

# Market Outlook Construction Forum Summary

as of February 11, 2022

## Presenters

- Blair Tennant, Principal, Vermeulens
- Linh Le, Vice President of Preconstruction, Skanska USA
- David Slomsky, Vice President of Preconstruction, Suffolk
- Kevin Moses, Vice President of Preconstruction, Big State Electric
- Greg Williamson, Vice President of Preconstruction, Bond Brothers

## Market Outlook, Vermeulens

- Turner Construction index is showing 5.5% since the start of the pandemic; FRED index showing 7.5% growth in the last quarter
- Vermeulens is showing a 5-10% escalation since the beginning of the pandemic
- infrastructure and nonresidential dollar volumes are near flat, residential construction is driving overall volume
- currently, close to pre-pandemic construction employment
- NYSE, GDP, Reserve assets, PCE indexes are at a turning point
- unemployment rates are low, putting pressure on wages and difficulty finding workers
- commodity prices, driven by energy, are up across a broad range

## Current Market Conditions, Skanska USA, Suffolk, Big State Electric, Bond Brothers

- discussion about the price increase of the various materials and changes to lead times
- discussion about factors influencing the market
- timing of the projects compared to the backlog
- material lead times influence pricing
- there is currently a labor shortage; some campuses that require vaccinations result in even more labor shortages
- the main price influencer is the capacity of the subcontractors
- case study for a west coast data center

## Round Table Q&A Discussion on the State of the Market

- presenters were asked to forecast bid price increases for 2022; the consensus for the market was in the 6%-8% range
- contractors are all looking to hire; staffing of jobs, through the pandemic, ran up to 50% over due to absenteeism



## Design and Construction Market Outlook<sup>®</sup>

Blair Tenant, Principal, Vermeulens

Linh Lee, Vice President – Preconstruction – Skanska USA

David Slomsky, Vice President – Preconstruction – Suffolk

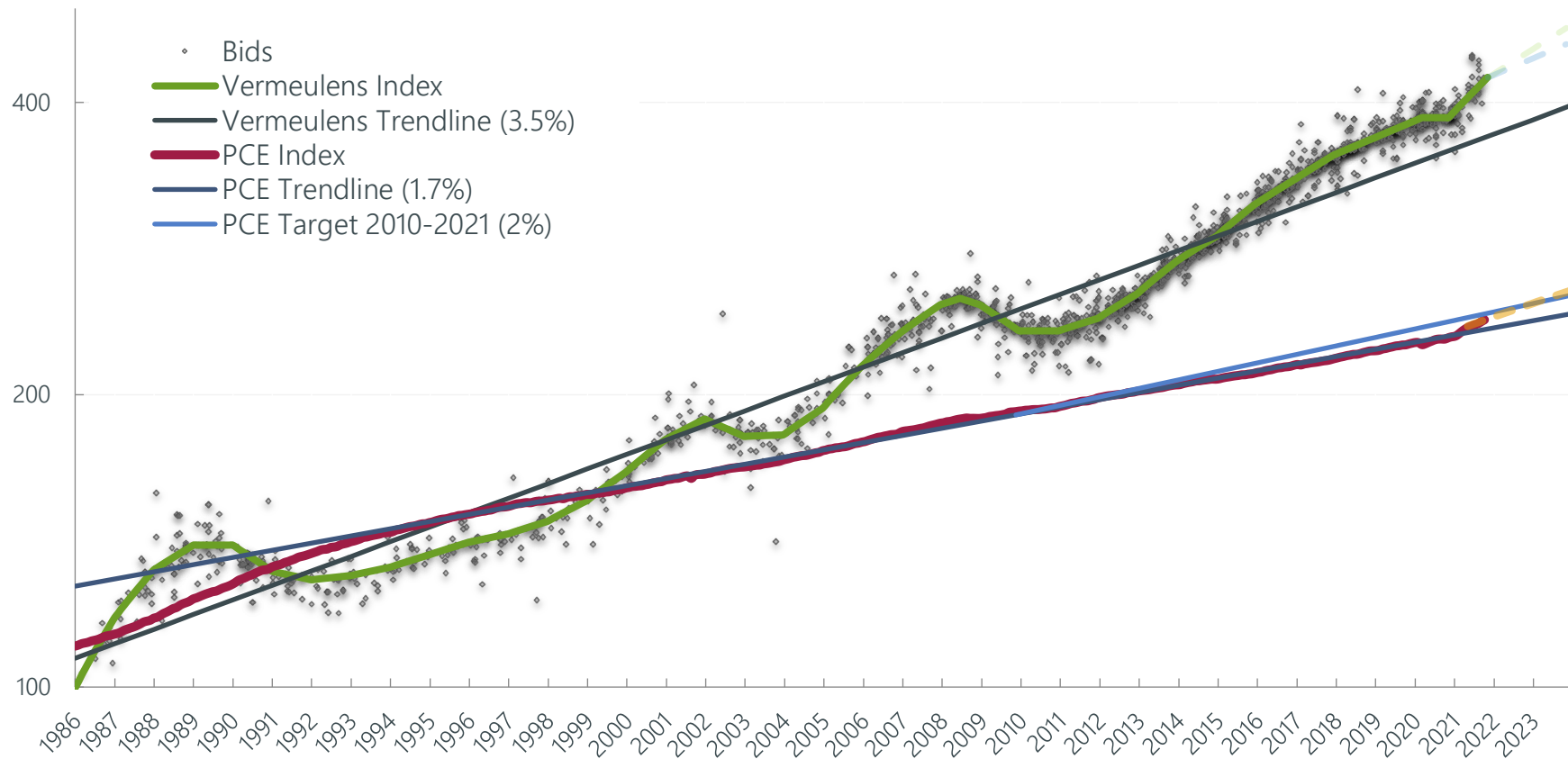
Kevin Moses, Vice President - Big State Electric

Greg Williamson, Vice President – Preconstruction – Bond Building Construction

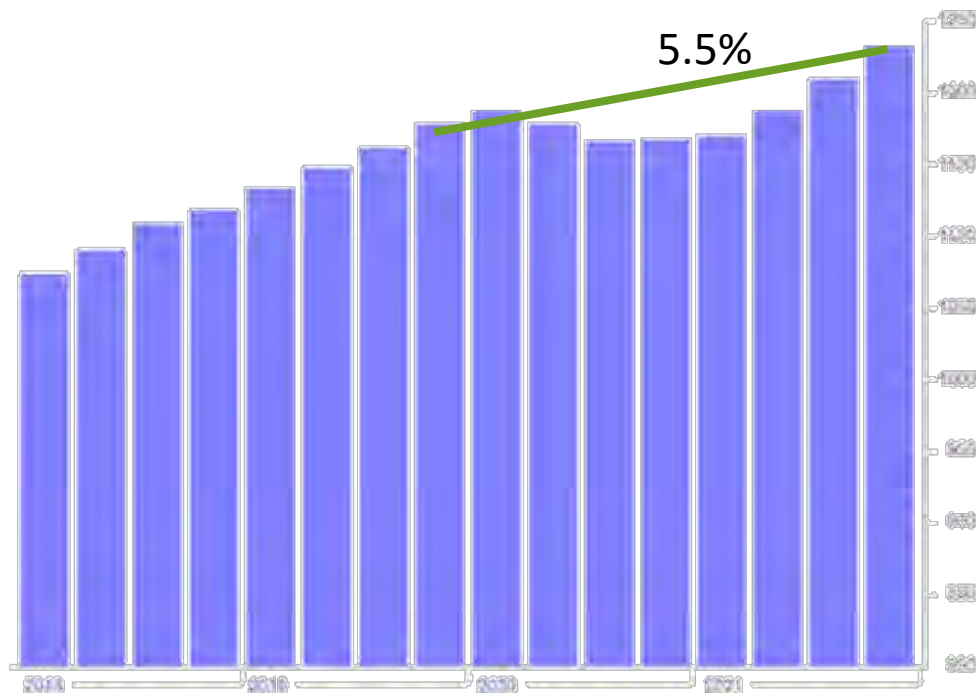
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- interim questions and comments via chat
- slide deck, videos, summary; available on website
- 2022 forum dates will vary

- ➔ Vermeulens Macro Economics Update
- ➔ Contractor Economic Update
  - ➔ Skanska
  - ➔ Suffolk
  - ➔ Big State Electric
  - ➔ Bond Building Construction
- ➔ Round Table Discussion



# Turner

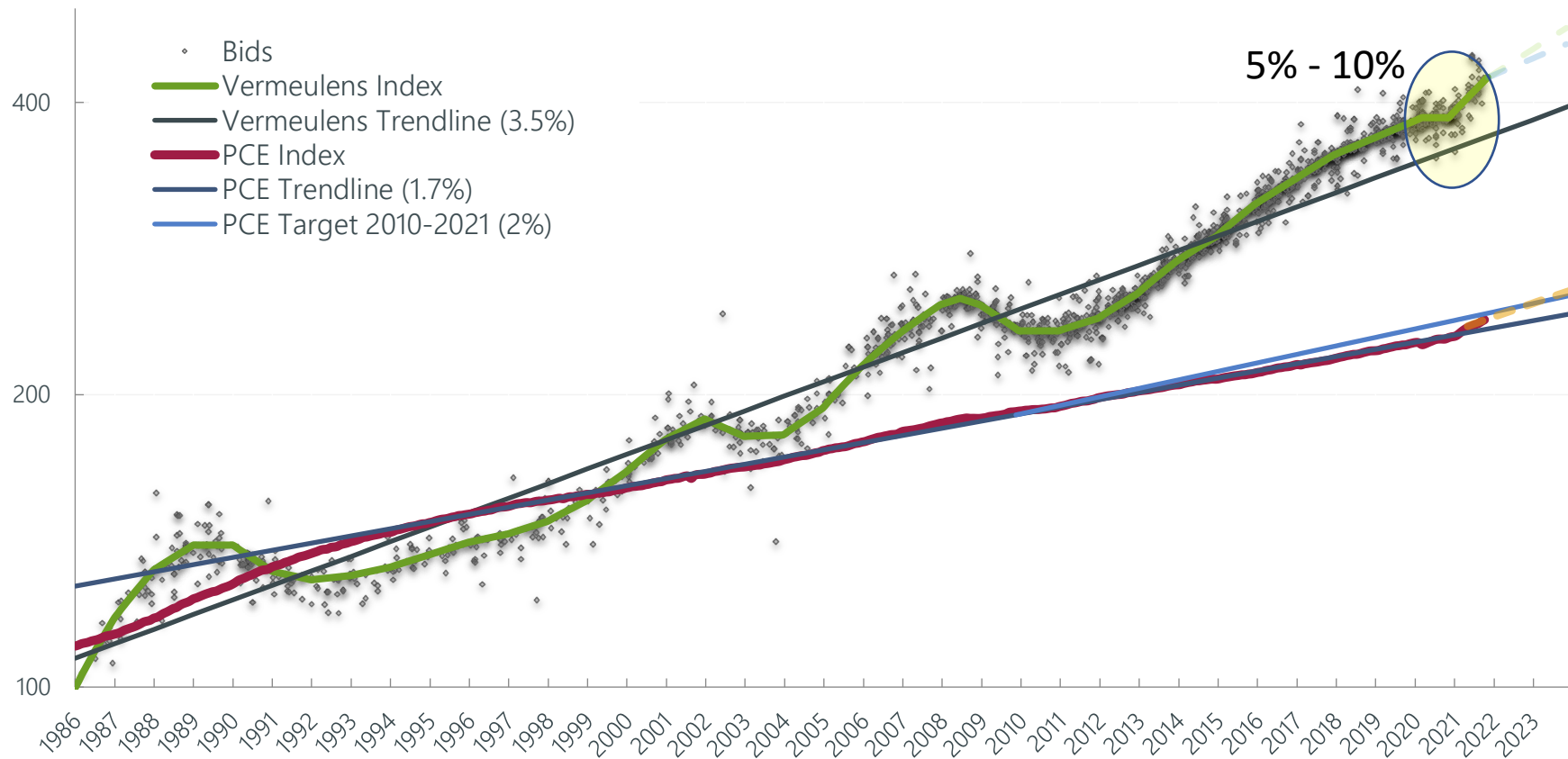


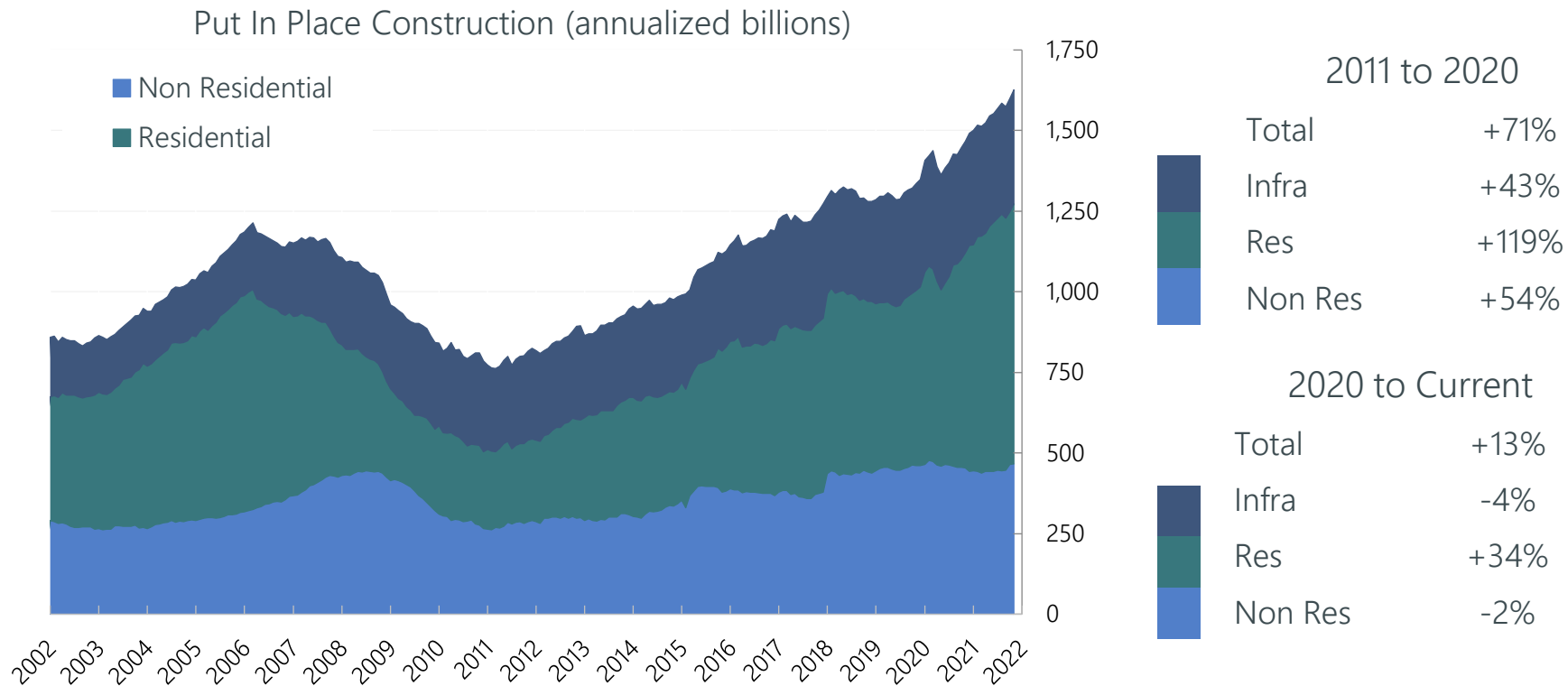
Quarter	Index	% Change
4th Quarter 2021	1230	1.91
3rd Quarter 2021	1207	1.68
2 <sup>nd</sup> Quarter 2021	1187	1.28
1 <sup>st</sup> Quarter 2021	1172	0.09
4 <sup>th</sup> Quarter 2020	1171	0.00
3rd Quarter 2020	1171	-0.51
2 <sup>nd</sup> Quarter 2020	1177	-1.01
1 <sup>st</sup> Quarter 2020	1189	1.02





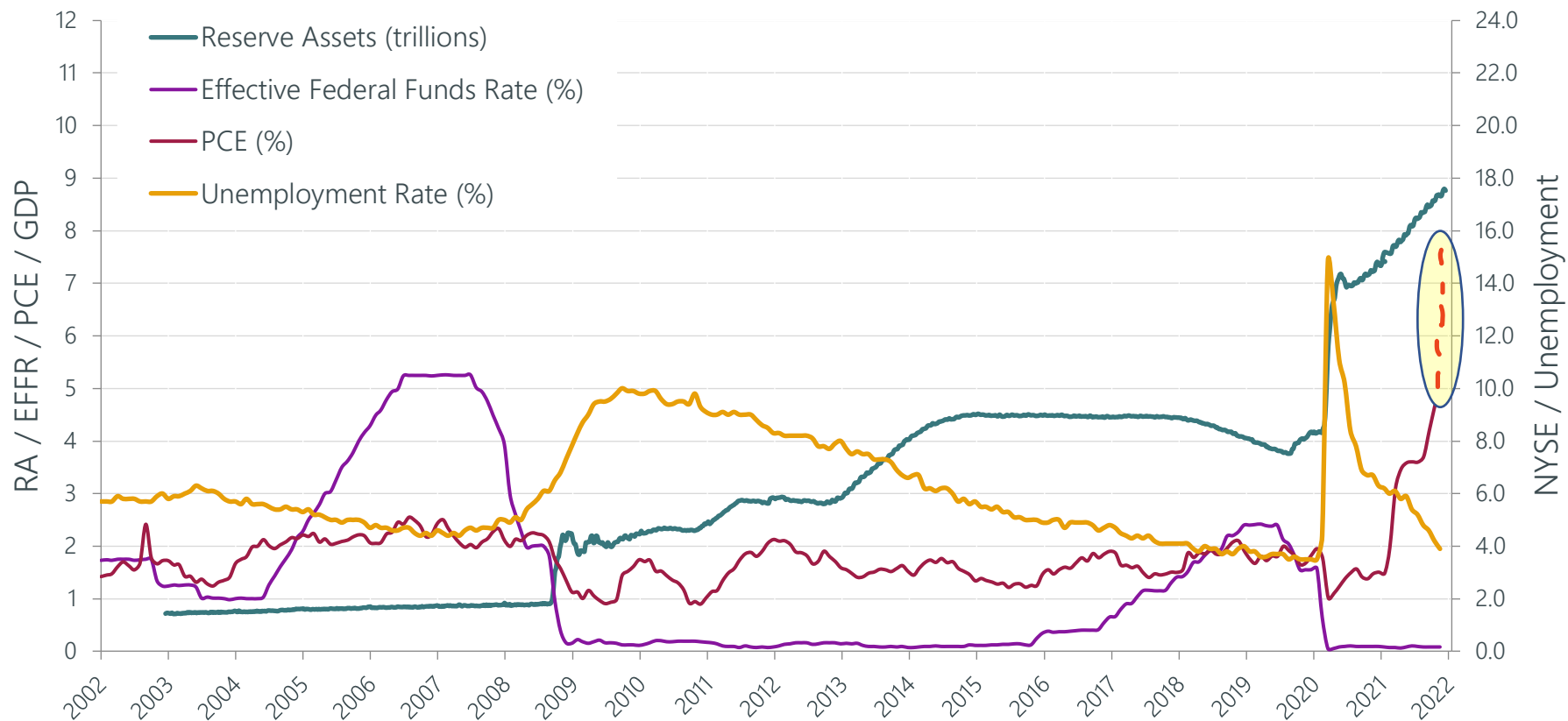


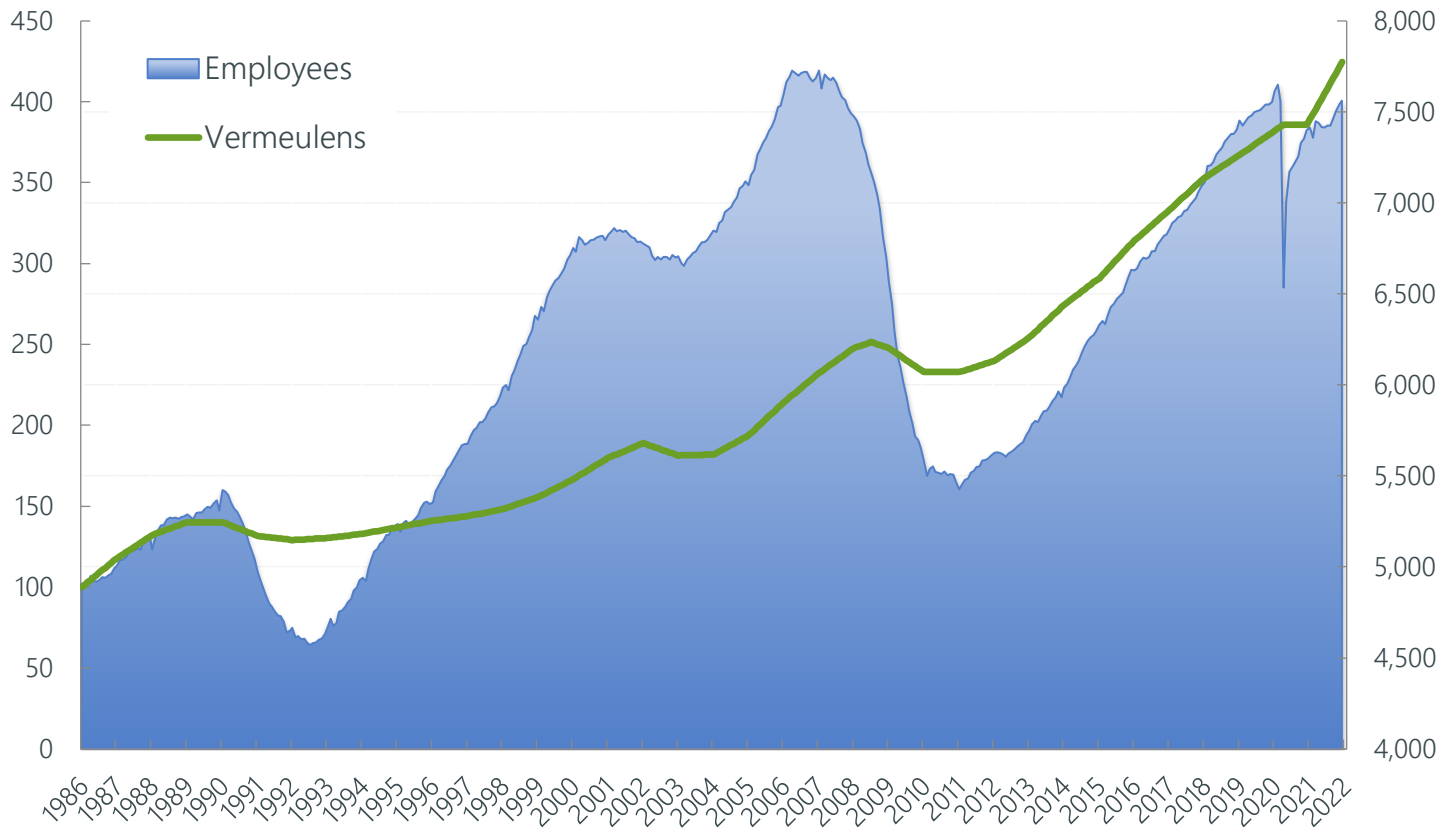




## [The Bipartisan Infrastructure Plan and Construction Costs](https://vermeulens.com/blog)

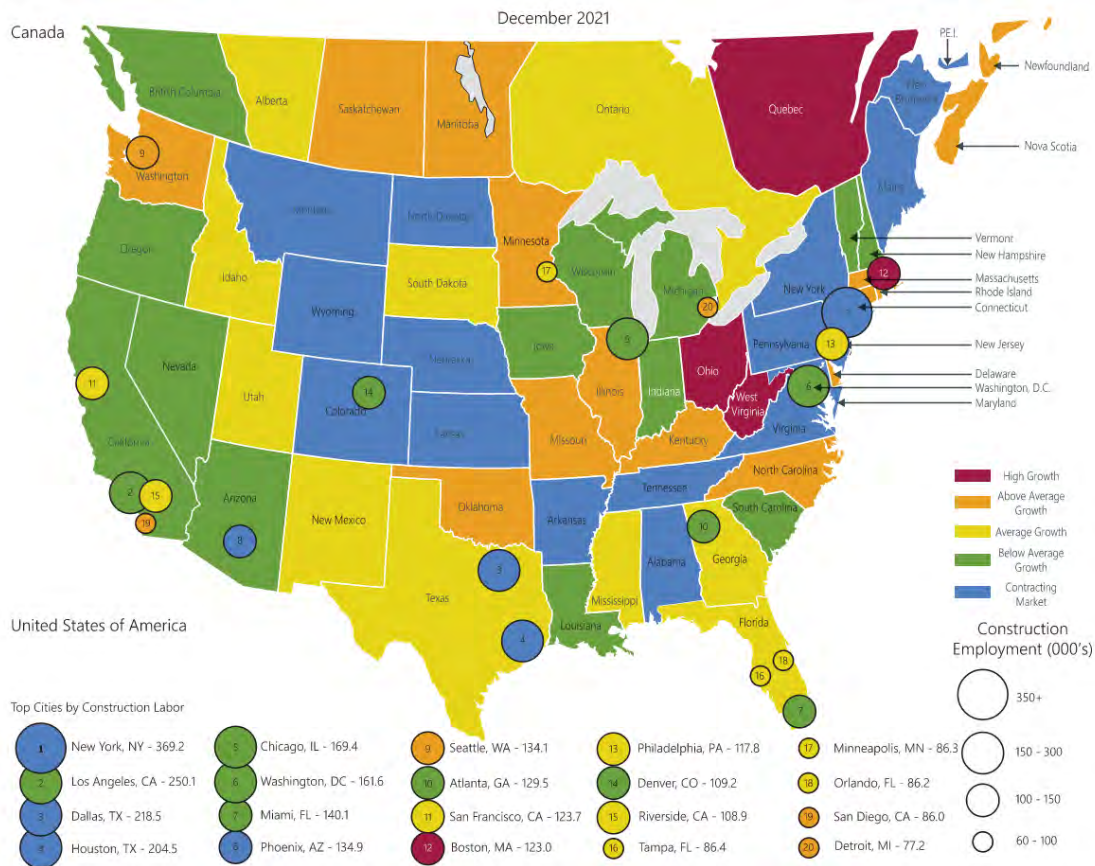
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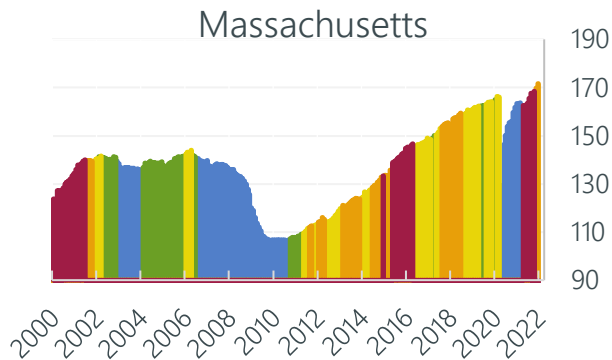
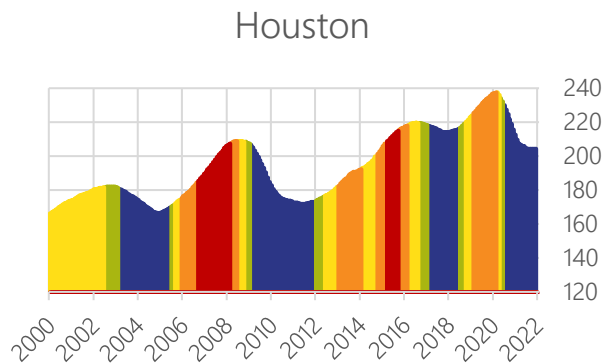




2010 – 2020  
+2.1M (28%)

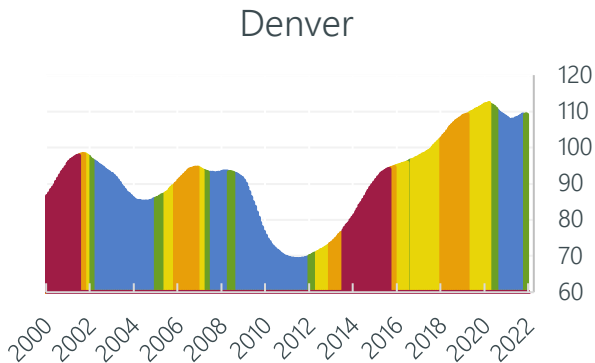
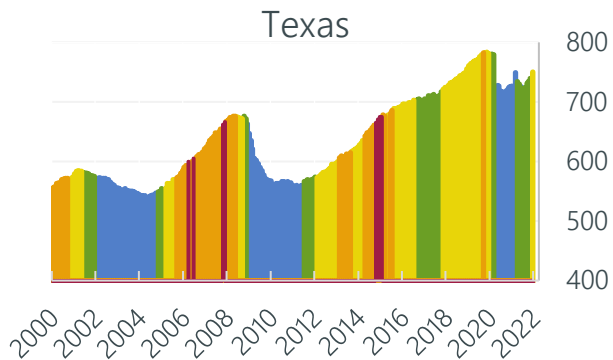
2020 – Current  
-88K (-1.2%)





### Year-Over-Year Growth

- High Growth
- Above Average Growth
- Average Growth
- Below Average Growth
- Contracting Market



SKANSKA

# Staying Connected on Escalation and Supply Chain Impacts

February 11, 2022





# 2021: An Unprecedented Year

- Covid and Its Variants / Vaccinations
- Manufacturing / Production Disruption
- Supply Chain Disruption
- Chip Shortages
- Major Weather Events
- Cost Escalation



# Tracking the Market

		Pricing Change <i>Last 12 Months</i>	Schedule Change <i>Last 12 Months</i>
Roofing	Evaluate alternate roofing insulations - i.e polystyrene in lieu of polyiso	20%	Polyiso was once readily available with 4-6 lead times, and is currently nearly 52 weeks to secure.
Metal Joists	Avoid metal joists if possible; evaluate structural shapes, alternate superstructure options	400%	From 16-18 weeks to 32-34 weeks (peaked at 48 weeks)
Structural Steel and Decking	Prioritize ERP for structural package - potential	95-150%, depending on shape	Decking from 10-12 weeks to 22 weeks (peaked at 30 weeks)
	Evaluate early structural detailing package to expedite procurement		
Interiors	Specialty specifications for studs such as G90 should be avoided, if possible		
	Evaluate mineral wool insulation alternates	12%	30 weeks - significant change
	Spec alternates to suspension systems - current extended lead times, particularly on Armstrong products	80%	Extended lead times; suspension systems are on allocation
Lab Casework	Monitor resin material	12%, but resin pricing up over 300%	From 8-12 to 26+ weeks
HVAC Equipment	Avoid fully customized AHUs	12%	From 6-10 weeks to up to 40 weeks
	ERP for long lead items - chillers, boilers, cooling towers, custom AHU's	12%	From 8-12 weeks to up to 30 weeks
	PVC	115%	From readily available to up to 12 weeks
Electrical Gear	ERP's must be prioritized, especially for 480v switchgear and generators	10%	From 18 weeks to 38-52 weeks
	Early design-assist for MEP trades		

# Material and Equipment Supply Chain Outlook for 2022



## Structural Steel

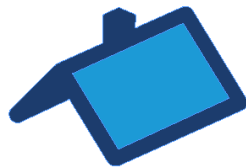
Engineered Bar Joists

Lead-Time Price



32 wks

Down +0-5%



## Roofing

PolyISO Insulation

Lead-Time Price



52 wks

Stable +5-10%



## HVAC

AHUs/RTUs

Lead-Time Price



30-40 wks

Down 20% +10-15%



## Electrical Gear

UL 1558 Switchgear

Lead-Time Price



38 - 52 wks

Stable +8-15%



## Transportation

Trucking/Rail

Dwell-Time\* Price

\*(time containers wait to be loaded to truck or rail)



10-13 days

down to 4-6 days +5-15%

Expected Trend

Current Lead Time

Expected Change (6-12 months)

A low-angle, upward-looking shot of a modern skyscraper with a glass facade. The building's structure is visible at the top and bottom corners, framing a large, clear blue sky. The word "SKANSKA" is centered in the sky area in a bold, white, sans-serif font.

**SKANSKA**

Suffolk

# Current Market

## Factors Driving Current Prices

1. Capacity of subcontractors & profit/contingency put into bids
  - Timing of projects compared to backlog
  - Material lead times
  - Size of projects
2. Labor shortage
  - Production rates
  - Vaccination requirements
3. Material Prices

# Case Study

## West Coast Data Center

- Same buildings on different campuses a few miles apart
  - Same design firm
  - Competitive bid November 2020 vs. January 2022 (14 months apart)
- 

- Entire Building 32% Increase
  - Concrete 19% Increase
  - Steel 80% Increase
  - GYP 29% Increase
  - HVAC/Plumbing 22% Increase
  - Electrical 41% Increase

Thank you

Suffolk







# Market Update

February 11, 2022

# In General

- Current Budgets vs. Value Engineering
- Material escalations with extended lead-times
- Messages from our Vendors

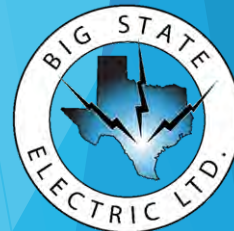


# Budgets vs Value Engineering

## BSE Recent Estimate Comparisons

PROJECT	BID	BID	BID	BID	COMMENTS (REASONS)
	2021 Q2	2021 Q3	2021 Q4	2022 Q1	
X	\$11.2M	< \$450K > **	\$13.8M	\$14.3M	OWNER DELAYS / COPPER AND PVC
Y	\$2.6M	N/A	\$3.8M	N/A	OWNER DELAYS / PVC AND LABOR
Z	\$5.7M	N/A	< \$520K > **	\$6.4M	DESIGN TIME TO COMPLETE VE / COPPER AND GEAR
** - Value Engineering Pricing					

- Due to fluctuations in commodities supply and demand, extended lead times for material may be expected. Maintaining project deadlines is subject to availability of material.
- Due to fluctuations in commodities, material is quoted based on today's pricing, and is subject to readjustment to reflect pricing at time of contract award.



# Electrical Commodities - Plastic

- 4" PVC (Sched. 40 and 80) = 6 Week Lead-times
  - Pre-COVID = \$1.40 / LF
  - January 2021 = \$ 2.75 / LF
  - June 2021 = \$ 5.50 / LF
  - December 2021 = \$ 9.10 / LF
  - February 2022 = Creeping over \$10.00 / LF



# Electrical Commodities - Steel

- 4" EMT = 4 Week Lead-times
  - Pre-COVID = \$ 5.00 / LF
  - January 2021 = \$ 8.00 / LF
  - June 2021 = \$ 12.00 / LF
  - December 2021 = \$ 14.00 / LF
  - February 2022 = Creeping over \$15.00 / LF



# Electrical Commodities- Copper



- #600 MCM (400A Cable) = 6 Week Lead-times
  - Pre-COVID = \$ 8.95 / LF
  - January 2021 = \$ 16.00 / LF
  - June 2021 = \$ 18.00 / LF
  - December 2021 = \$ 16.00 / LF
  - February 2022 = Creeping over \$18.00 / LF



# From the Vendors



Vendor	Increase Date
Altech	2/1/2022
Brady	2/1/2022
Bridgeport	2/1/2022
Ledvance	2/1/2022
Klein	2/5/2022
Crouse/Blinc	2/7/2022
Acuity	2/7/2022
Cooper Lighting	2/14/2022
Fluke	2/14/2022
Ideal	2/14/2022
Philips Signify	2/21/2022
Minerallac	2/28/2022
Broan	3/1/2022
Dundas Jafine	3/1/2022
Federal Signal	3/1/2022
Garvin	3/1/2022
Greenlee/Ridgid	3/1/2022
Kichler	3/1/2022
Panduit	3/1/2022
Power Fasteners	3/1/2022
Progress	3/1/2022
Generation Brands	3/4/2022
SQD	3/6/2022
GE/ABB	3/11/2022
Midwest	3/11/2022
Hellerman Tyton	3/14/2022
Rayovac	3/14/2022
Wiremold	3/14/2022
Pass & Seymour	3/21/2022
Wattstopper	3/21/2022
ABB/T&B	3/28/2022
Hammond Manufacturing	3/28/2022
Erico	3/31/2022
Arlington	4/1/2022
Dewalt	4/1/2022
Milbank	4/1/2022
Siemens	4/1/2022
Intermatic	4/4/2022
Rab	4/4/2022

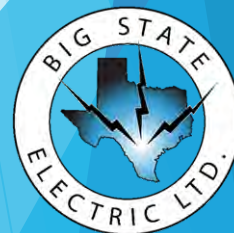


*We just had a meeting with Eaton yesterday, and I wanted to pass along what we heard from them. Lead times on gear are going to be bad for a while. They do not see relief until 2023 at a minimum. I wanted to relay this message, so you could give it to your customers as well. Factors, as well all know, are supply chain issues, and labor. Eaton is working on ways to work around this, but it will take some time (getting other suppliers UL Listed, new manufacturing facility, etc...). We are hearing that the other manufacturers are in the same boat. Here are the current lead times...*

*Switchboards = 45 weeks*

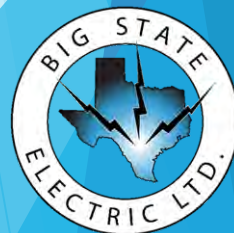
*Distribution Type Panels = 25 weeks*

*Lighting Class Panels = 8-12 weeks (we need to utilize stock panels when we can)*





Item	Description	Inventory On Hand	Business Days on Hand	Avg Monthly Usage	Quantity on Order	Next Expected Delivery*
1	BRACKET STLT 8 FT TRUSS 5FT-6IN RISE	0	0	4	60	2/18/2022 (improved from 03/01)
2	POLE STL STLT GALV 45FT W/DBL 12FT BKT	0	0	2	20	5/31/2022
3	STOPCOCK 3/4 IN WITH INSULATED UNION	0	0	588	845	2/14/2022
4	TRAN OH 2B 500KVA 19.9/34.5YKV-7.6/13.2YKV SINGLE PHASE	0	0	4	93	03/01/2022 (pushed out from 2/18)
5	BOX PULL SIDEWALK 11X18X12 INCH 15000 LB	0	0	3	12	3/31/2022
6	LID FLAT HDPE SECONDARY ENCLOSURE GREEN	0	0	35	629	2/22/2022
7	ELBOW PE 90 DEG 1 IN BUTT FUSE	0	0	47	205	2/7/2022
8	METER LOOP 7-3/4 IN X 5 IN X 4-1/2 IN	0	0	960	4,823	3/22/2022 (pushed from 2/14)
9	CABLE CNTRL FREP #10 AWG 4/C NON-SHLED	0	0	10,514 FT	85,000 FT	2/28/2022
10	CABLE CNTRL FREP #10 AWG 8/C NON-SHLED	0	0	2,607 FT	15,000 FT	2/11/2022
11	FITTING SHORTSTOP WELDING 3-WAY TEE	0	0	3	70	2/15/2022
12	TRANSOCKET UG 800A CODE 26 W/ 400/5 CT	0	0	5	80	2/7/2022
13	PADLOCK 3531 2-1/8 IN STEEL BODY	10	0	1,260	4,868	2/18/2022 (pushed from 2/3)
14	PIPE PLASTIC 8 IN SDR 11 STICK	200	1	4,987	14,080	2/7/2022 (pushed from 2/2)
15	BRACKET POLE TOP INSULATED 26 IN LENGTH	29	1	533	1,760	2/9/2022
16	WIRE STL EHS 5/16IN 7-STRAND ON WOODEN	0	2	2,955 LBS	8,200 LBS	2/14/2022
17	PLUG BUSHING LDBK SM 21.1/36.KV	0	0	114	324	3/2/2022 (pushed from 2/22)
18	TRAN PM 1P 167KVA 34.5GY/19.9KV-240/120V	0	2	9	157	2/17/2022
19	ANCHOR CROSS PLATE 20 IN	10	2	129	412	2/11/2022
20	POLE ST LT 30 FT W/4FT BKT URD	15	3	99	700	2/7/2022
21	NUT EYE OVAL 5/8 IN GALV STL EYE ID	100	2	1,190	2,400	2/11/2022
22	CLEVIS SEC GALV STEEL PLIABLE COTTER PIN	231	3	1,457	3,160	2/11/2022
23	UNION GALV INSU 2IN GRND JOINT CLASS 150	0	0	12	148	4/14/2022
24	RISER GAS ANODELESS 1-1/4X1-1/4X36VX36H	0	0	15	108	4/14/2022
25	SUPPORT PIPE 8 IN SADDLE TYPE ADJUSTABLE	0	0	3	45	2/24/2022
26	NUT WASHERHEAD GALV 5/8 IN 1 PIECE UNIT	170	0	11083	20300	2/28/2022
27	TRAN PM 1PH 100KVA W/SWITCH LG INTERFACE34500GRDY/19920-240/120 VOLT	33	17	36	108	3/22/2022
28	TRAN PM 1PH 50KVA W/SWITCH LG INTERFACE34500GRDY/19920-240/120 VOLT	87	14	128	558	2/23/2022
29	TRAN PM 1PH 75KVA W/SWITCH LG INTERFACE34500GRDY/19920-240/120 VOLT	44	14	63	263	2/17/2022





# Questions?





Greg Williamson  
Vice President – Preconstruction  
Bond Building Construction

# Design and Construction Market Outlook®

Thank you

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