Market Outlook Construction Forum

Summary

as of Novembe 5, 2021

Presenters

- Blair Tennant, Associate Principal, Vermeulens
- Brad Wendler, Senior Project Manager, Vaughn Construction

Market Outlook, Vermeulens

- AIA billings index is showing 8 months of increasing design contracts and 10 months of increasing inquiries
- construction volume is at an all-time high; mainly driven by residential construction whereas non-residential volume is down 3% from peak
- unemployment is beginning to settle, which implies peak employment, pressure on wages, and difficulty finding workers
- commodities: steel futures are projecting a decrease in material costs

Recommendations, Vermeulens

- anticipating 0.5% escalation per month for Q3, Q4 2021, and 2022
- recommending 3% – 5% in bidding contingency for price shocks and margins as backlogs rebuild
- consider alternative delivery methods
- design add alternates in the magnitude of 10%

Design-Assist Procurement, Vaughn Construction

- things to consider before using design-assist: market conditions (labor material costs), schedule, and complexity
- contracting is easy: one for preconstruction and one for construction
- do not recommend GMP early: bid to DA contractor on 100% construction documents
- contract multiphase projects using the same techniques of detailed proposals, open book documentation, audit, and bid/buy events for each phase
- when proposing get rates, use auditors, totally open book, competitive nature for all line items and subcontracts
- escalation tracking: a level field with commodities and schedule
- some trades can lock in early when quantities are known; cost avoidance with prebuy activities and procurement
- cons: avoid GMP contracts as everything becomes a change, accountability measures against real data, poor teamwork where CM does not lead and filter, poor value where the team does not have a process, integration between design team or design-assist when doing the drawings
- lock in hard dollar amounts at 50% construction documents when you know your job and can trigger buys; use contingency online item basis for prebuy risk
- how to avoid toilet paper rush: 25 times the normal number of people in line, suppliers can help spread and smooth demand to a happy medium

Next Session, December 3, 2021

- Design-Build and Design-Assist Contracting, Big State Electric
- Design-Build Contracting, University of Texas at Arlington
- Higher Education Survey Results, Gensler

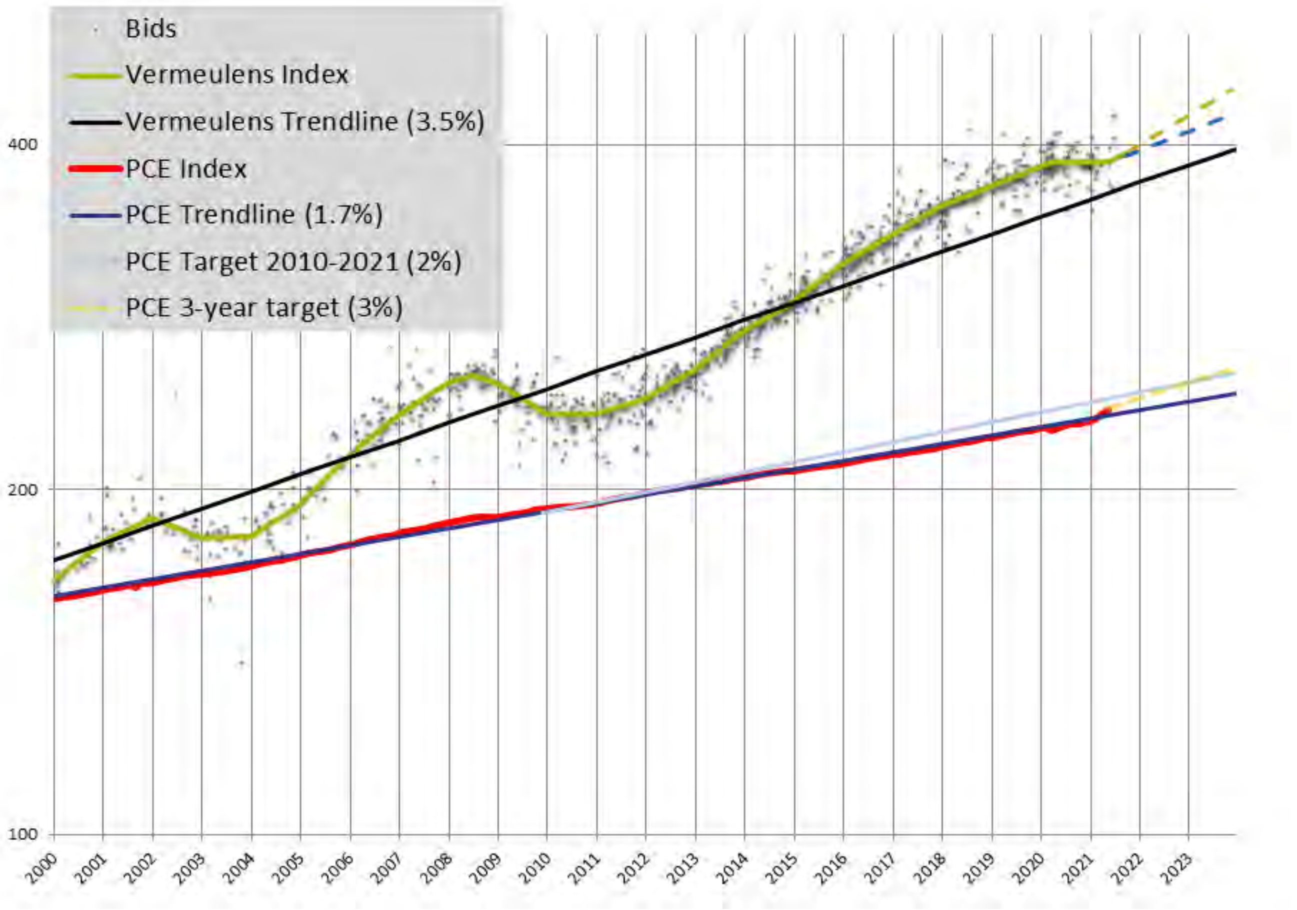
Design and Construction Market Outlook

Blair Tennant, Associate Principal | Vermeulens
Brad Wendler| Vaughn Construction

- Interim questions and comments via chat
- Slide deck, videos, summary; available on website
- Next session, December 3, 2021 (First Friday)

- Macro Economics & Construction Cost Update
- Design Assist Procurement

VERMEULENS

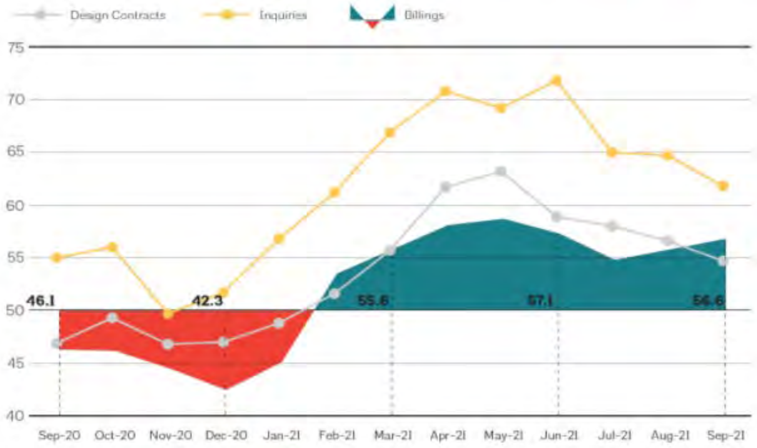

Bids
Vermeulens Index
Vermeulens Trendline (3.5%)
PCE Index
PCE Trendline (1.7%)
PCE Target 2010-2021 (2%)
PCE 3-year target (3%)
400
200
100
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

National

Business conditions at architecture firms strengthen further in September

Above 50 · Below 50 · No change from previous period

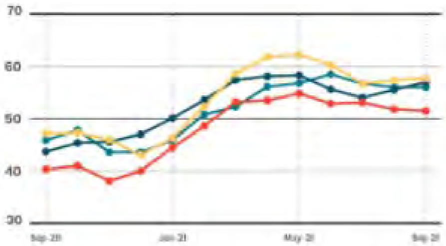
Graphs represent data from September 2020–September 2021

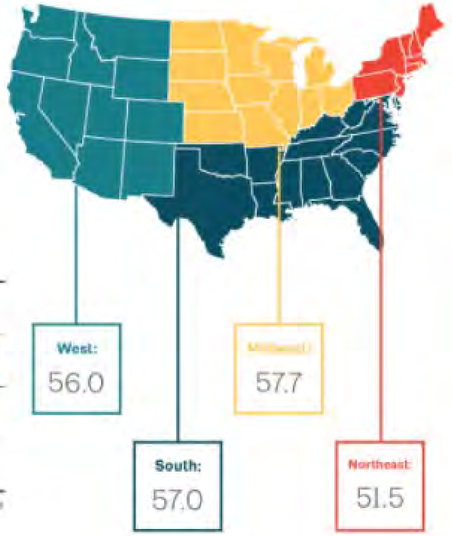


Regional

Firms in the Midwest, South report strongest billings

Graphs represent data from September 2020–September 2021 across the four regions. 50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease. 3-month moving average.





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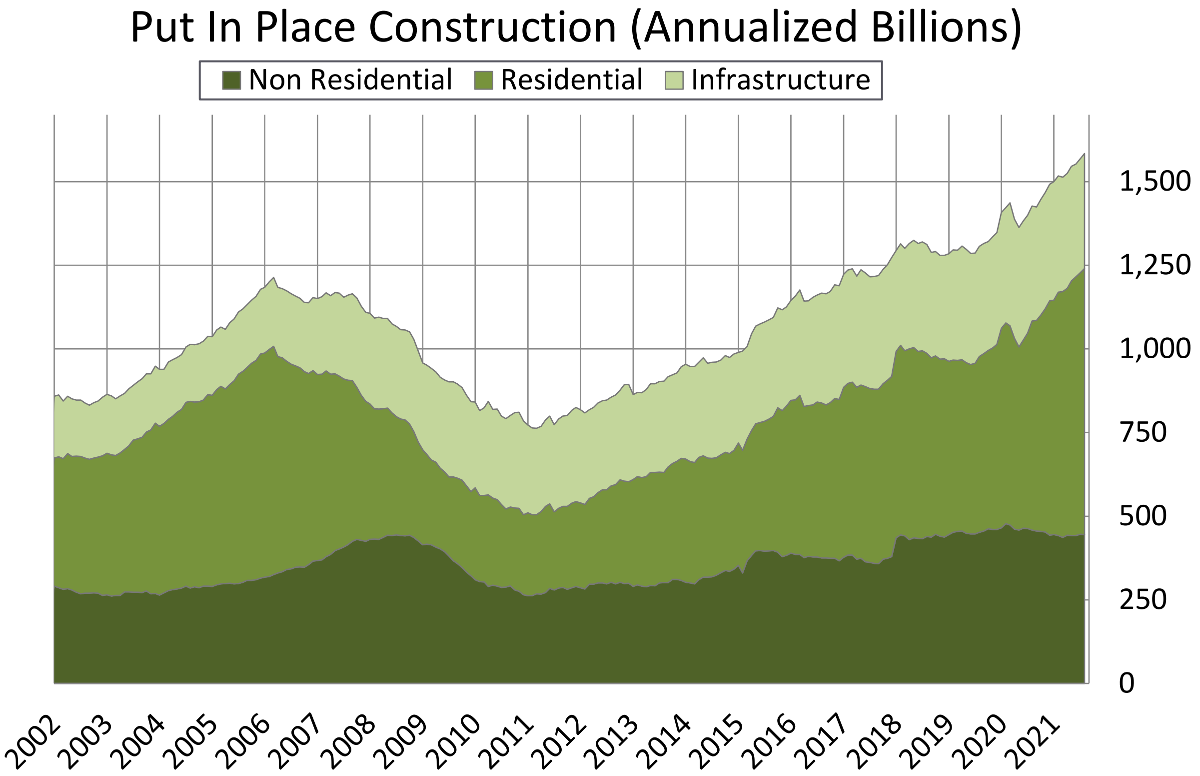
Put In Place Construction (Annualized Billions)
Non Residential
Residential
Infrastructure
1,500
1,250
1,000
750
500
250
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021

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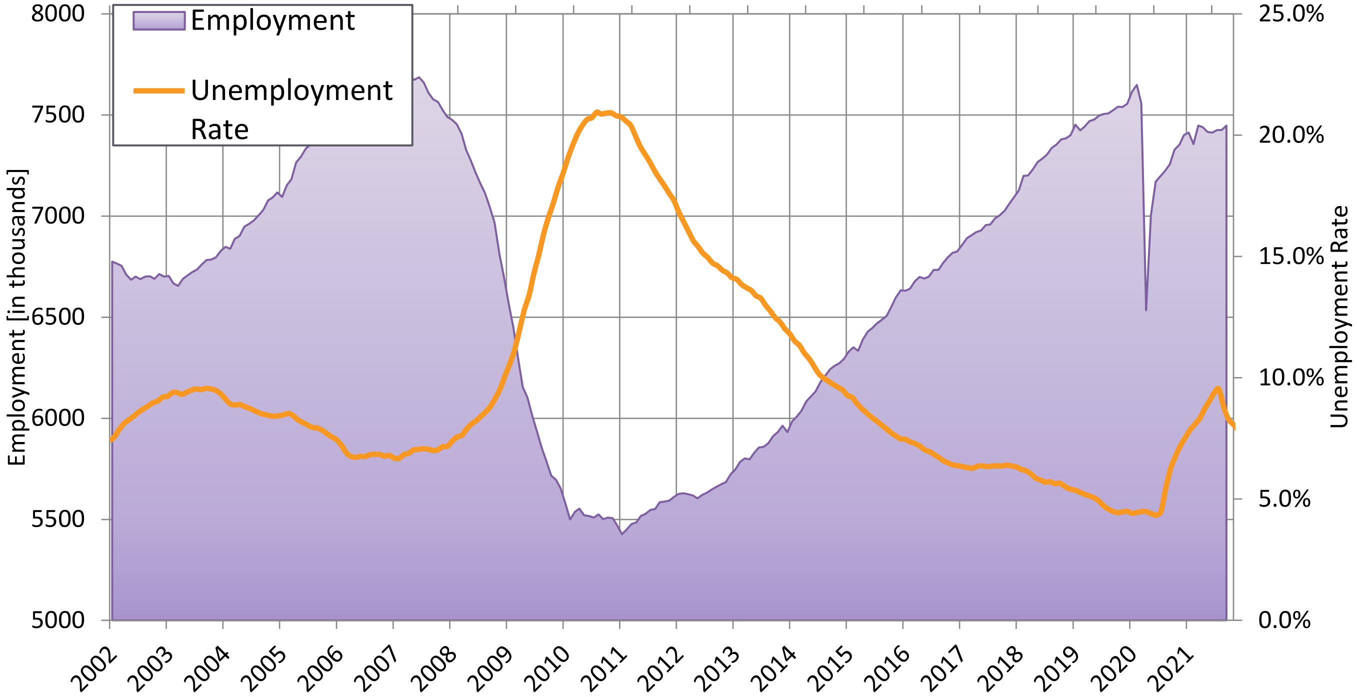
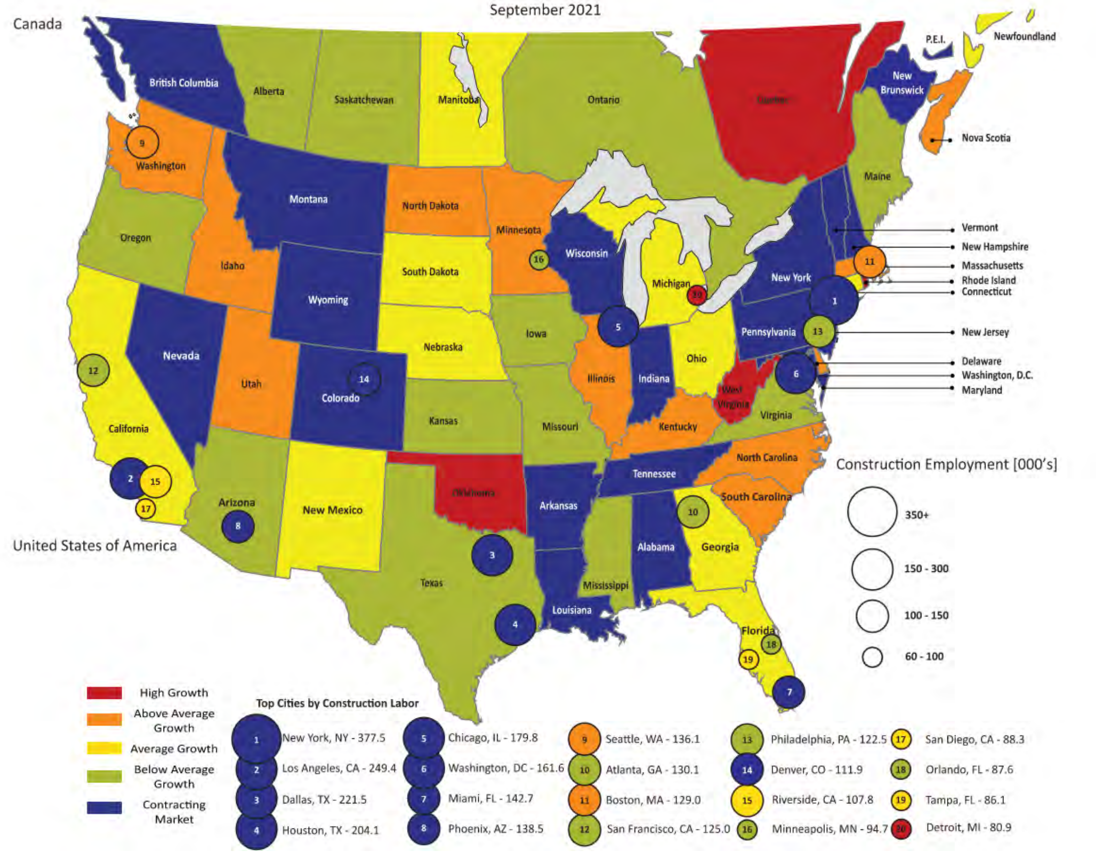
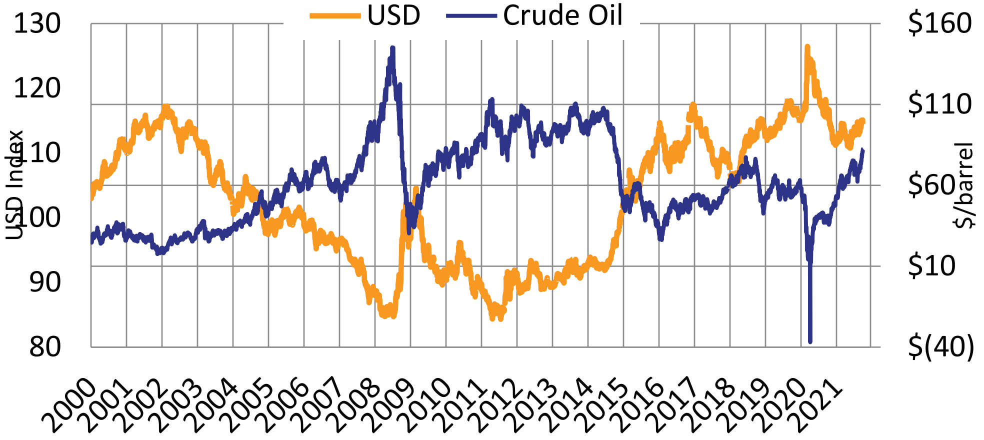
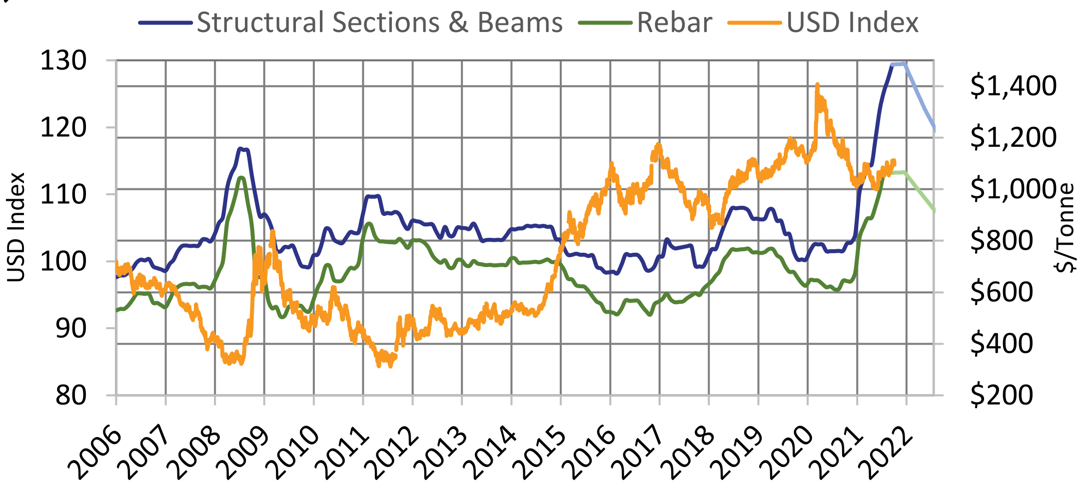

Employment
Unemployment Rate
8000
7500
7000
6500
6000
5500
5000
Employment [in thousands]
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
Unemployment Rate
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021


September 2021
Canada
United States of America
British Columbia
Alberta
Saskatchewan
Manitoba
Ontario
New Brunswick
P.E.I.
Newfoundland
Nova Scotia
Washington
Oregon
California
Nevada
Idaho
Montana
Wyoming
Utah
Colorado
Arizona
New Mexico
North Dakota
South Dakota
Nebraska
Kansas
Texas
Minnesota
Iowa
Missouri
Arkansas
Louisiana
Wisconsin
Illinois
Michigan
Indiana
Ohio
Kentucky
Tennessee
Mississippi
Alabama
Georgia
Florida
South Carolina
North Carolina
Virginia
West Virginia
Pennsylvania
New York
Maine
Vermont
New Hampshire
Massachusetts
Rhode Island
Connecticut
New Jersey
Delaware
Washington, D.C.
Maryland
Construction Employment [000's]
350+
150 - 300
100 - 150
60 - 100
High Growth
Above Average Growth
Average Growth
Below Average Growth
Contracting Market
Top Cities by Construction Labor
1 New York, NY - 377.5
2 Los Angeles, CA - 249.4
3 Dallas, TX - 221.5
4 Houston, TX - 204.1
5 Chicago, IL - 179.8
6 Washington, DC - 161.6
7 Miami, FL - 142.7
8 Phoenix, AZ - 138.5
9 Seattle, WA - 136.1
10 Atlanta, GA - 130.1
11 Boston, MA - 129.0
12 San Francisco, CA - 125.0
13 Philadelphia, PA - 122.5
14 Denver, CO - 111.9
15 Riverside, CA - 107.8
16 Minneapolis, MN - 94.7
17 San Diego, CA - 88.3
18 Orlando, FL - 87.6
19 Tampa, FL - 86.1
20 Detroit, MI - 80.9


USD
Crude Oil
USD Index
$/barrel
130
120
110
100
90
80
$160
$110
$60
$10
$(40)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021


Structural Sections & Beams
Rebar
USD Index
USD Index
$/Tonne
130
120
110
100
90
80
$1,400
$1,200
$1,000
$800
$600
$400
$200
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022

- Recommend a 3% - 5% bidding contingency for price shocks and margins as backlogs rebuild
- In addition to bidding contingency; 0.5% per month for Q3 & Q4 and 2022
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Design Assist Contracting

Vaughn Construction

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- Consider alternative delivery methods
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- Design Assist/Build Contracting – Big State Electric
- Design Build Contracting – University of Texas Arlington
- Higher Education Survey Results - Gensler
- Next session, December 2, 2021

Design and Construction Market Outlook

Thank You