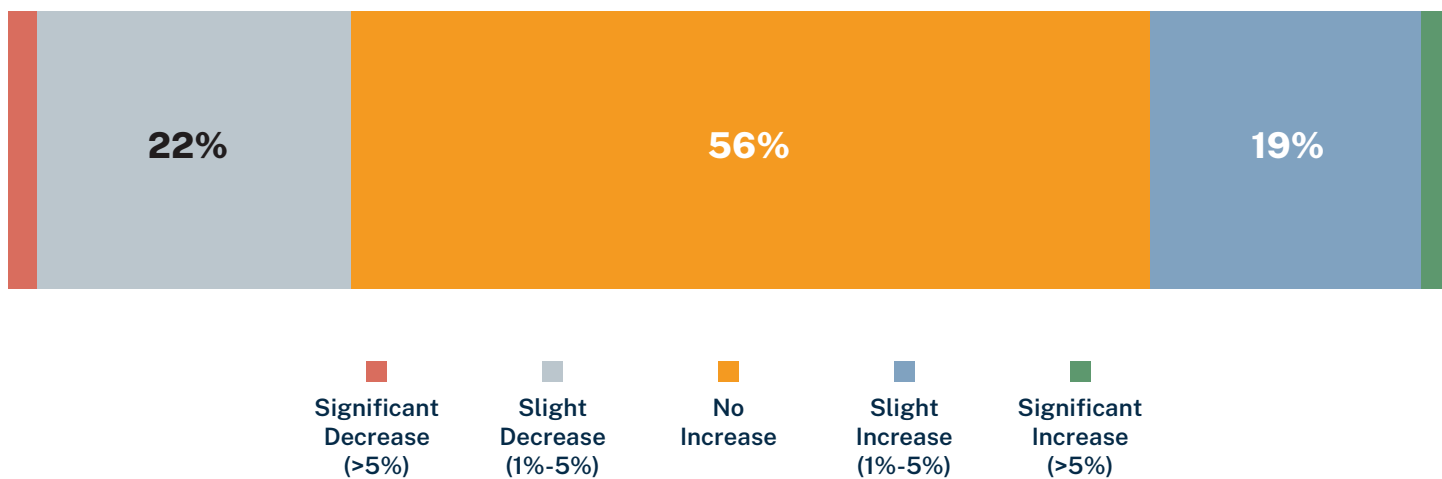


Margin

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



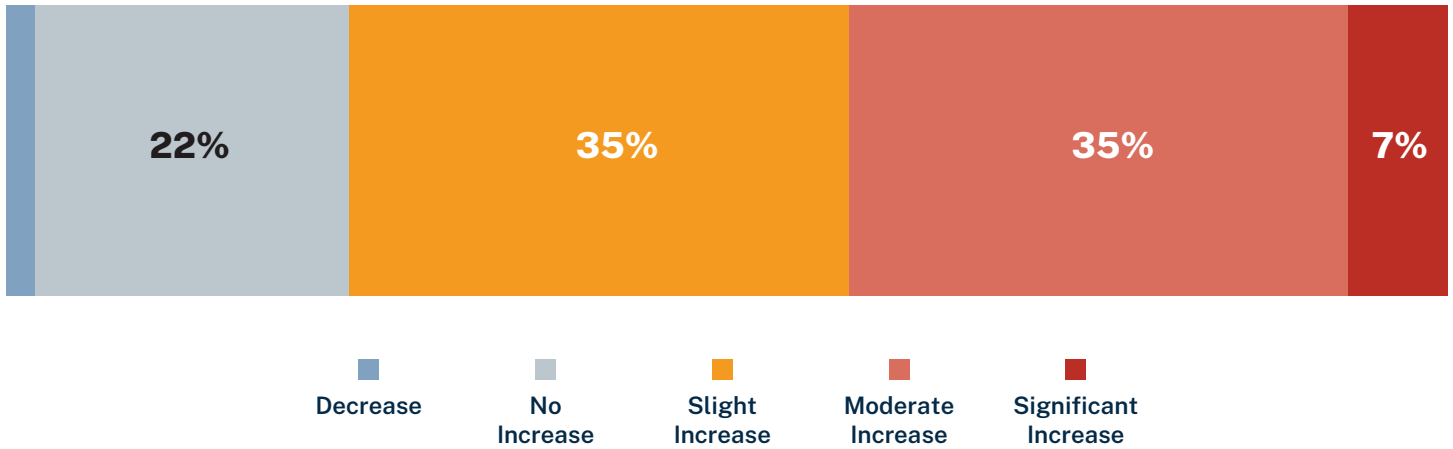
How would you compare margin on the work you have acquired in this quarter compared to the previous quarter?



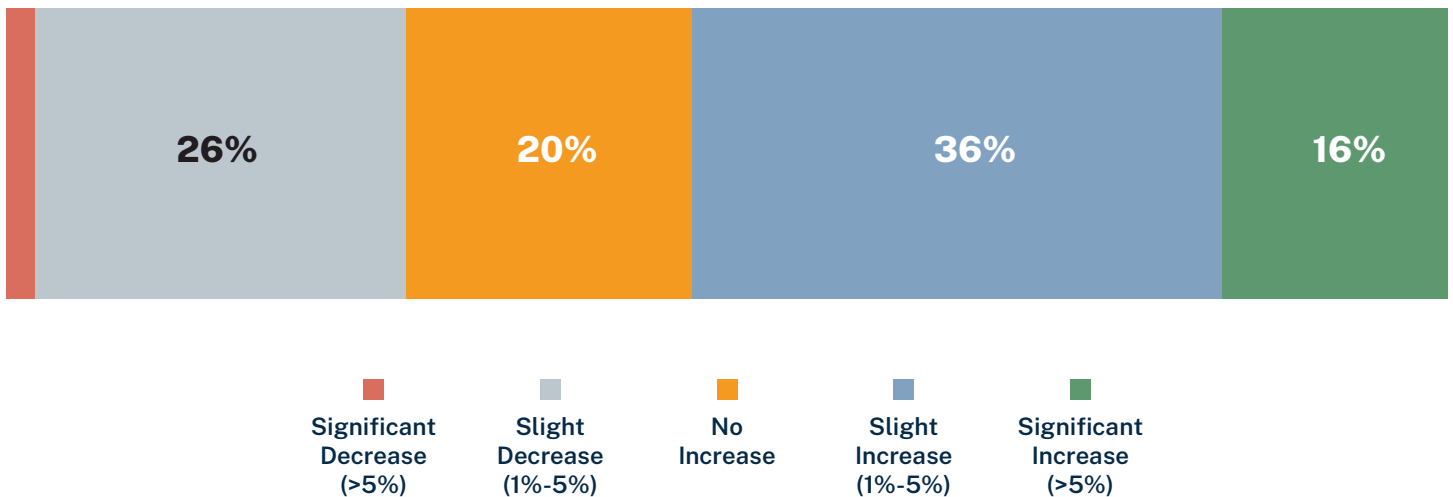


Competitive Landscape

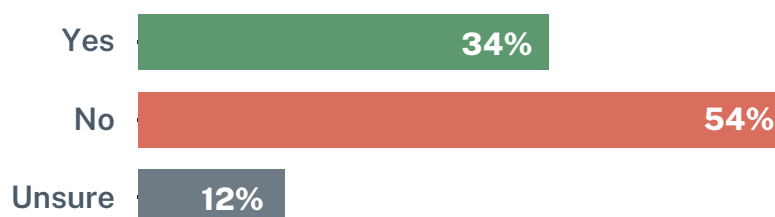
How has the competitive landscape changed in the last quarter in terms of the number of competitors?



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) entering the market?

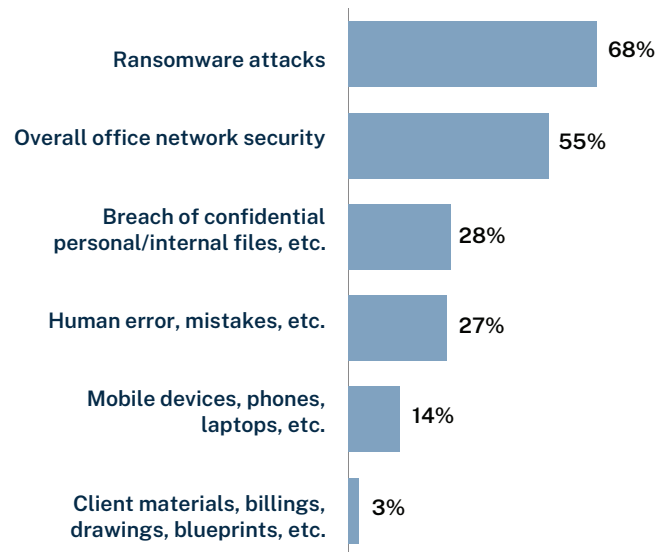
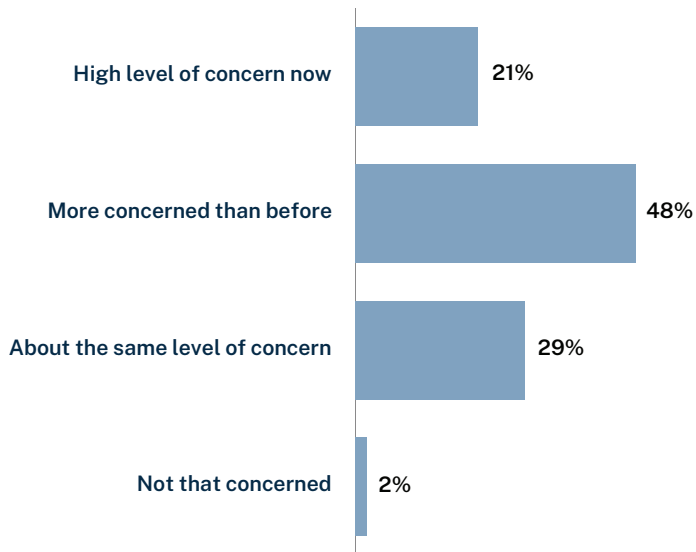




Current Issues: Cybersecurity

Recently, there have been noticeable increases and news reports of cybersecurity-related incidents. How has this affected your views on the matter?

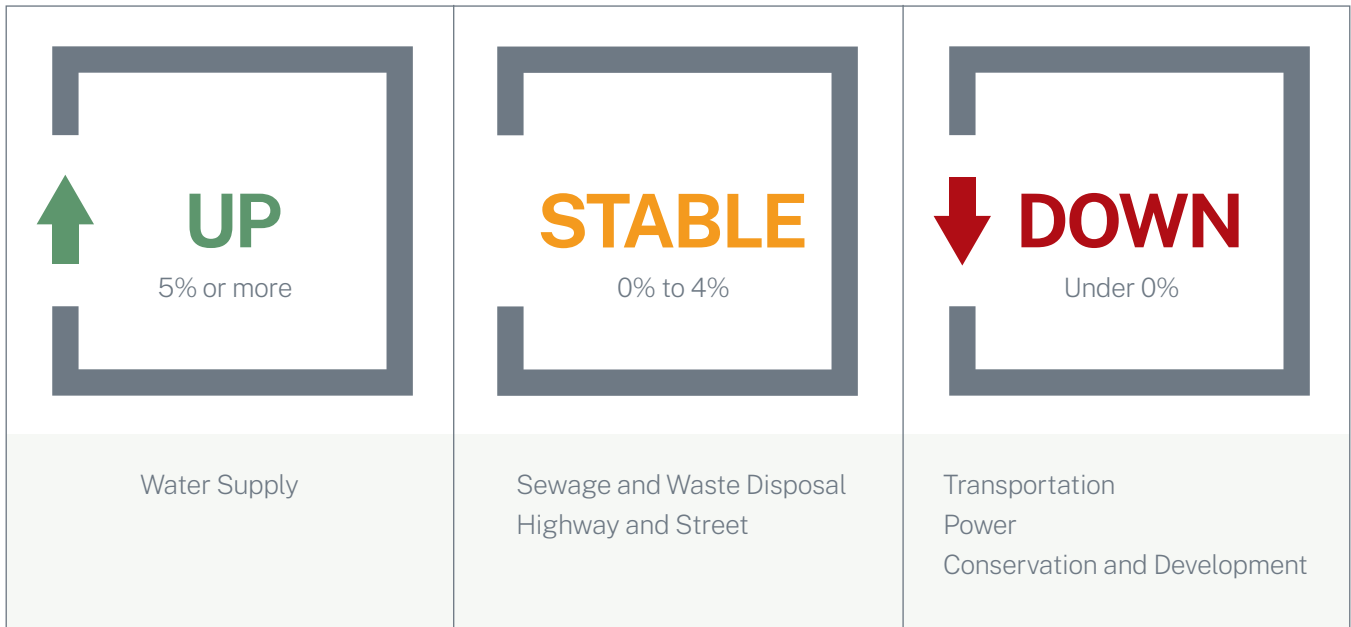
If you have concerns about cybersecurity, where are they concentrated? (Select your top two)



CONSTRUCTION SPENDING

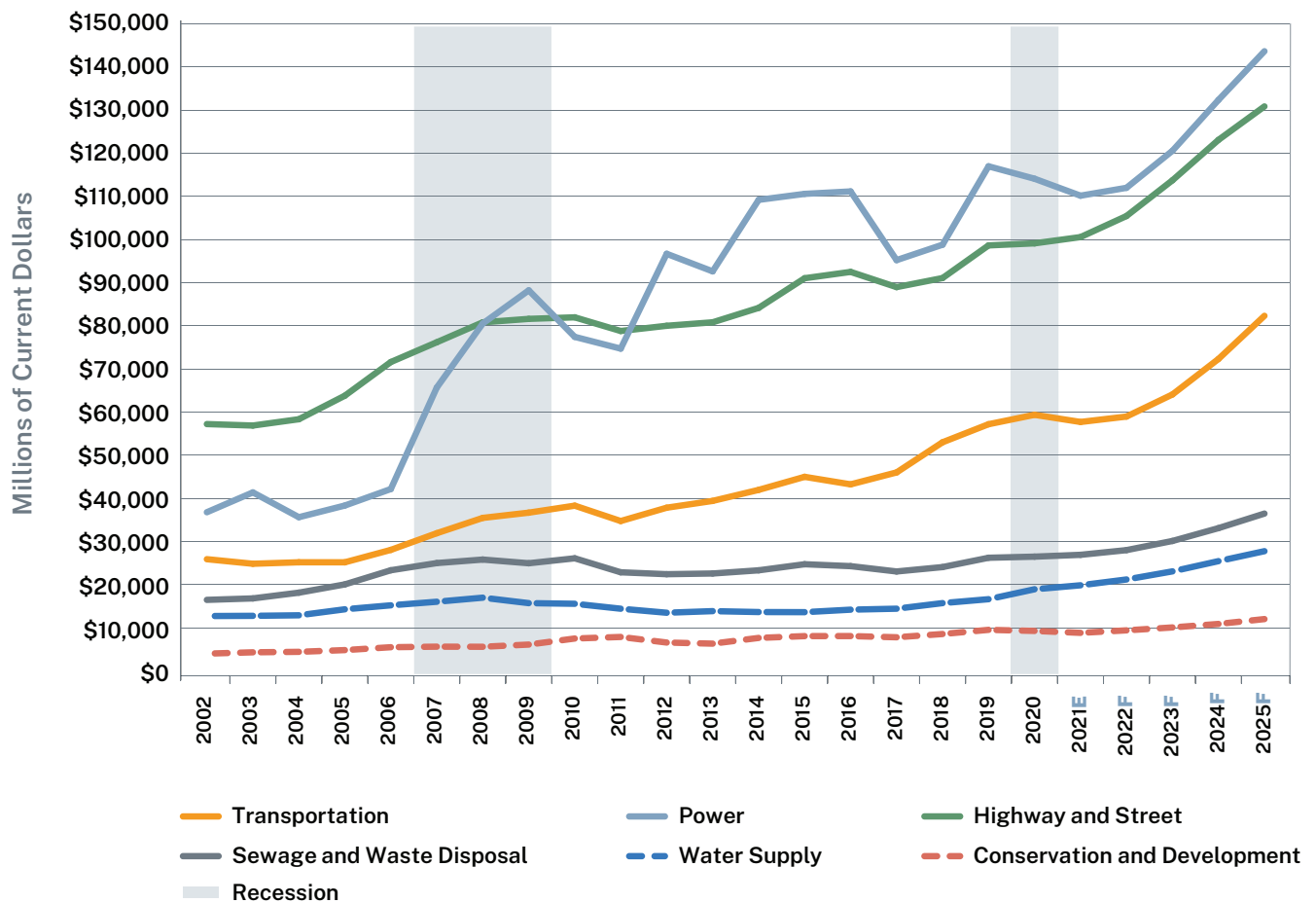
- Total heavy civil construction put in place is anticipated to fall 1% in 2021, led by declines in conservation and development, power and transportation (particularly in water and air).
- Growth expectations through 2025 have been increased this quarter due to ongoing negotiations and pressing requests for increased federal investment toward infrastructure to promote ongoing economic growth.
- Based on recent federal requests, an infrastructure package is anticipated to impact all heavy civil segments. Longer-term growth through 2025 will be led by water supply, transportation, and sewage and waste disposal investment.

U.S. 2021 Segment Performance 2021/2020 Comparison



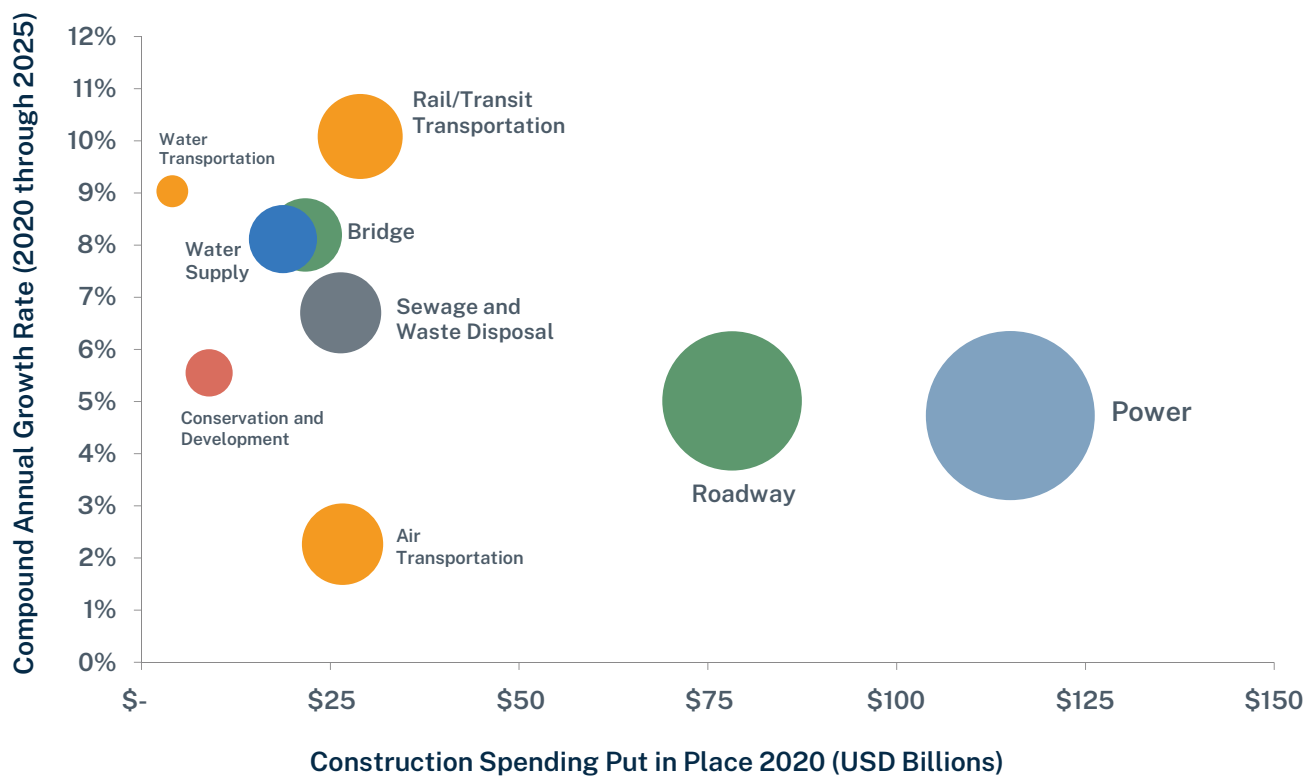


Heavy Civil Construction Put in Place





Heavy Civil Construction Outlook



Construction Put in Place Estimated for the United States

Millions of Current Dollars

Third Quarter 2021 Forecast (based on 1st Quarter 2021 Actuals and 2nd Quarter 2021 Assumptions)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
TRANSPORTATION	43,340	46,138	53,218	57,449	59,661	57,978	59,246	64,434	72,755	82,879
Air	14,232	17,194	22,008	24,428	26,619	24,755	25,048	25,698	27,075	29,774
Rail/Transit	26,794	26,588	28,200	28,898	28,956	29,336	30,253	34,118	40,210	46,809
Port/Water	2,314	2,356	3,010	4,123	4,086	3,888	3,945	4,617	5,470	6,296
POWER	112,067	95,951	99,569	117,960	115,048	111,071	112,918	121,605	133,526	144,960
HIGHWAY AND STREET	93,187	89,620	91,745	99,402	99,888	101,356	106,297	114,678	124,154	132,010
Roadway	60,679	59,188	65,087	72,678	78,203	79,115	82,608	87,884	94,087	99,861
Bridge	32,508	30,432	26,658	26,724	21,685	22,240	23,689	26,794	30,067	32,150
SEWAGE AND WASTE DISPOSAL	24,151	22,901	23,931	26,119	26,379	26,808	27,910	30,058	33,067	36,483
WATER SUPPLY	13,940	14,168	15,477	16,397	18,727	19,660	21,022	22,925	25,325	27,663
CONSERVATION AND DEVELOPMENT	7,745	7,464	8,229	9,207	8,955	8,501	9,087	9,772	10,591	11,732
Total Heavy Civil Put in Place	\$294,430	\$276,242	\$292,169	\$326,534	\$328,658	\$325,374	\$336,481	\$363,471	\$399,418	\$435,727

Construction Put in Place Estimated for the United States

Change From Prior Year – Current Dollar Basis

Third Quarter 2021 Forecast (based on 1st Quarter 2021 Actuals and 2nd Quarter 2021 Assumptions)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
TRANSPORTATION	-3.9%	6.5%	15.3%	8.0%	3.9%	-2.8%	2.2%	8.8%	12.9%	13.9%
Air	8.0%	20.8%	28.0%	11.0%	9.0%	-7.0%	1.2%	2.6%	5.4%	10.0%
Rail/Transit	-9.1%	-0.8%	6.1%	2.5%	0.2%	1.3%	3.1%	12.8%	17.9%	16.4%
Port/Water	-6.4%	1.8%	27.8%	37.0%	-0.9%	-4.8%	1.5%	17.1%	18.5%	15.1%
POWER	0.5%	-14.4%	3.8%	18.5%	-2.5%	-3.5%	1.7%	7.7%	9.8%	8.6%
HIGHWAY AND STREET	1.6%	-3.8%	2.4%	8.3%	0.5%	1.5%	4.9%	7.9%	8.3%	6.3%
Roadway	3.0%	-2.5%	10.0%	11.7%	7.6%	1.2%	4.4%	6.4%	7.1%	6.1%
Bridge	-0.9%	-6.4%	-12.4%	0.2%	-18.9%	2.6%	6.5%	13.1%	12.2%	6.9%
SEWAGE AND WASTE DISPOSAL	-1.8%	-5.2%	4.5%	9.1%	1.0%	1.6%	4.1%	7.7%	10.0%	10.3%
WATER SUPPLY	4.4%	1.6%	9.2%	5.9%	14.2%	5.0%	6.9%	9.0%	10.5%	9.2%
CONSERVATION AND DEVELOPMENT	0.1%	-3.6%	10.2%	11.9%	-2.7%	-5.1%	6.9%	7.5%	8.4%	10.8%
Total Heavy Civil Put in Place	0.2%	-6.2%	5.8%	11.8%	0.7%	-1.0%	3.4%	8.0%	9.9%	9.1%

Historical CPIP reflects spending as reported by the U.S. Census through August 2021.

ABOUT THE AUTHORS



Brian Moore is a principal and strategy practice leader with FMI. Brian focuses 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).



Paul Trombitas is a senior consultant with FMI's strategy practice and works with clients across the engineering and construction industry. He is responsible for managing and delivering in-depth market insights focused on the built environment. He is actively involved with clients in developing market strategy, focusing on alternative project delivery methods. Paul has been quoted in multiple publications, including ENR, regarding the design-build market and maintains key stakeholder relationships that provide unparalleled industry access. Paul can be reached at [***paul.trombitas@fmicorp.com***](mailto:paul.trombitas@fmicorp.com).



Brian Strawberry is a senior economist with FMI. Brian's expertise is in economic and statistical modeling. He leads FMI's efforts in market sizing, forecasting, and building product/construction material pricing and consumption trends. Brian's combination of analytical skills and creative problem-solving abilities has proven valuable for many contractors, owners and private equity groups as well as industry associations and internal research initiatives. Brian can be reached at [***brian.strawberry@fmicorp.com***](mailto:brian.strawberry@fmicorp.com).



Emily Beardall is a consultant for FMI's strategy practice. Emily is responsible for creating and developing tools to deliver innovative solutions for our clients. She is committed to utilizing these strategic tools to improve company performance and profitability. Emily can be reached at [***emily.beardall@fmicorp.com***](mailto:emily.beardall@fmicorp.com).

**Denver**

44 Cook Street
Suite 900
Denver, CO 80206
303.377.4740

Houston

1301 McKinney Street
Suite 2000
Houston, TX 77010
713.936.5400

Raleigh (headquarters)

223 S. West Street
Suite 1200
Raleigh, NC 27603
919.787.8400

Tampa

4300 W. Cypress Street
Suite 950
Tampa, FL 33607
813.636.1364

FMI is the leading provider of consulting and investment banking to the built environment. We provide services in the areas of strategy, leadership and organizational development, performance, technology and innovation, mergers and acquisitions, financial advisory and private equity financing.

For more information, please visit www.fmicorp.com.