



Market Outlook for Alternative Delivery

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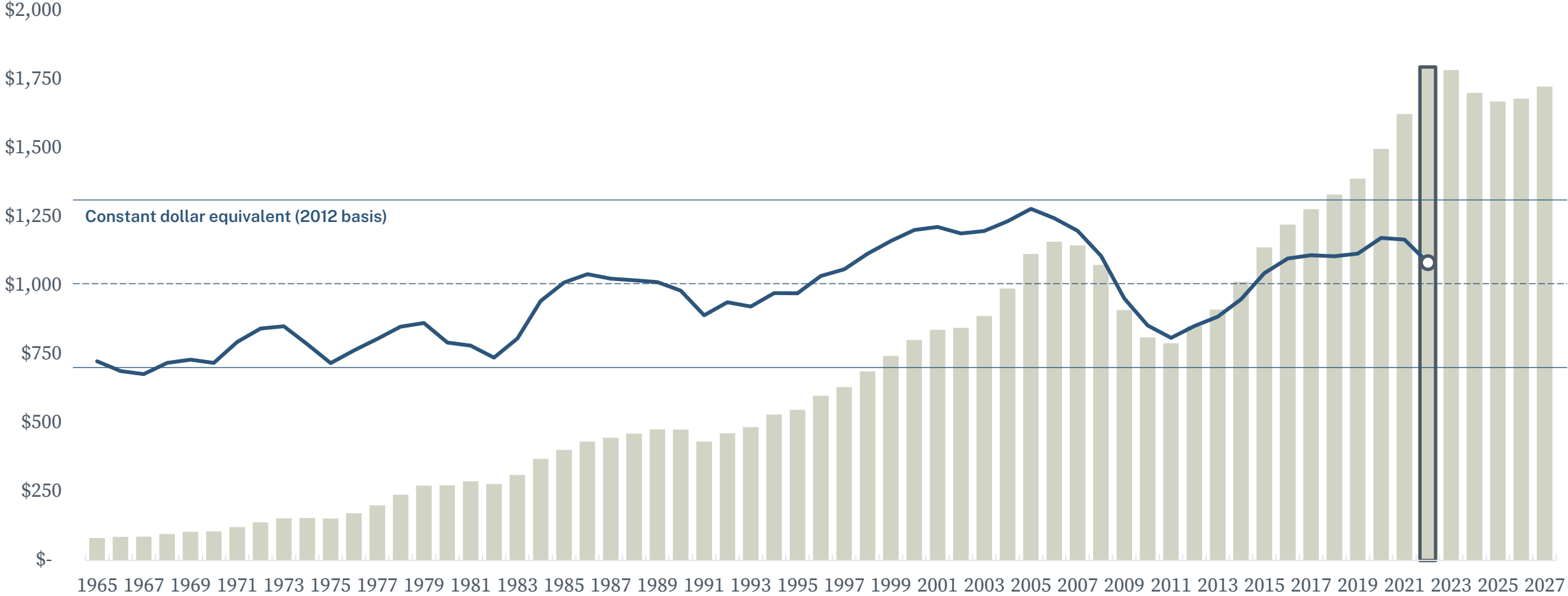
Topics

- Market Outlook for Design-Build
- Design-Build & Talent Retention
- Key Considerations for Design-Build in the Market

Less... For More

Total Construction Spending Put in Place (US)

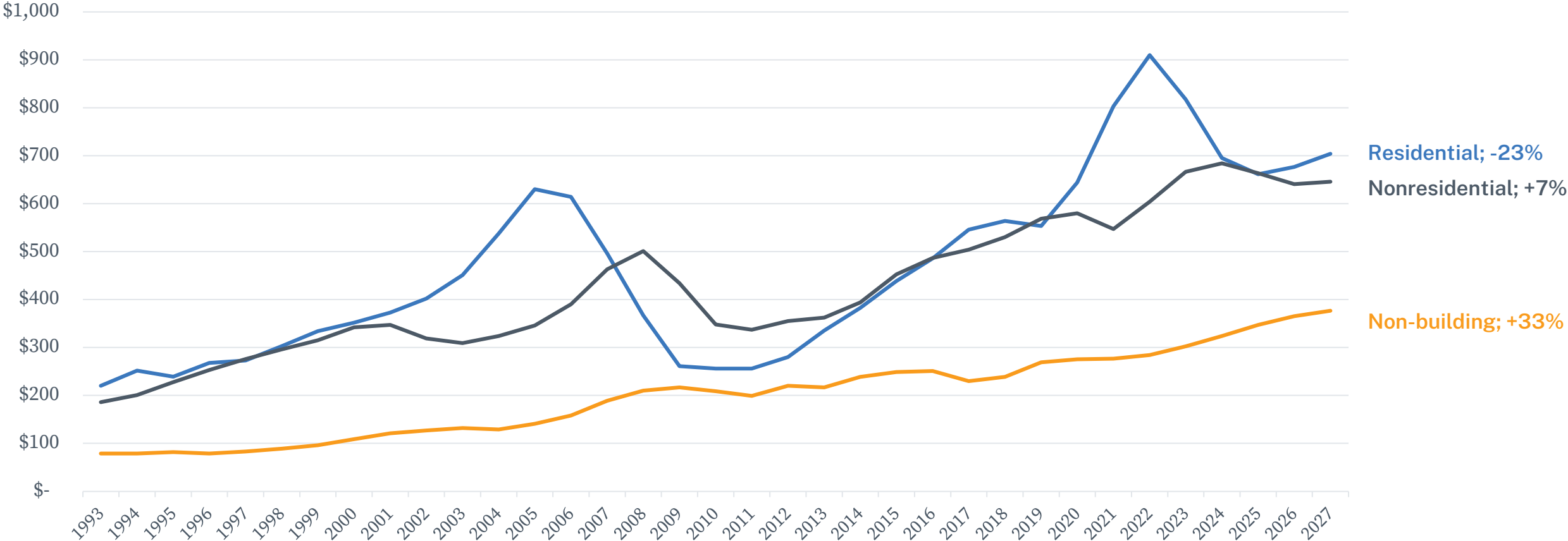
Source(s): FMI Q2 2023 Forecast



Bright Spots Remain

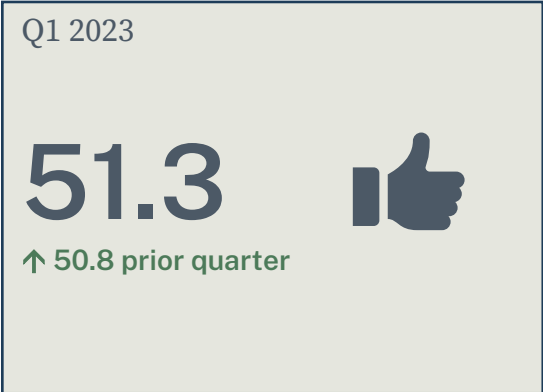
Total Construction Spending Put in Place (US)

Source(s): FMI Q2 2023 Forecast



Market Confidence

AEC Sentiment Indices



Architectural Billings Index (ABI)



Nonresidential Construction Index (NRCI)



Heavy Civil Construction Index (HCCI)



Construction Industry Round Table

CIRT Sentiment Index

New vs Old Economy

New Economy...

Life Sciences



Data Centers



Semiconductor Fabrication



Food & Beverage Manufacturing



Logistics



Intelligent Transportation Systems



Urban Mass Transit



New Energy



Old Economy...

Lodging



Shopping Centers/ Malls



Automotive



Movie Theaters



Office



Sports/ Recreation



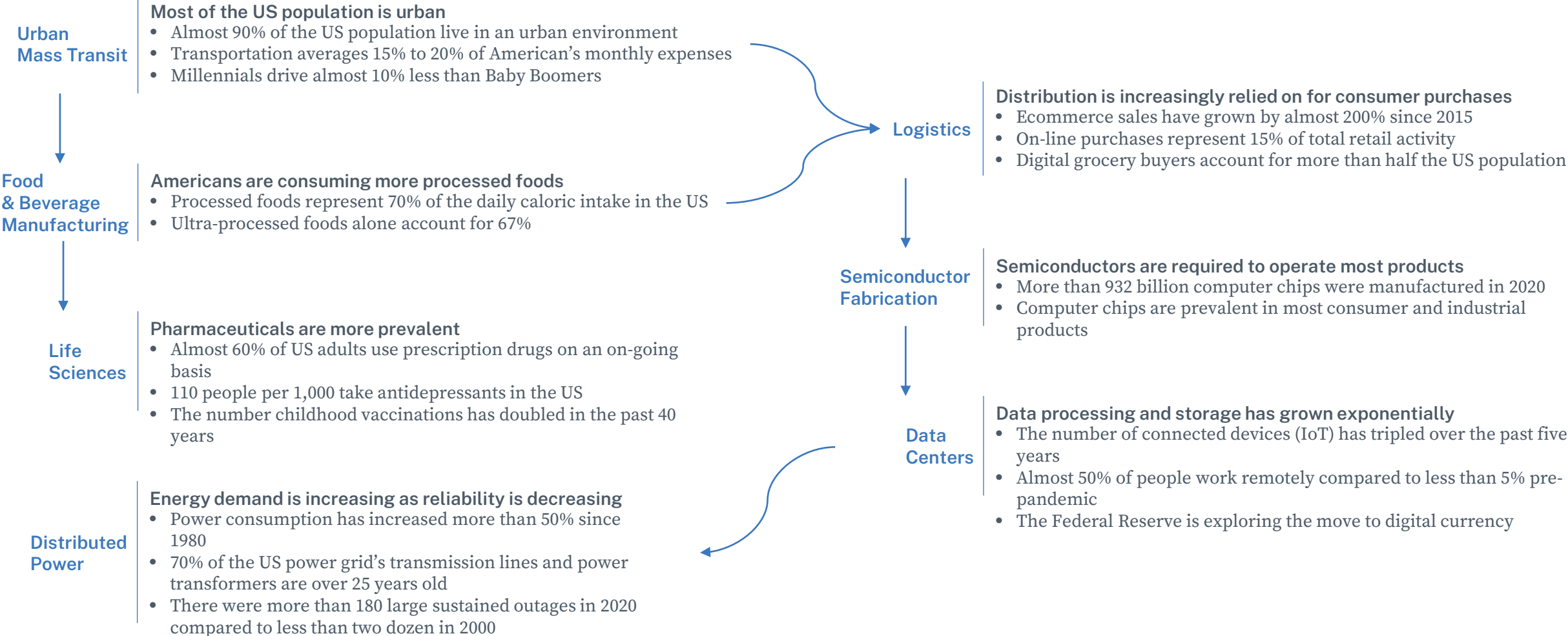
Amusement Parks



Banks



New Economy Trend Line



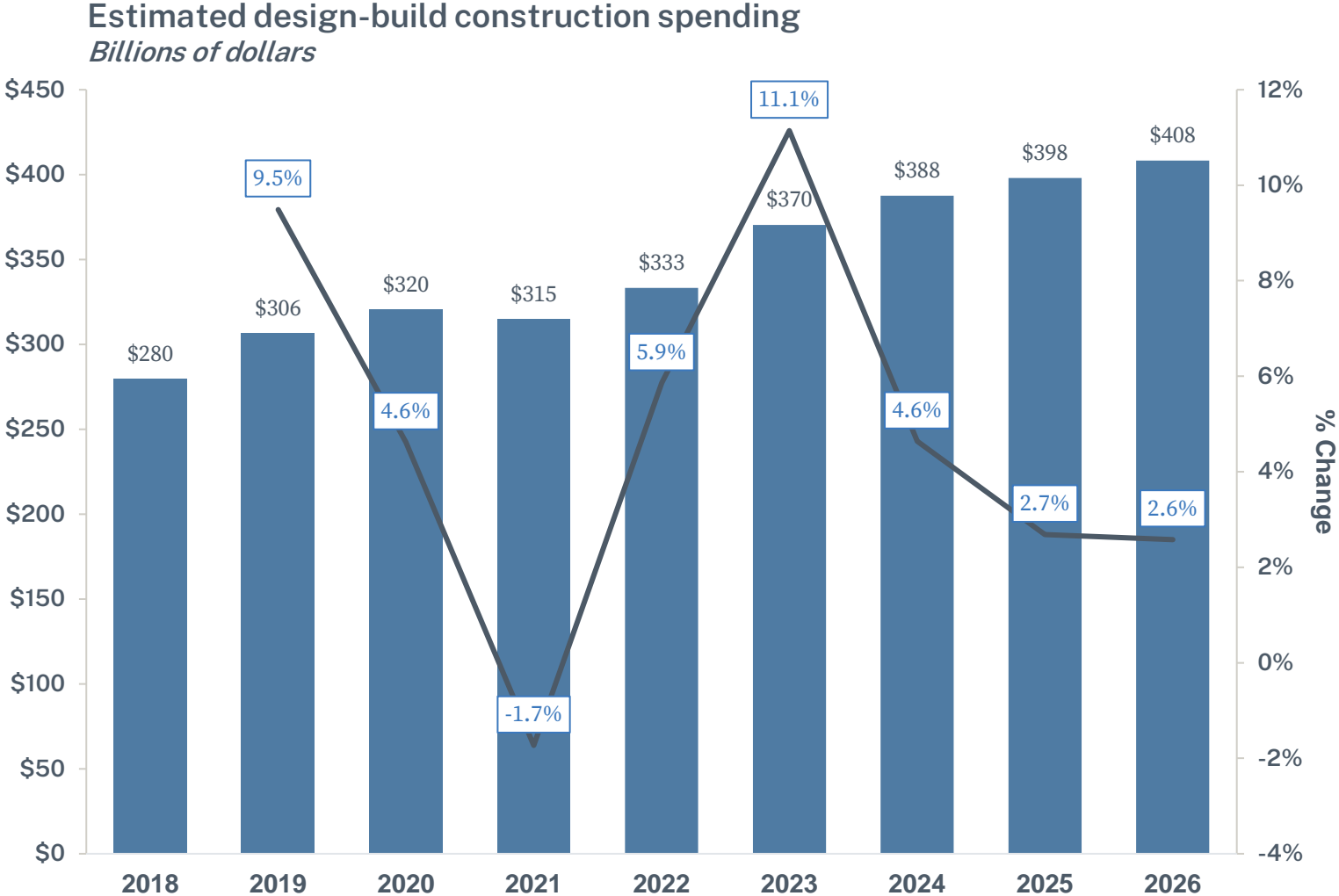
“Design-build is no longer an alternative method. It is a main part of how we deliver our program.”

- Owner



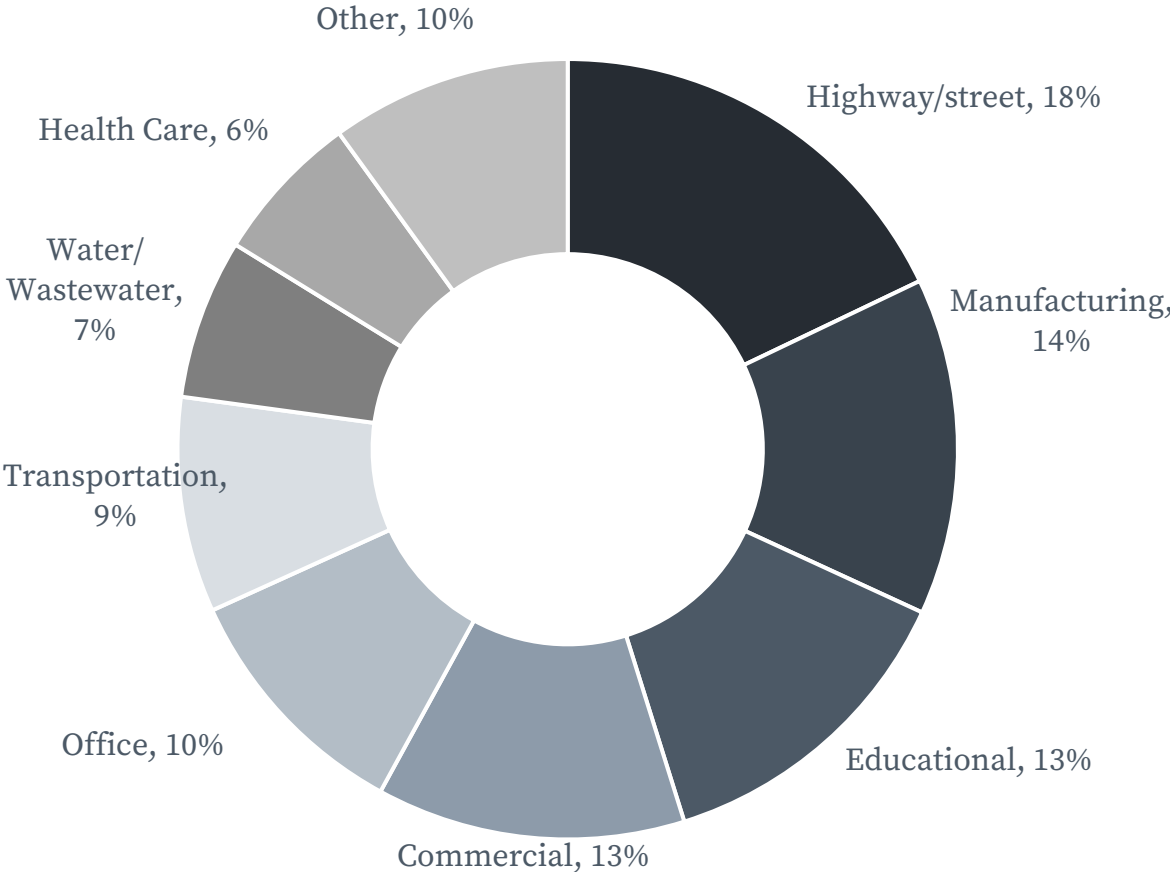
Design-Build Forecast

Owners have traditionally employed design-bid-build as the project delivery method of choice. As owner needs and project demands have changed, owners have increasingly opted to employ alternative delivery methods based on specific project factors.



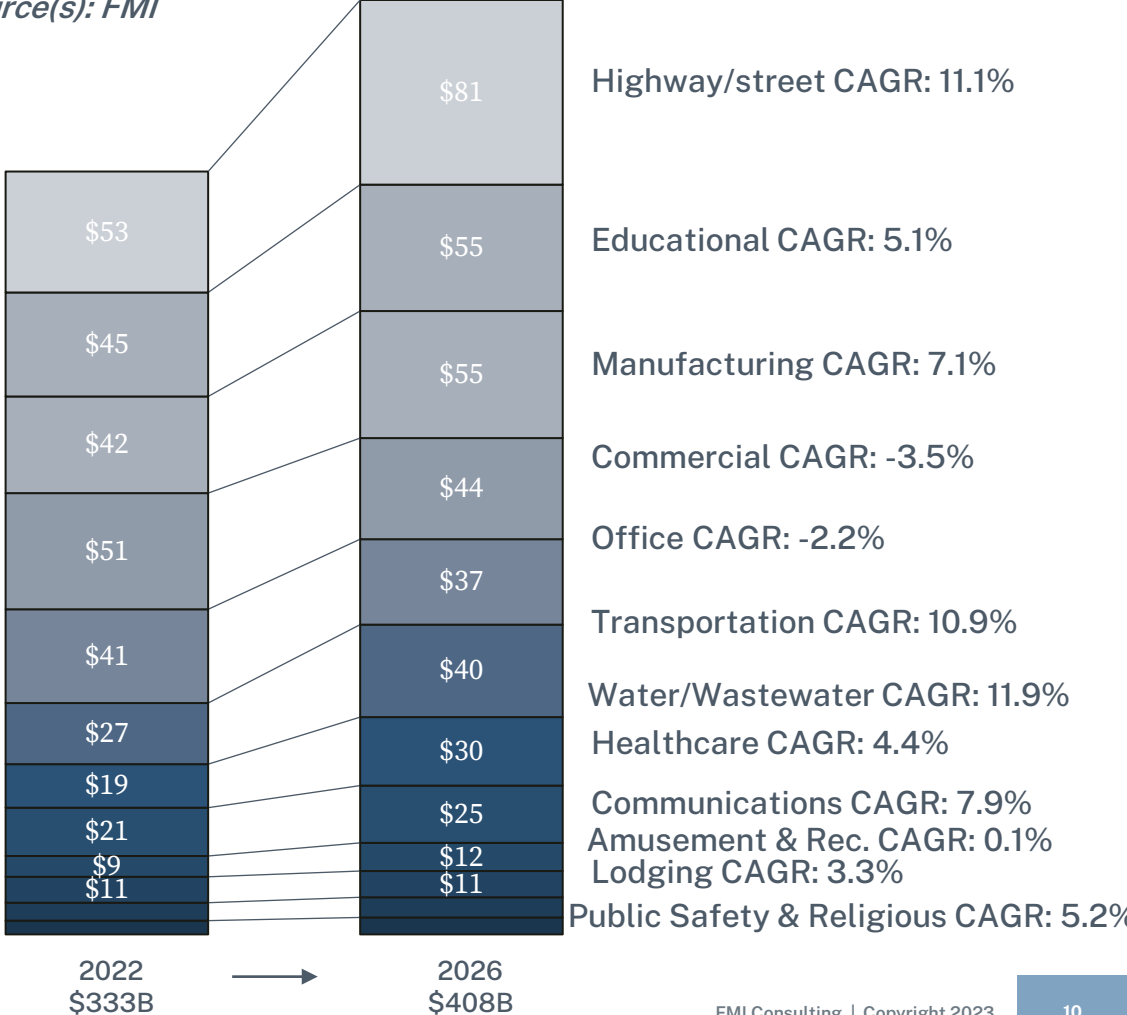
Design-Build Forecast

Distribution of forecast spending by segment
Combined CPiP spending, 2022-2026
 Source(s): FMI



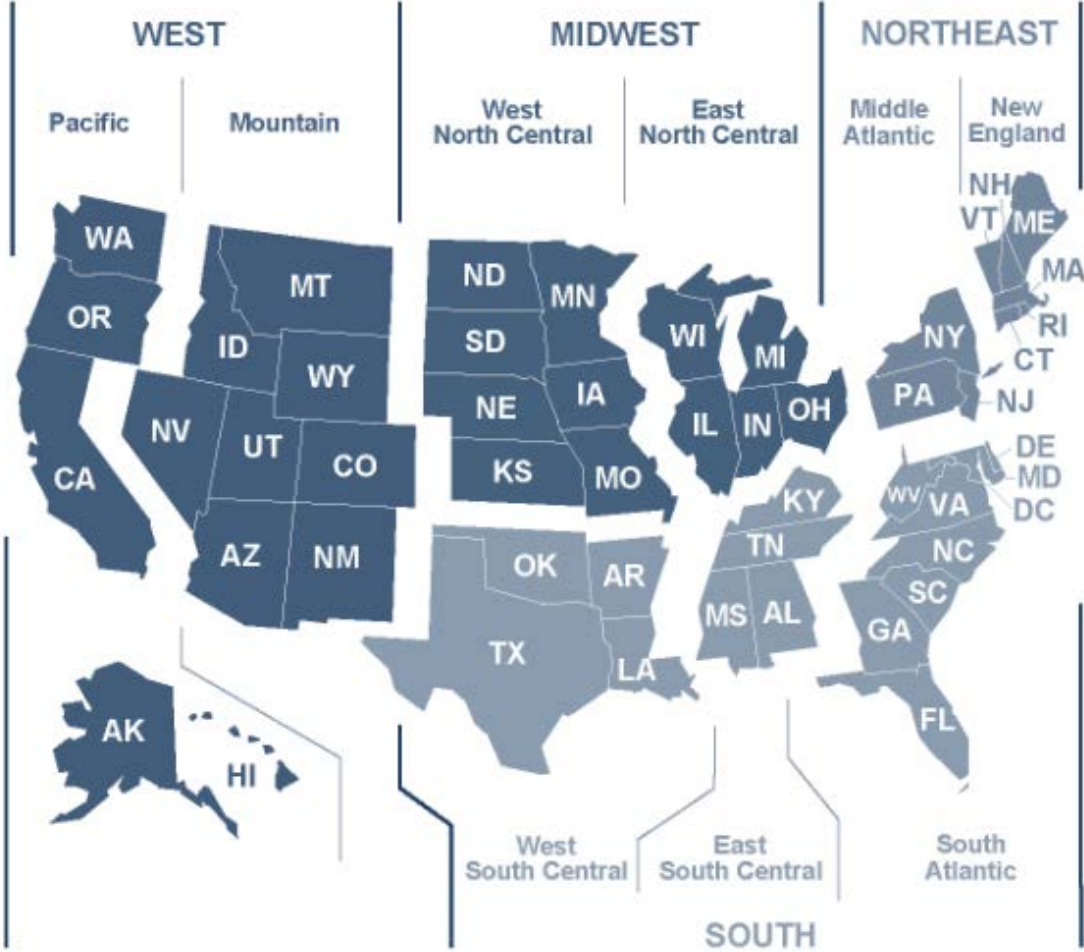
*Other includes: Public safety, religious, A&R, and lodging

Distribution of forecast spending by segment
CPiP spending, 2022, 2026
 Source(s): FMI



Design-Build Forecast

Design-build construction put in place by Census Division
 Source(s): FMI

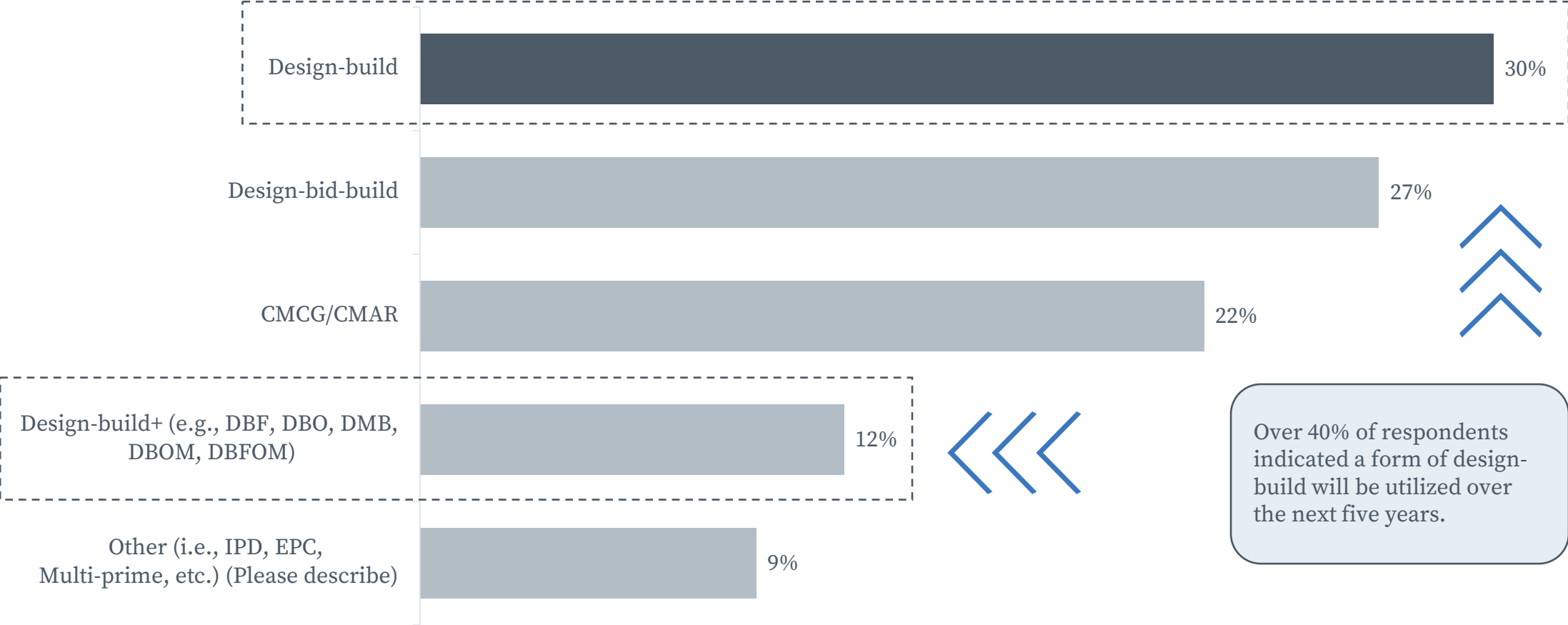


| | | <i>Billions of current dollars</i> | | CAGR (22-26) |
|------------|--------------------|------------------------------------|---------|--------------|
| | | 2022e | 2026f | |
| WEST | Mountain | \$25.7 | \$31.3 | 5.0% |
| | Pacific | \$60.8 | \$69.4 | 3.4% |
| MIDWEST | East North Central | \$37.9 | \$43.1 | 3.2% |
| | West North Central | \$25.5 | \$30.9 | 5.2% |
| NORTHEAST | New England | \$12.4 | \$14.9 | 4.8% |
| | Middle Atlantic | \$40.4 | \$53.2 | 7.1% |
| SOUTH | South Atlantic | \$65.1 | \$80.4 | 5.4% |
| | East South Central | \$12.8 | \$15.4 | 4.8% |
| | West South Central | \$53.0 | \$69.6 | 7.0% |
| U.S. Total | | \$333.2 | \$408.2 | 5.2% |

Design-build and Design-build+ Will Lead

Percentage of respondents that indicated use over the next five years

Source(s): FMI Survey

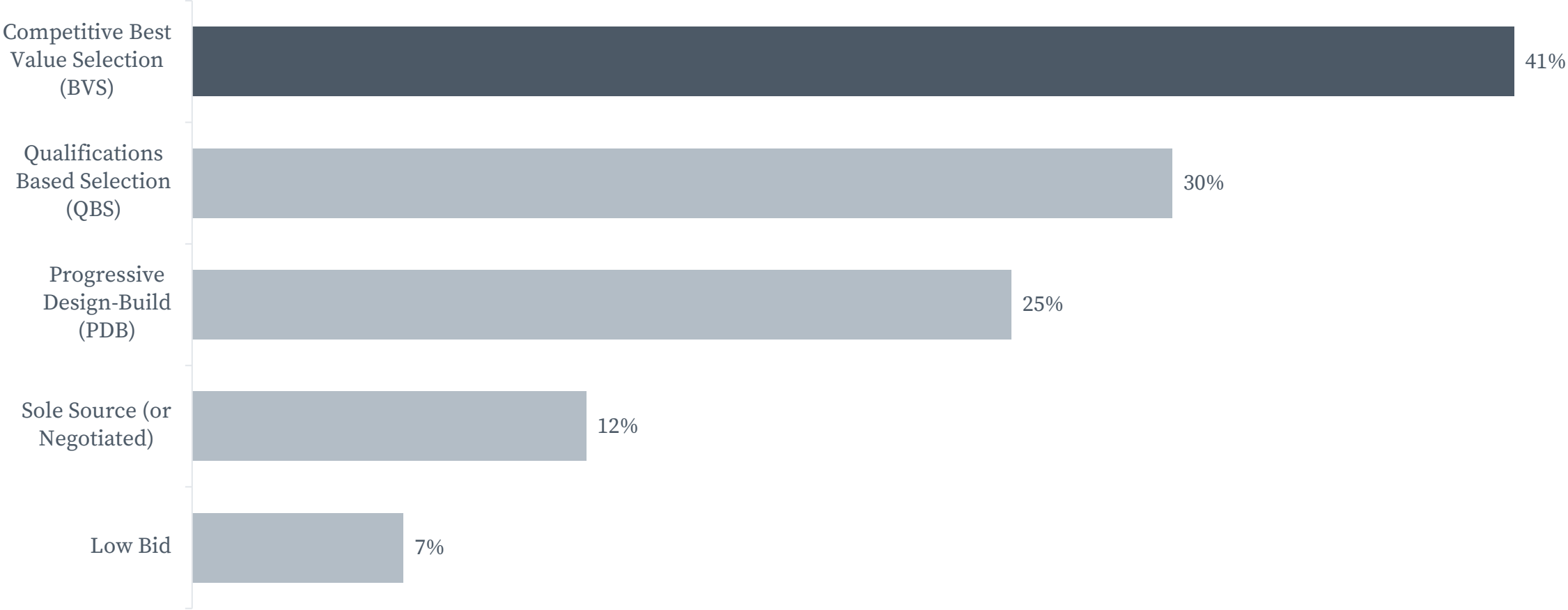


Over 40% of respondents indicated a form of design-build will be utilized over the next five years.

Procurement Approaches

Percentage of respondents that utilize select procurement approaches

Source(s): FMI Survey





Many in today's construction industry have neither managed or led through a significant downturn, and almost no one has managed during an extreme inflationary environment.

Benefits of Engaged Employees

1. Increased productivity

Individual productivity improves by 15% to 20%

2. Higher quality

Rework can be reduced by up to 25%

3. Fewer safety incidents

Safety incidents may be reduced by roughly 33%

4. Superior customer service

Repeat work can increase more than 50%

5. Lower absenteeism

Poor engagement results in 30%-plus higher absenteeism

6. Reduced turnover

Employee retention improves by almost 40%

7. Greater profitability

Contractors with highly engaged employees experience 20% to 25% greater job profitability

Turnover Is Expensive...

Estimated Cost of Employee Turnover for the Average US Contractor
 Assumes a 500-person organization
 Source(s): FMI

21%

Estimated Voluntary
Turnover Rate

33%

Cost to Replace (of salary)

\$

Total Cost/
Savings

30%

Project
Management

50%

Field
Labor

\$93,370 **\$34,810**

Project
Management Field
Labor

Other "hidden" costs...

- Loss of customers
- Loss of knowledge
- Loss of morale

Average Employee Engagement

| | | | | |
|----|----|-----------|-----------|-------------|
| 32 | 53 | \$985,987 | \$608,827 | \$1,594,814 |
|----|----|-----------|-----------|-------------|

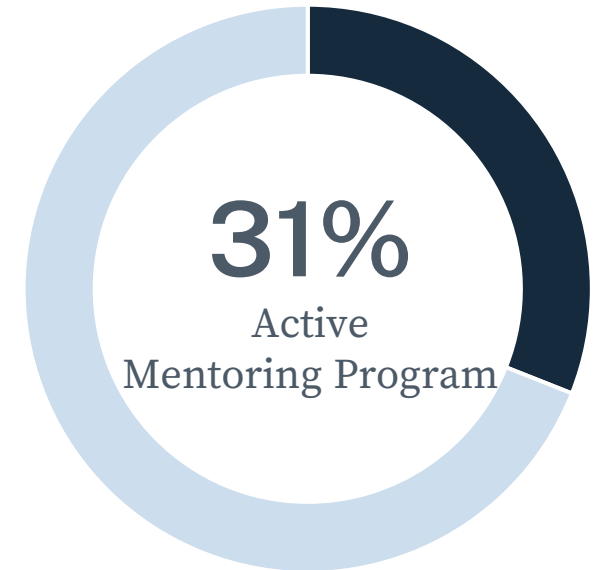
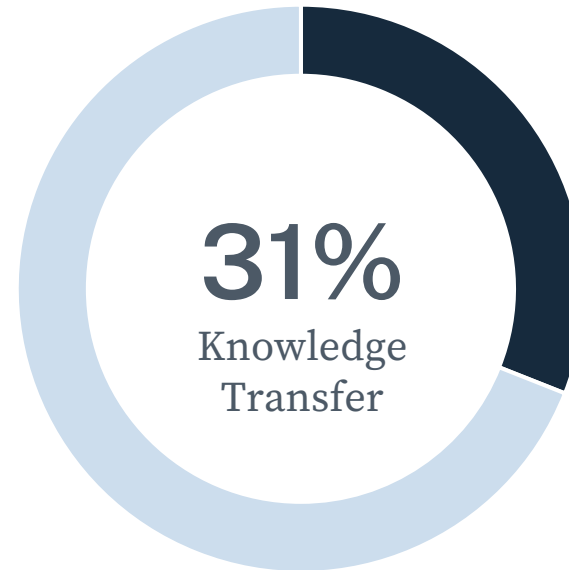
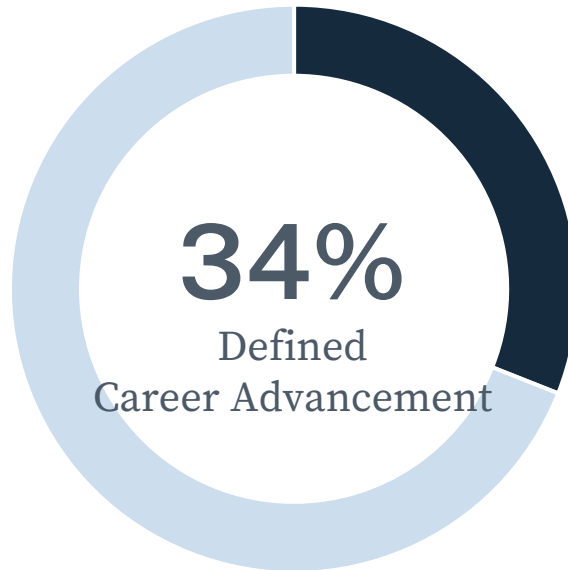
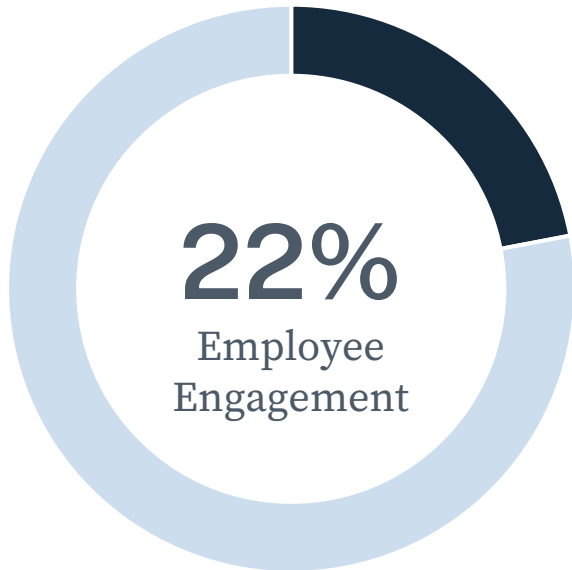
Above Average Employee Engagement (12.5% estimated voluntary turnover rate)

| | | | | |
|----|----|-----------|-----------|-----------------------------|
| 19 | 31 | \$585,430 | \$356,106 | \$941,536/ \$653,278 |
|----|----|-----------|-----------|-----------------------------|

...But Contractors Aren't Playing Defense

Which of the following does your organization have formal plans for?

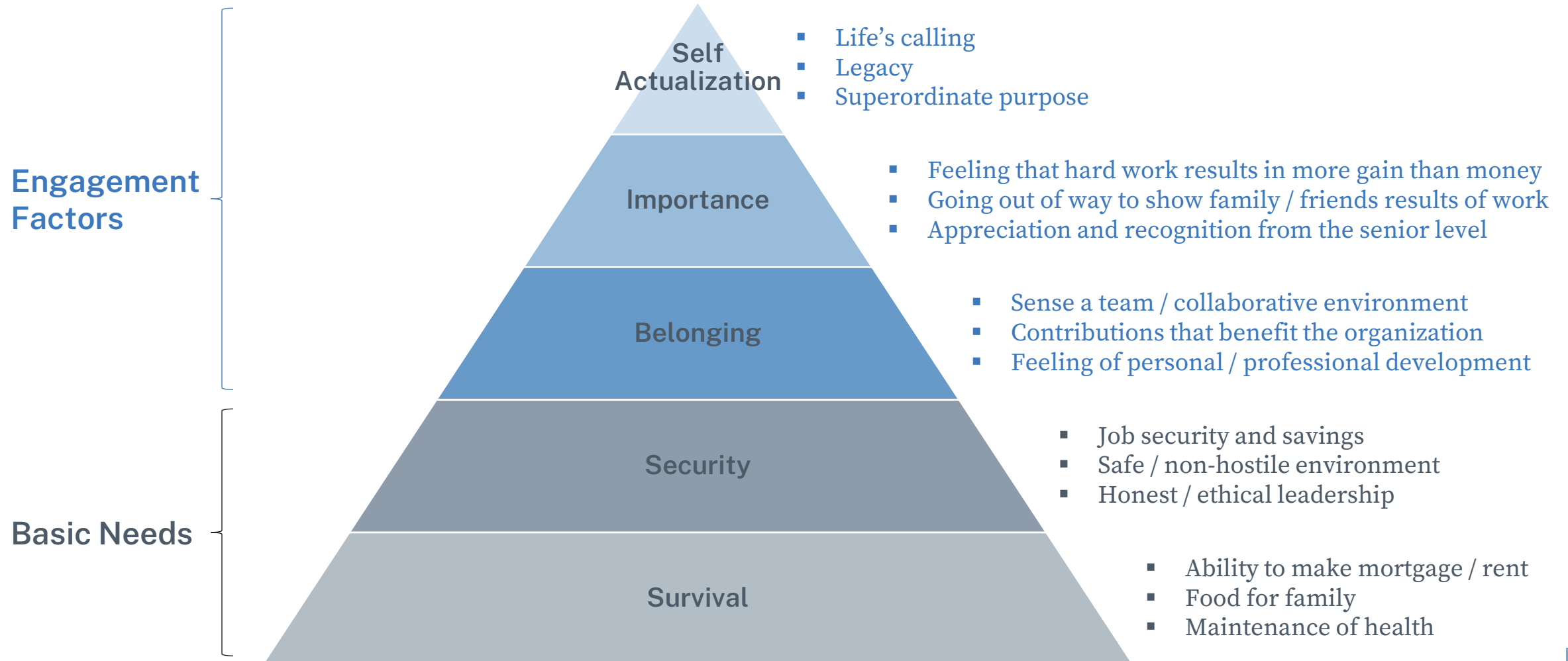
Source(s): FMI



Maslow's Hierarchy of Needs Applied to Employee Engagement

Why do employees leave?

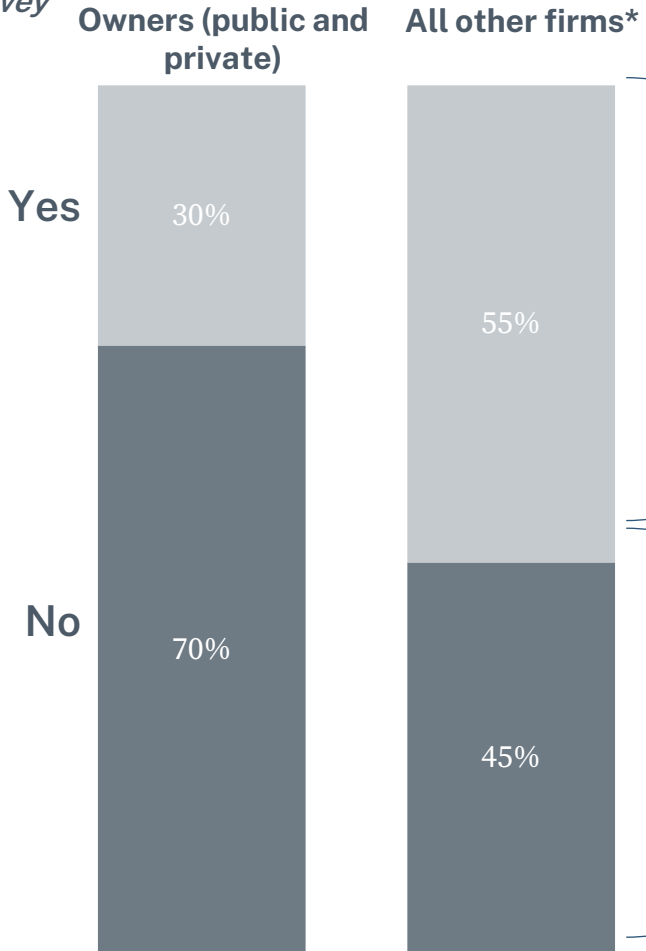
Source(s): FMI



Industry Firms Believe Design-Build Helps Retention

Design-build & Talent Shortages

Source(s): FMI Survey



How does design-build assist in addressing talent retention challenges?

Survey respondents indicated design-build projects led to higher levels of engagement and provided advancement opportunities and creative outlets to individuals on the team. Common themes included greater responsibilities and a broader perspective of the project, increasing satisfaction (and compensation) for individuals on design-build teams.

- “Younger generation is interested in this new collaborative approach.”*
- “Give people more freedom to make decisions and solve problem making them feel more valuable.”*
- “More collaborative, more fun, more learning.”*
- “Attracts a different group of next-generation Engineers to the Construction Industry.”*
- “Better team sport with preferred partners who have a common goal.”*

Why do you believe design-build does not assist in addressing talent retention challenges?

Stakeholders pointed to several factors that are believed to limit design-build’s assistance in talent retention. Factors such as location and compensation from projects seem to matter more than project delivery system to some teams. Additionally, respondents feel that retention is tied to culture and leadership of a particular company, not necessarily specific projects.

- “A higher skilled resource required which is limited in supply and subject to recruiting by competition.”*
- “Staff love design-build but get burnt out due to the demanding schedule. A balance is required.”*
- “Retaining resources is driven more by the location of projects vs. project delivery methods.”*
- “Burns out staff before projects are won. Staff prefer steady state design-bid-build design effort.”*
- “Talent is attracted to a company and not a contract strategy.”*

How Firms Are Addressing Retention

Steps organizations have taken to address talent retention challenges

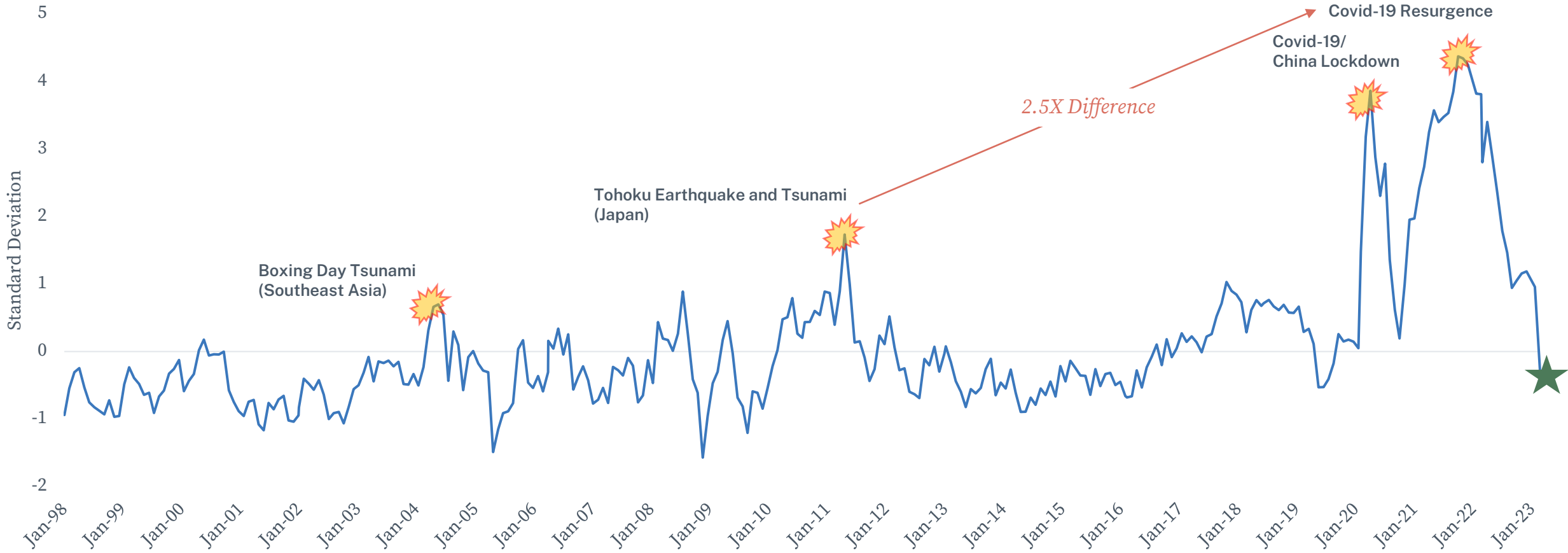
Source(s): FMI Survey

| Stakeholder | Compensation Adjustments | Increased/Additional Benefits (e.g., flex/remote work) | Increased Corporate/Leadership Focus on Culture | Other* (Please Describe) |
|--|--------------------------|--|---|--------------------------|
| Owners (Public + Private) | 27% | 30% | 15% | 29% |
| General Contractor / Construction Manager | 39% | 16% | 26% | 19% |
| Design-Build Firm | 38% | 13% | 9% | 25% |
| Specialty Trade Contractors | 35% | 0% | 23% | 22% |
| Architect / Engineer | 29% | 23% | 9% | 23% |
| Owner's Advisor (e.g., Owner Rep, PM, Owner Agent) | 22% | 33% | 9% | 22% |

*67% of those who selected Other wrote in their answer as all three solutions being taken with another 19% responding nothing is being done.

Supply Chain Returning to Normal?

Standard Deviation from the Mean
Source(s): Global Supply Chain Pressure Index

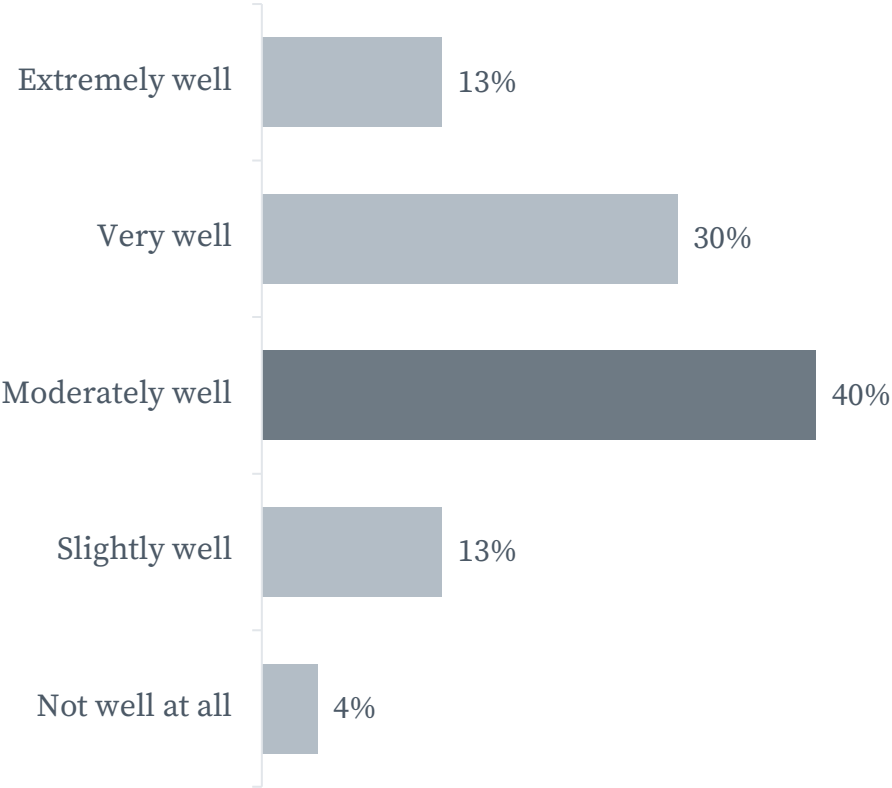


Design-Build Considered a Solution

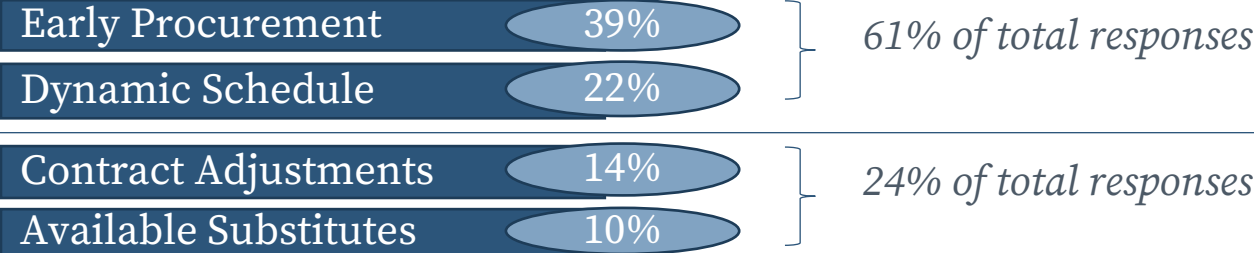
Supply Chain & Design-Build

Source(s): FMI Survey

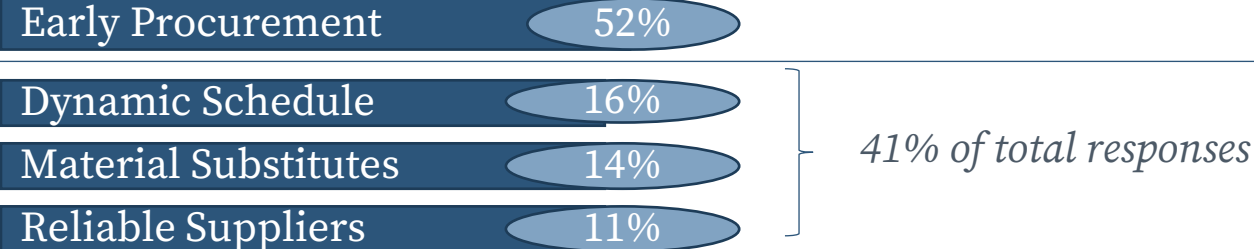
The majority of respondents indicated design-build can help them with supply chain issues over other delivery methods. When asked why that is, over half responded that it allows earlier procurement of goods and services to facilitate long lead times and collaborate with trades and their fabricators. This earlier procurement and a dynamic and fluid schedule aligns with overall industry strategies to combat supply chain constraints agnostic of design method.



What methods have you used to address global supply chain issues?



How has the design-build delivery method enabled your organization to better address global supply chain issues?



Project Characteristics to Expect Moving Forward

Project Characteristics
Source(s): FMI

| Bigger | Faster | Better |
|---|---|---|
| <p>Megaprojects consume an increasing share of construction spending</p> | <p>Project schedules continue to compress</p> | <p>When alternative delivery becomes normal delivery</p> |
| <ul style="list-style-type: none"> • Annual megaproject CPIP is expected to increase almost 500% over the next five years, growing from slightly more than \$50 billion to just almost \$300 billion. Over the next decade, annual megaproject spending is expected to increase nearly 600%, reaching just over \$350 billion. • More than \$2.5 trillion in megaprojects are currently in planning or design through 2050 | <ul style="list-style-type: none"> • Accelerated schedule and schedule certainty are increasingly influencing contractor selections. This is particularly true in mission critical and time sensitive industries. • For nonresidential building projects valued over \$25 million, the average schedule has shortened by over a year during the past decade. • Use of prefabrication / offsite construction is increasing to address these compressed schedules | <ul style="list-style-type: none"> • As legislation has enabled greater use of alternative methods, and familiarity with these methods has grown, these methods are anticipated to represent over 80% of spending over the forecast period. • Industry stakeholders consistently identify the ability to deliver a project in an expedited manner as a main driver of alternative delivery method utilization. |

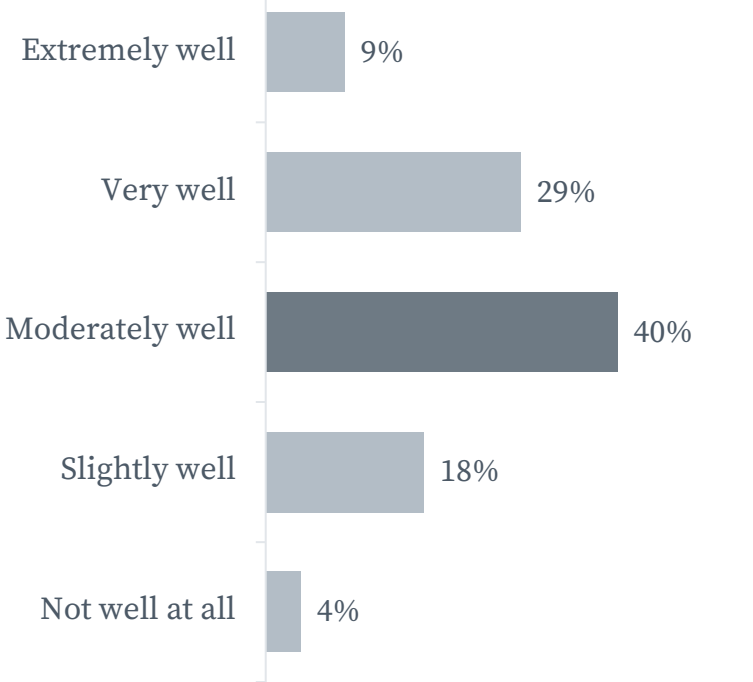
Prefabrication Favors Design-Build

Design-Build & Prefabrication

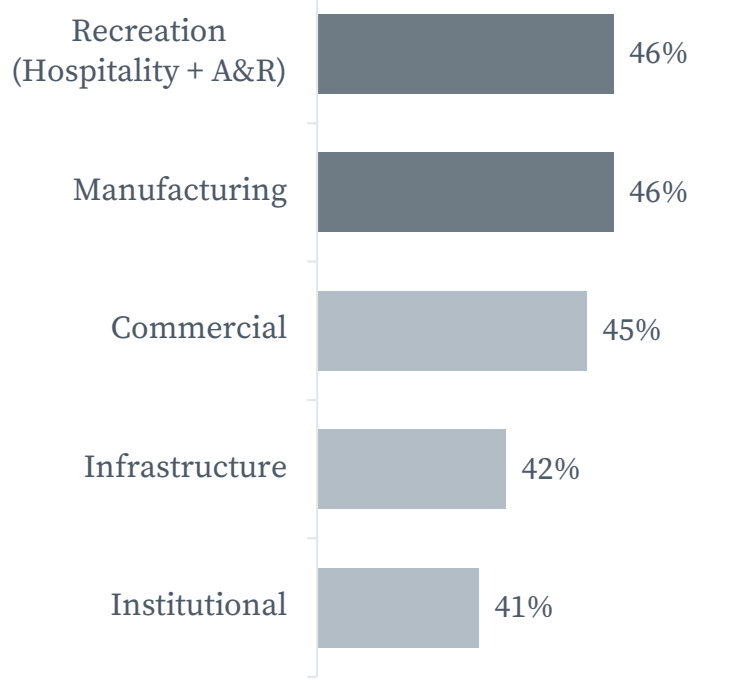
Source(s): FMI Survey

The majority of respondents indicated that design-build can increase prefabrication use in projects. Participants also stated almost half of recreation, manufacturing, and commercial projects are utilizing some form of prefabrication construction. Additionally, all segments have at least a third of their projects using off-site construction. Approximately a quarter of recreation projects use prefabrication whereas one in five projects in all the segments use off-site construction in some format.

How well does design-build facilitate greater prefabrication on projects?



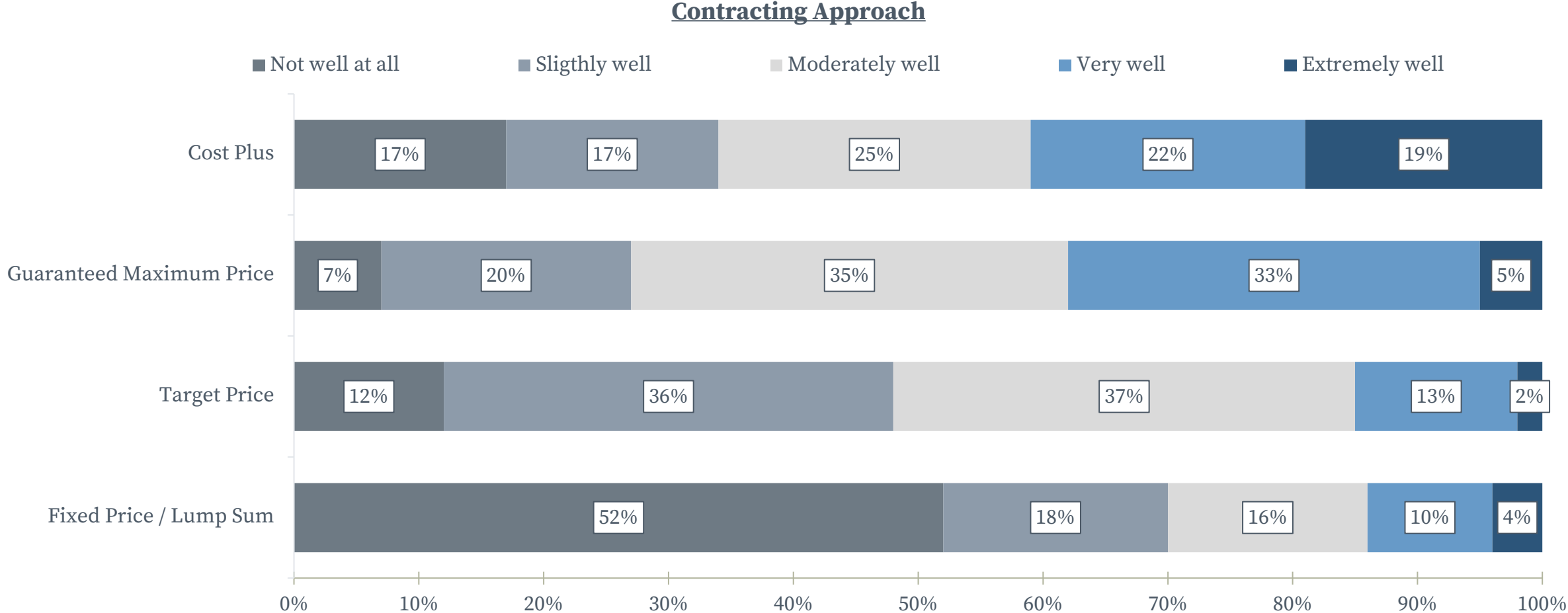
What percentage of your design-build projects are utilizing prefabrication?



Managing Costs

Cost Certainty in a Volatile Market Environment

Source(s): FMI Survey



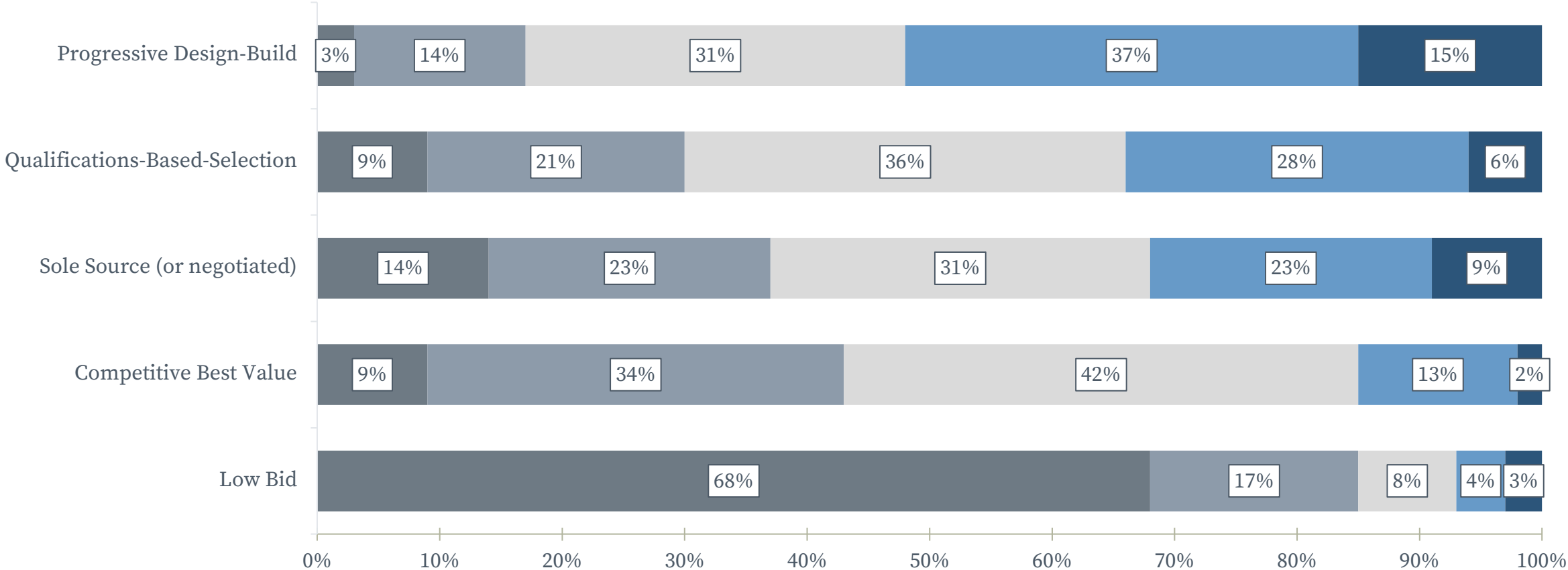
Managing Costs

Cost Certainty in a Volatile Market Environment

Source(s): FMI Survey

Procurement Approach

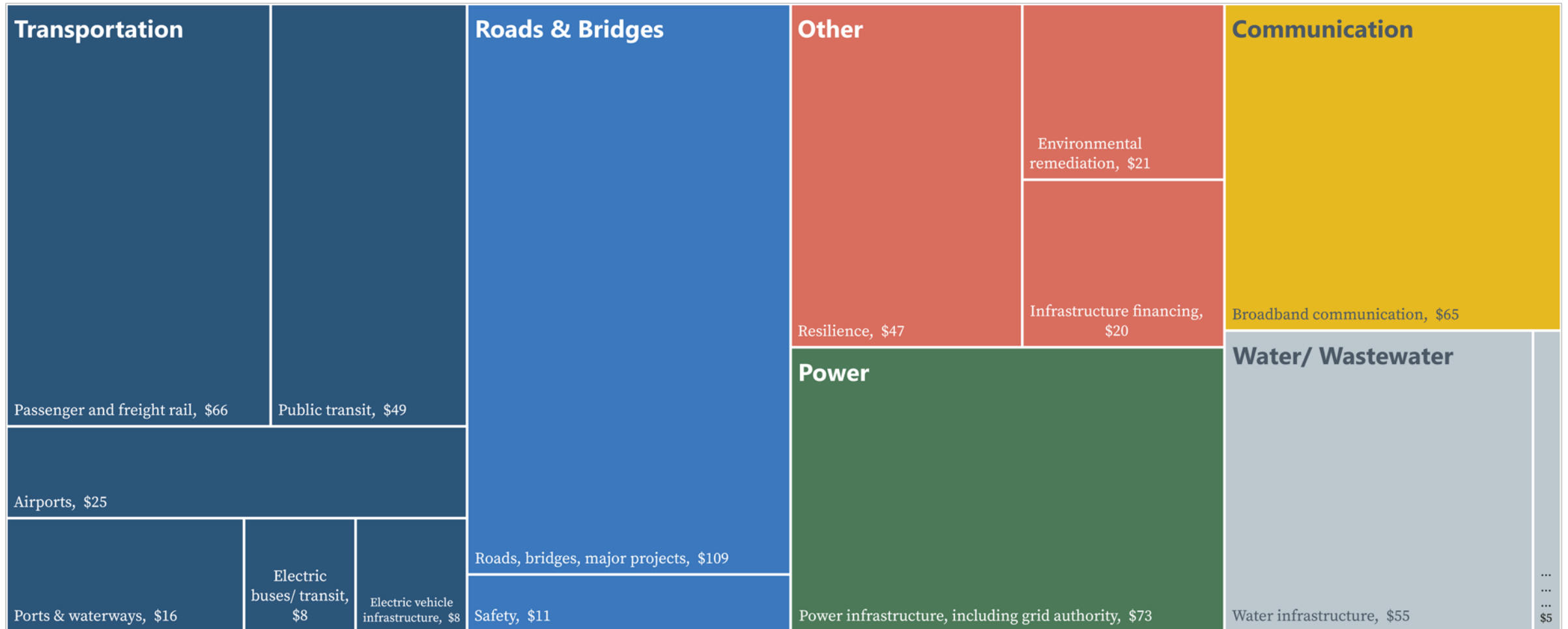
■ Not well at all ■ Slightly well ■ Moderately well ■ Very well ■ Extremely well



Where Federal Funds Are Allocated

Bipartisan Infrastructure Framework

Source(s): FMI

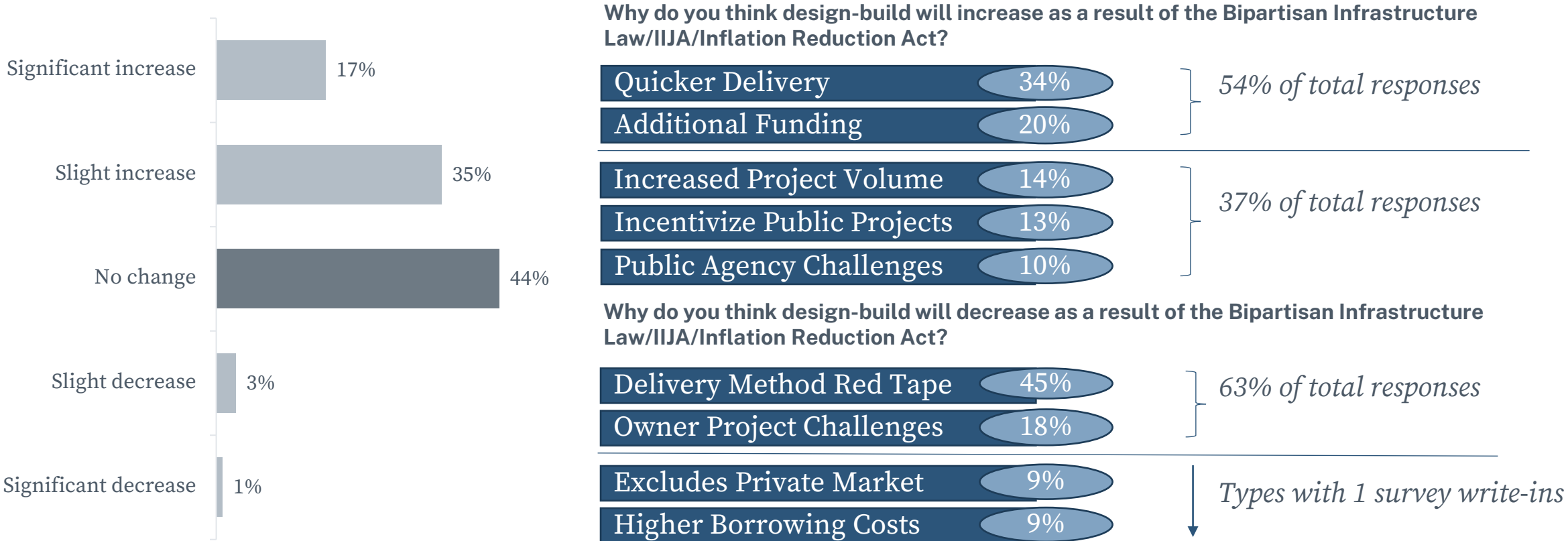


Design-Build & Federal Projects

Design-build and Federal Projects

Source(s): FMI Survey

Over half of those surveyed believe design-build use will increase thanks to new infrastructure legislation. Many cited projects will now have the funding support to accelerate a higher volume of projects in owner pipelines. 44% don't think utilization will change at all and a small percentage of stakeholders anticipate a decline of design-build use. The majority of those with negative outlooks believe ministerial red tape from the legislation will impede quicker design-build adoption.



Conclusion

- The market is continuing to evolve. While there is uncertainty, certain segments of construction will continue to grow
- Importance of talent retention cannot be overstated. Design-build projects can align with the types of projects that support higher retention.
- Focus on non-traditional and pro-active development of people that you currently have. To stay ahead in the market, you have to have people ready to deliver.
- Project demands continue to rise. Owners are requiring quicker delivery at compressed costs. Utilization of design-build can assist in meeting these challenges

Questions

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FMI is a leading consulting and investment banking firm dedicated exclusively to the built environment. We serve as the industry's trusted advisor, providing current market insights, deep industry research and key relationships that deliver tangible results for our clients.

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