



for the Built Environment

**WHERE TO NOW?**  
September 2020

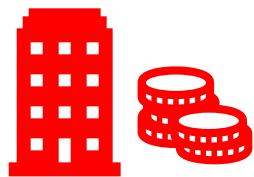
# Economic Signals – Q3 2020



- unemployment 10.2%



- inflation below 0%; low energy prices



- business investment down 20% YoY



- manufacturing index improving; highest sentiment in 12 months



- personal consumption down 6% YoY
- consumer confidence is down 20% YoY



- economy declining at >5+% annual rate



- consumer spending on durable and nondurable goods up YoY



- residential housing starts are down, new home sales are up, median home price up YoY

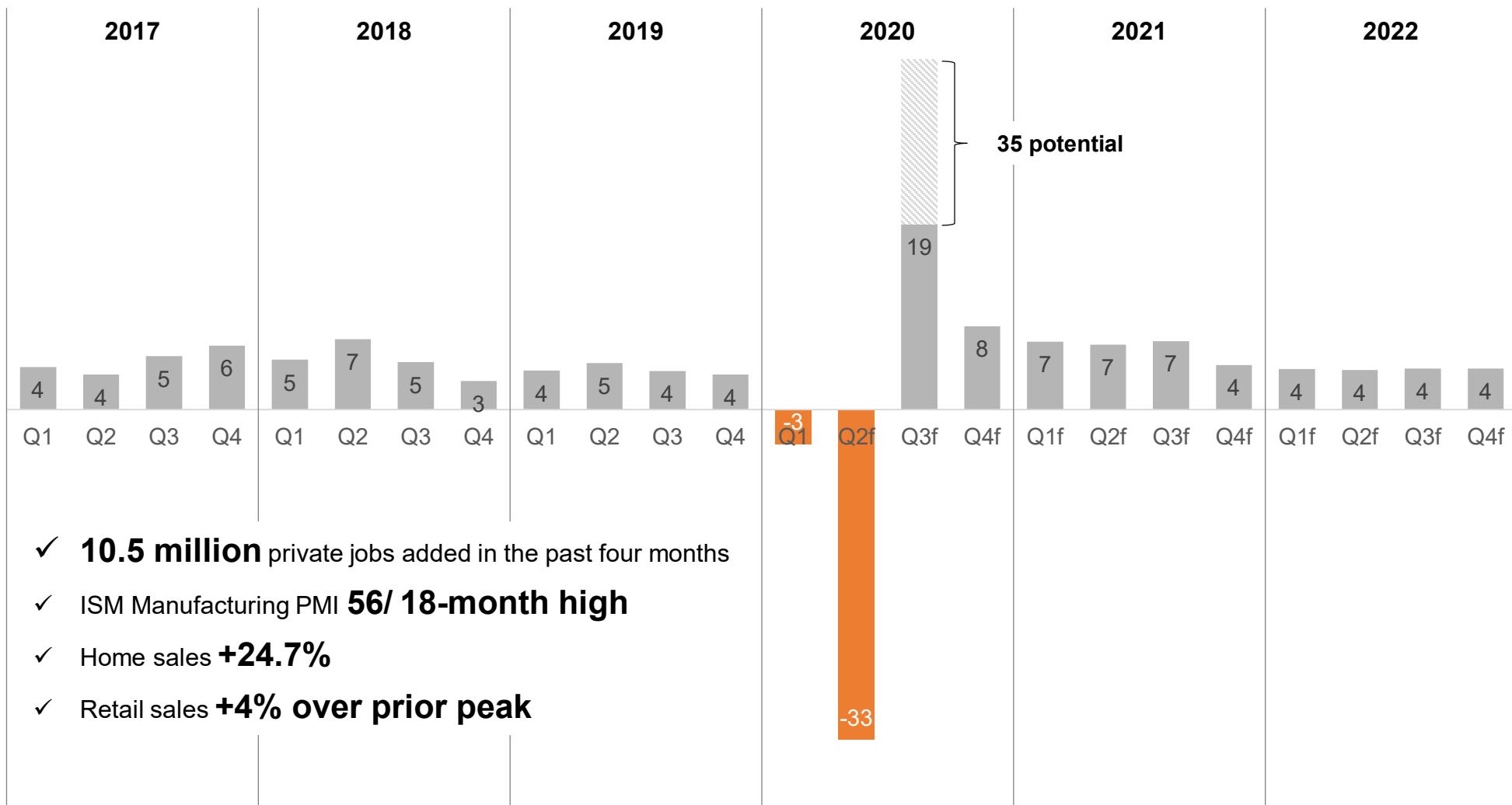
# US Construction Outlook Post COVID-19 | September 24, 2020

## An unprecedented velocity of change

### US GDP

Percentage change, annual rate

Source: CBO

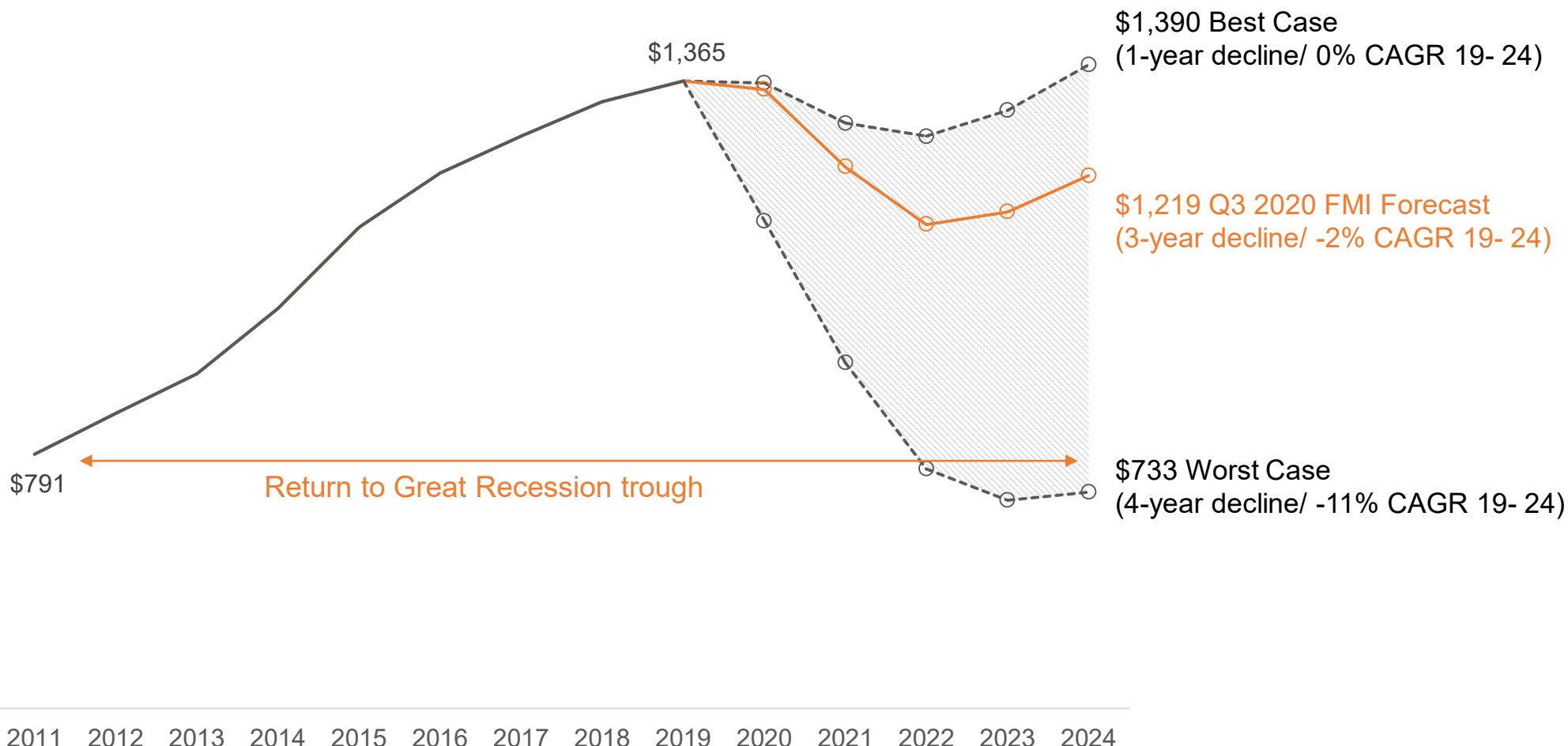


## Preparing for a V, U, or L shaped recovery

Total construction spending put in place (US)

Billions of current dollars

Source: FMI

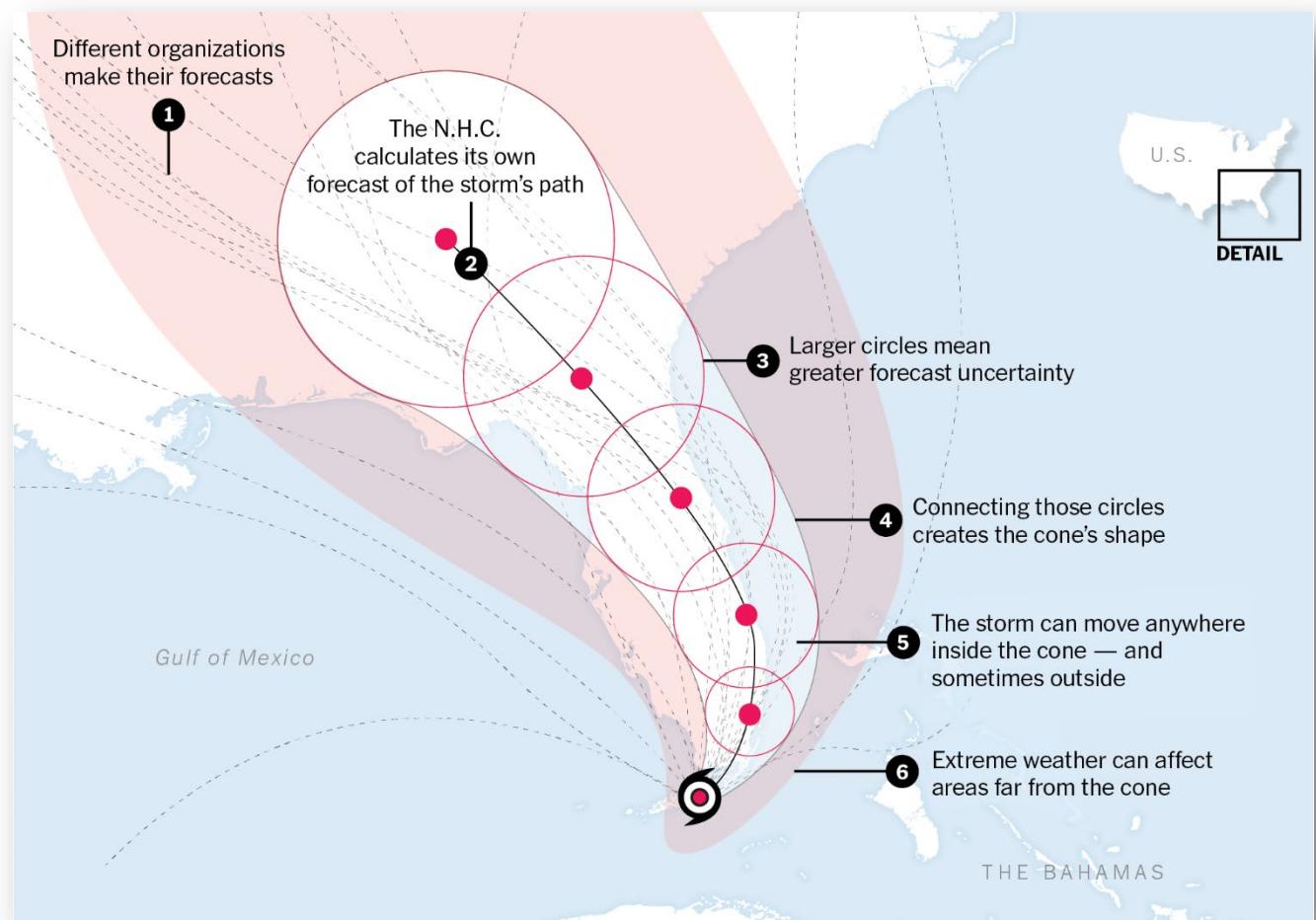


*Just because the future is uncertain, it doesn't mean it is unknowable.*

*Dynamic models  
are required in the  
current context*

## National Bureau of Economic Research:

- Wholesale/retail sales
- Industrial production
- Real income
- Employment



# Key Leadership Pivots

## *Correlated Impacts*

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- What challenges are our customers' customers facing?
- Are they able to secure the necessary funding and resources to operate effectively?
- How are our subcontractors and vendors faring? Do they have adequate resources?



# It used to take months or years to officially declare a recession

The Sahm Rule, developed by Federal Reserve economist and consumer section chief Claudia Sahm, signals the start of a recession when the three-month moving average of the national unemployment rate rises by 0.50 percentage points or more relative to its low during the previous 12 months.

The rule stands out for its simplicity and ability to identify a recession “nearly immediately and long before it has been officially recognized,” (using monthly employment data) to provide a faster way to trigger stimulus programs.

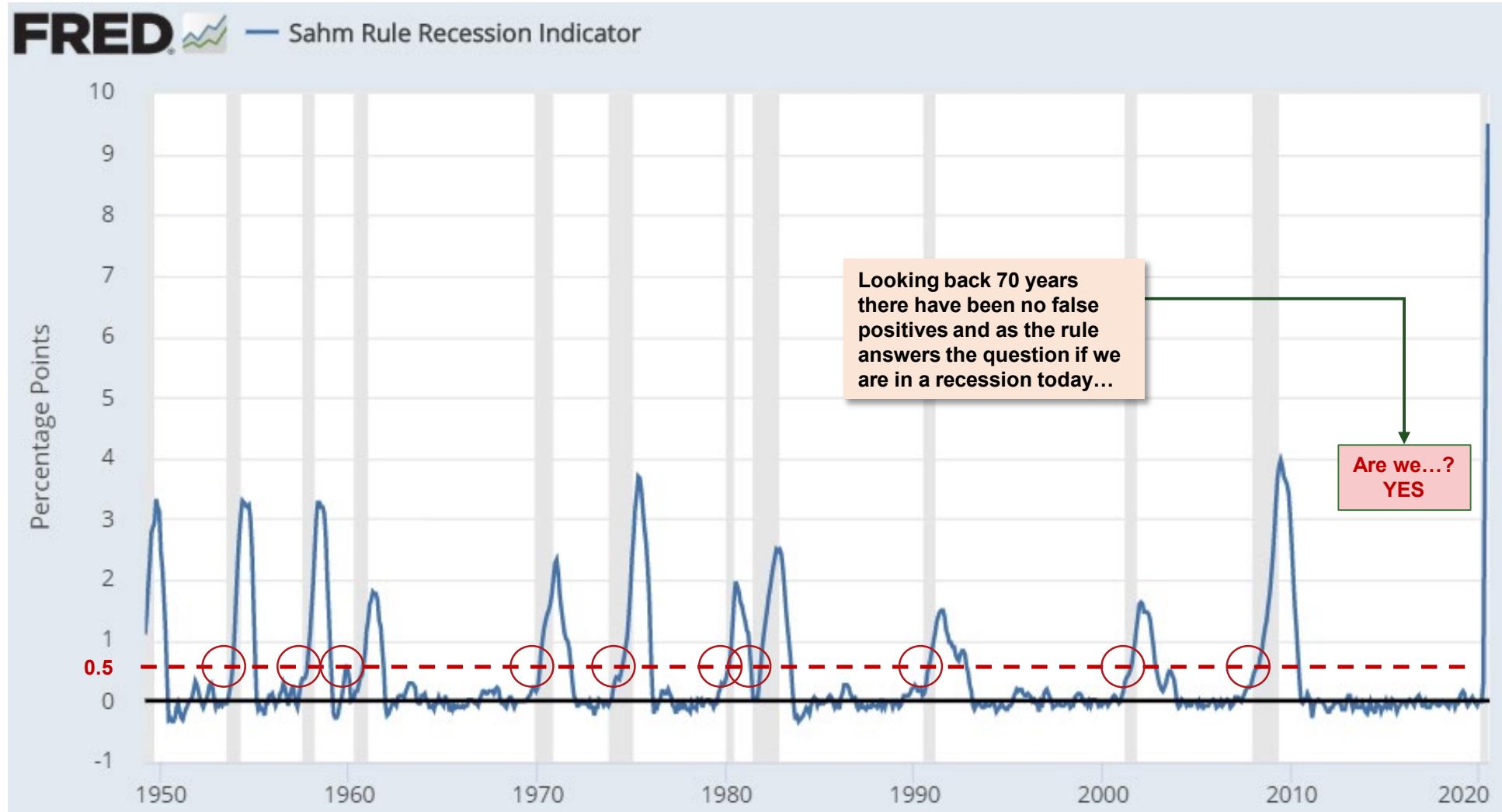
## Indicator Signals



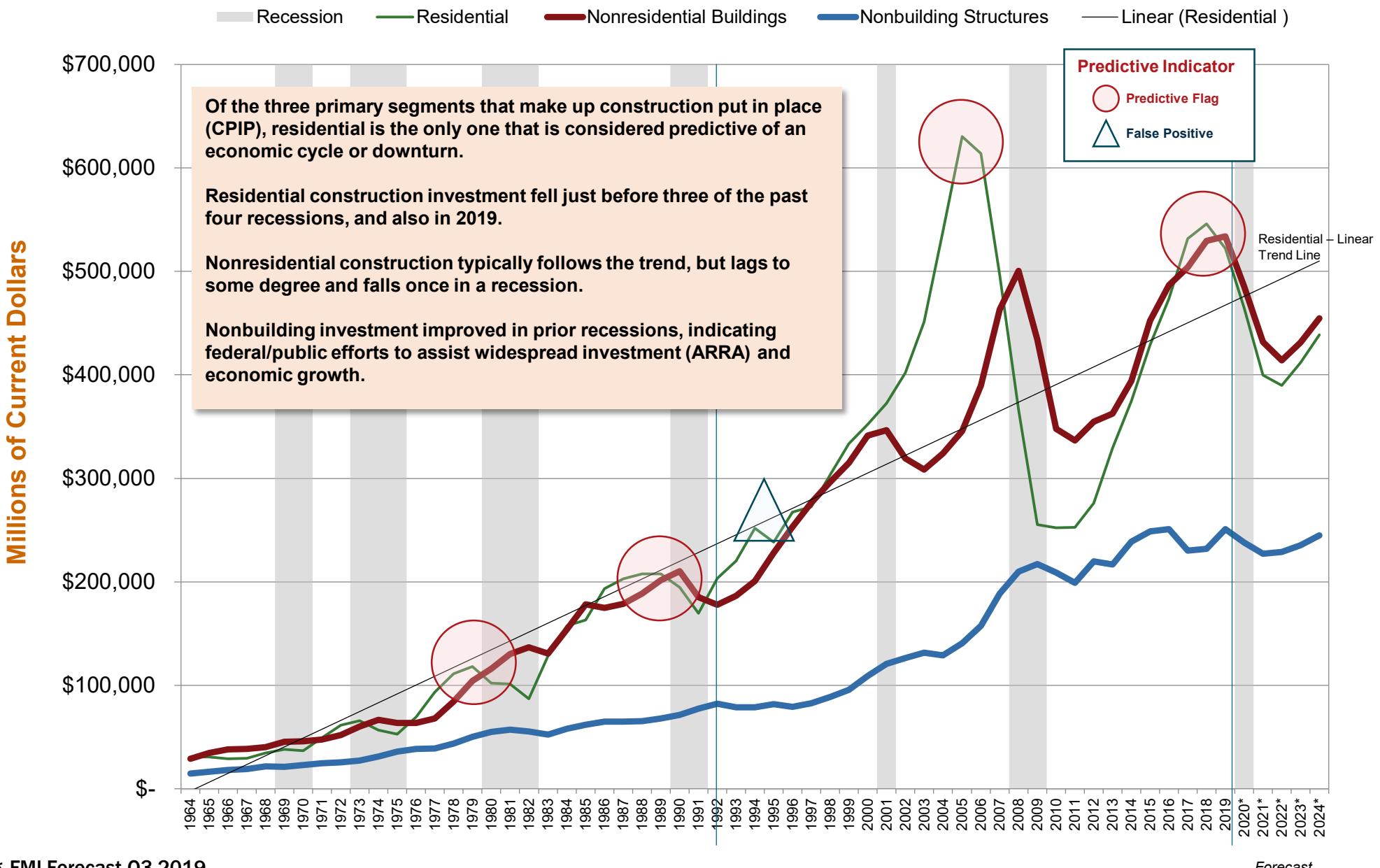
Flag



False Positive



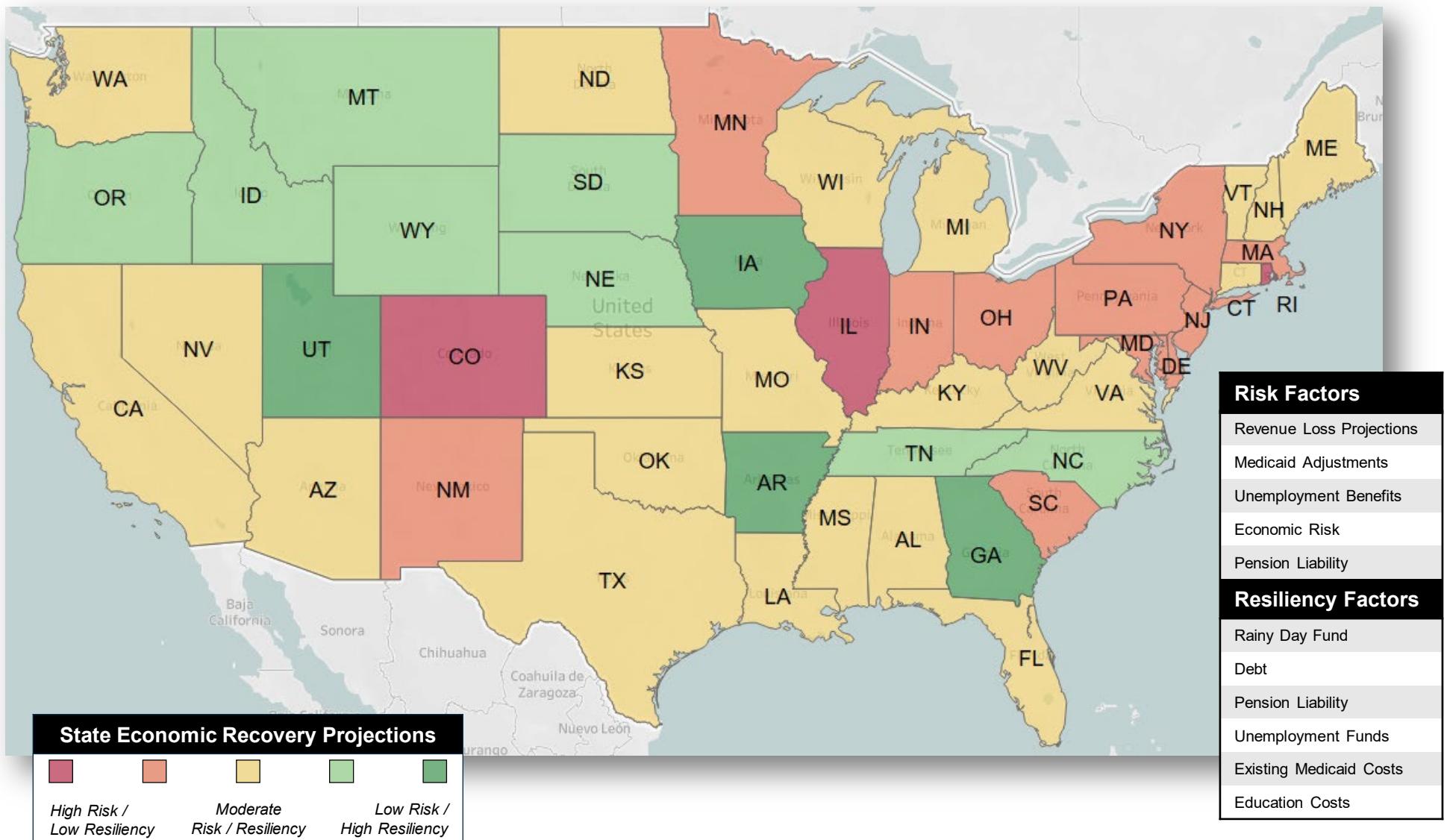
# Construction spending and economic cycles



\* FMI Forecast Q3 2019

Forecast

# The Northeast and Mid-West are challenged to have a strong recovery



Source(s): The Council of State Governments Special Report: *COVID-19: Fiscal Impact to States and Strategies for Recovery*; FMI  
As of August 7<sup>th</sup>, 2020

# Key Leadership Pivots

## *Continuity Focus*

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- The magnitude of change threatens the existence of many companies
- What is your level of business resiliency?
- What investments are needed to position the company to bounce back strongly?



# US Market Outlook

## Construction Put in Place Estimated for The United States

Millions of Current Dollars



3rd Quarter 2020 Forecast, Based on 2nd Quarter 2020 Actuals

	2019	2020	2021	2022	2023	2024
<b>RESIDENTIAL BUILDINGS</b>						
Single Family	280,398	283,544	252,475	232,277	235,455	247,621
Multifamily	85,880	86,298	71,906	63,768	64,923	69,738
Improvements*	184,664	195,155	178,126	155,271	158,924	165,979
<b>Total Residential</b>	<b>550,942</b>	<b>564,998</b>	<b>502,508</b>	<b>451,316</b>	<b>459,301</b>	<b>483,339</b>
<b>NONRESIDENTIAL BUILDINGS</b>						
Lodging	33,071	28,606	22,489	18,889	18,380	19,714
Office	84,862	80,620	69,992	60,038	58,923	62,435
Commercial	80,435	77,963	66,919	56,386	55,789	59,936
Health Care	45,560	46,076	43,689	42,494	44,086	45,298
Educational	105,374	97,899	91,167	90,790	93,931	97,785
Religious	3,544	2,800	2,299	2,088	2,060	2,141
Public Safety	10,530	11,523	11,147	10,493	10,268	10,604
Amusement and Recreation	28,803	26,267	21,130	17,692	16,920	18,228
Transportation	57,154	57,905	53,978	49,537	50,327	53,220
Communication	22,242	23,085	24,025	24,946	25,870	26,953
Manufacturing	80,079	77,060	73,633	72,587	75,337	76,792
<b>Total Nonresidential Buildings</b>	<b>551,654</b>	<b>529,804</b>	<b>480,467</b>	<b>445,941</b>	<b>451,890</b>	<b>473,107</b>
<b>NONBUILDING STRUCTURES</b>						
Power	113,885	115,201	111,404	107,961	110,112	116,240
Highway and Street	97,559	98,954	97,462	100,414	104,558	107,739
Sewage and Waste Disposal	26,089	27,213	26,884	24,937	24,028	24,919
Water Supply	15,882	17,282	17,285	16,060	15,783	16,223
Conservation and Development	9,126	9,318	8,120	7,405	7,992	8,665
<b>Total Nonbuilding Structures</b>	<b>262,541</b>	<b>267,967</b>	<b>261,154</b>	<b>256,778</b>	<b>262,473</b>	<b>273,785</b>
<b>Total Put in Place</b>	<b>1,365,137</b>	<b>1,362,769</b>	<b>1,244,129</b>	<b>1,154,035</b>	<b>1,173,665</b>	<b>1,230,231</b>

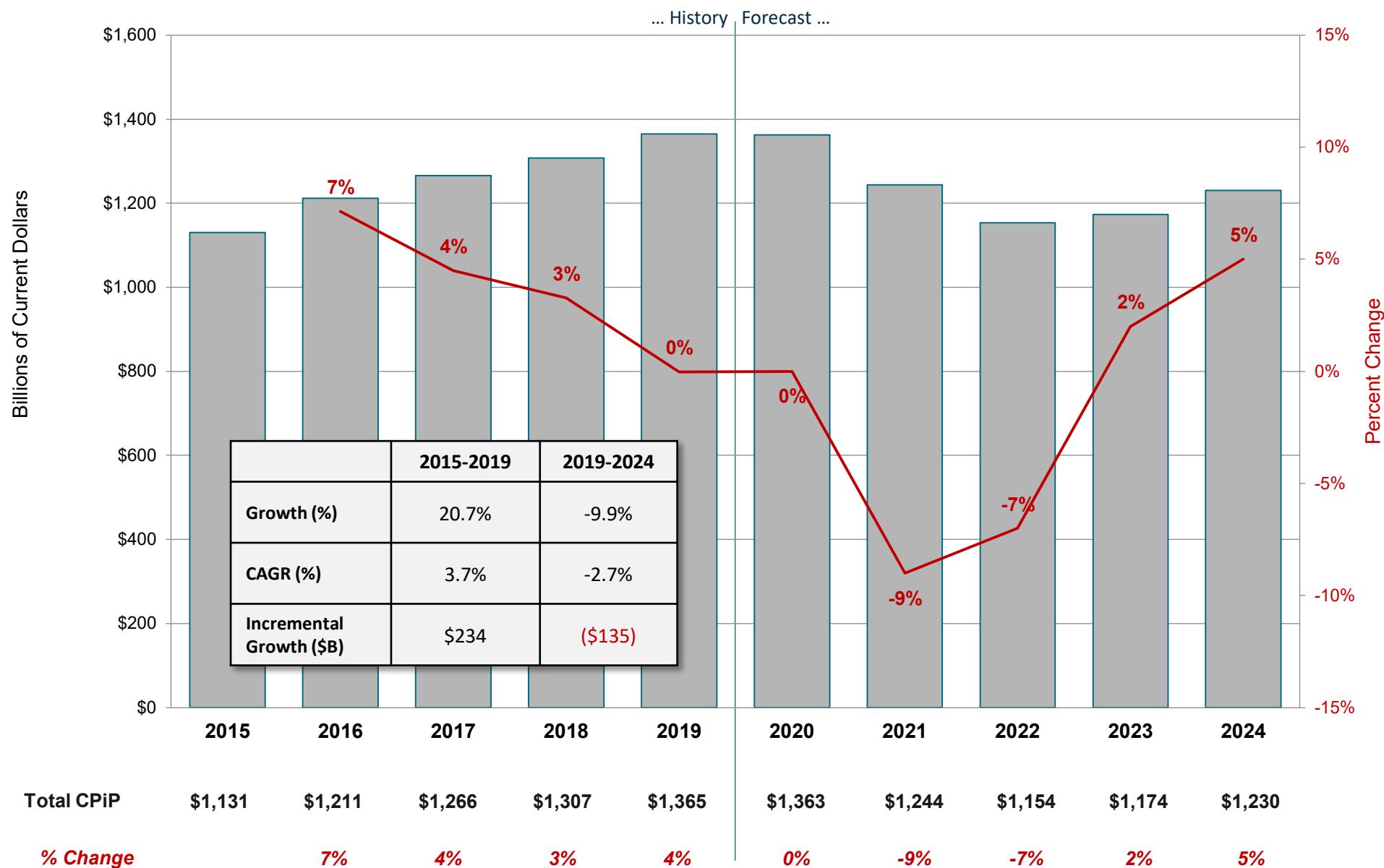
\*Improvements include additions, alterations and major replacements. It does not include maintenance and repairs.

# US Market Outlook

Construction Put in Place Estimated for The United States						
	Change From Prior Year - Current Dollar Basis					
3rd Quarter 2020 Forecast, Based on 2nd Quarter 2020 Actuals						
	2019	2020	2021	2022	2023	2024
<b>RESIDENTIAL BUILDINGS</b>						
Single Family	-3%	1%	-11%	-8%	1%	5%
Multifamily	3%	0%	-17%	-11%	2%	7%
Improvements*	-3%	6%	-9%	-13%	2%	4%
<b>Total Residential</b>	<b>-2%</b>	<b>3%</b>	<b>-11%</b>	<b>-10%</b>	<b>2%</b>	<b>5%</b>
<b>NONRESIDENTIAL BUILDINGS</b>						
Lodging	5%	-14%	-21%	-16%	-3%	7%
Office	11%	-5%	-13%	-14%	-2%	6%
Commercial	-7%	-3%	-14%	-16%	-1%	7%
Health Care	5%	1%	-5%	-3%	4%	3%
Educational	4%	-7%	-7%	0%	3%	4%
Religious	1%	-21%	-18%	-9%	-1%	4%
Public Safety	13%	9%	-3%	-6%	-2%	3%
Amusement and Recreation	3%	-9%	-20%	-16%	-4%	8%
Transportation	7%	1%	-7%	-8%	2%	6%
Communication	-9%	4%	4%	4%	4%	4%
Manufacturing	10%	-4%	-4%	-1%	4%	2%
<b>Total Nonresidential Buildings</b>	<b>4%</b>	<b>-4%</b>	<b>-9%</b>	<b>-7%</b>	<b>1%</b>	<b>5%</b>
<b>NONBUILDING STRUCTURES</b>						
Power	14%	1%	-3%	-3%	2%	6%
Highway and Street	6%	1%	-2%	3%	4%	3%
Sewage and Waste Disposal	9%	4%	-1%	-7%	-4%	4%
Water Supply	3%	9%	0%	-7%	-2%	3%
Conservation and Development	11%	2%	-13%	-9%	8%	8%
<b>Total Nonbuilding Structures</b>	<b>10%</b>	<b>2%</b>	<b>-3%</b>	<b>-2%</b>	<b>2%</b>	<b>4%</b>
<b>Total Put in Place</b>	<b>2%</b>	<b>0%</b>	<b>-9%</b>	<b>-7%</b>	<b>2%</b>	<b>5%</b>

\*Improvements include additions, alterations and major replacements. It does not include maintenance and repairs.

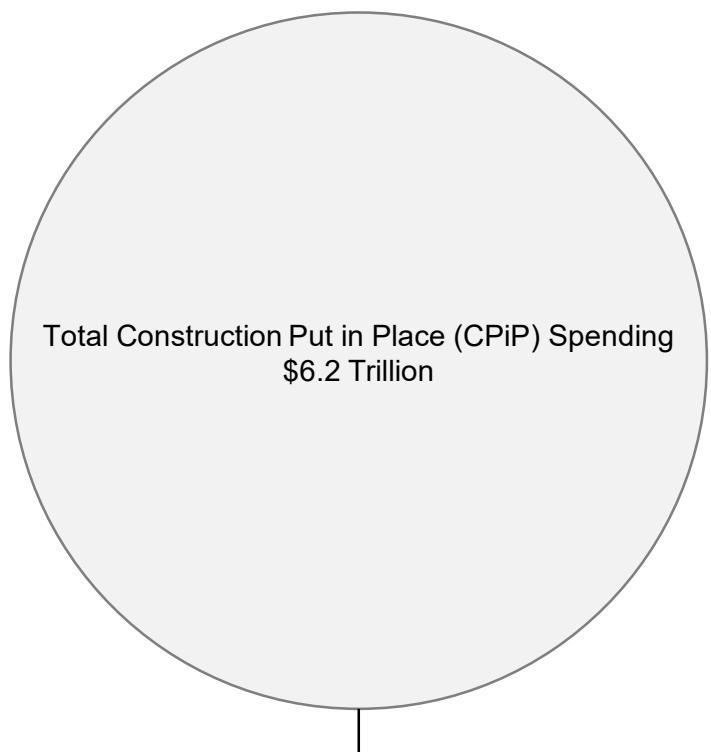
Across all markets and segments, total construction put in place in 2019 of \$1.3 trillion is expected to fall to just over \$1.2 trillion by 2024, a 10% decrease over the next five years.



**Construction spending through the forecast period will remain concentrated in residential and commercial segments (61%) and across the South and West Census Regions (66%).**

### Market size comparison

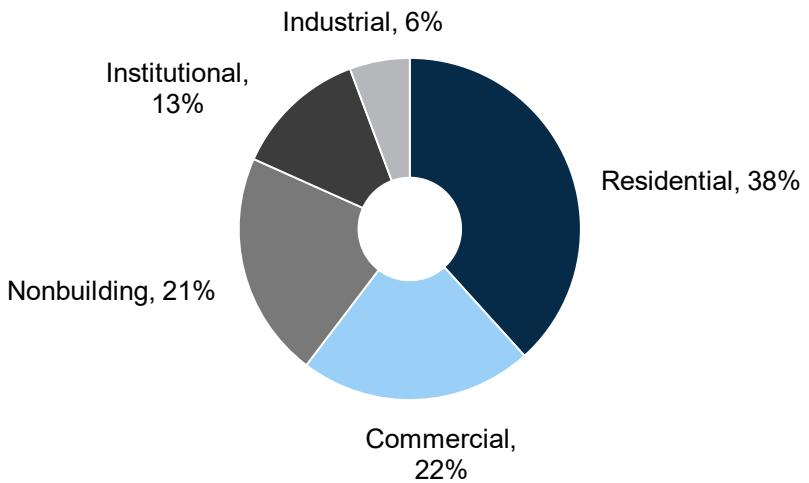
Total combined spend, Regional Rollup, 2020-2024 US\$



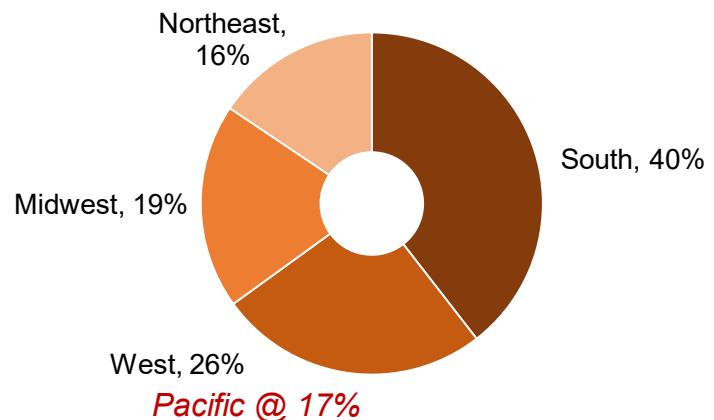
### Market segmentation

Total combined spend, 2020-2024 US\$

Segment



Geography

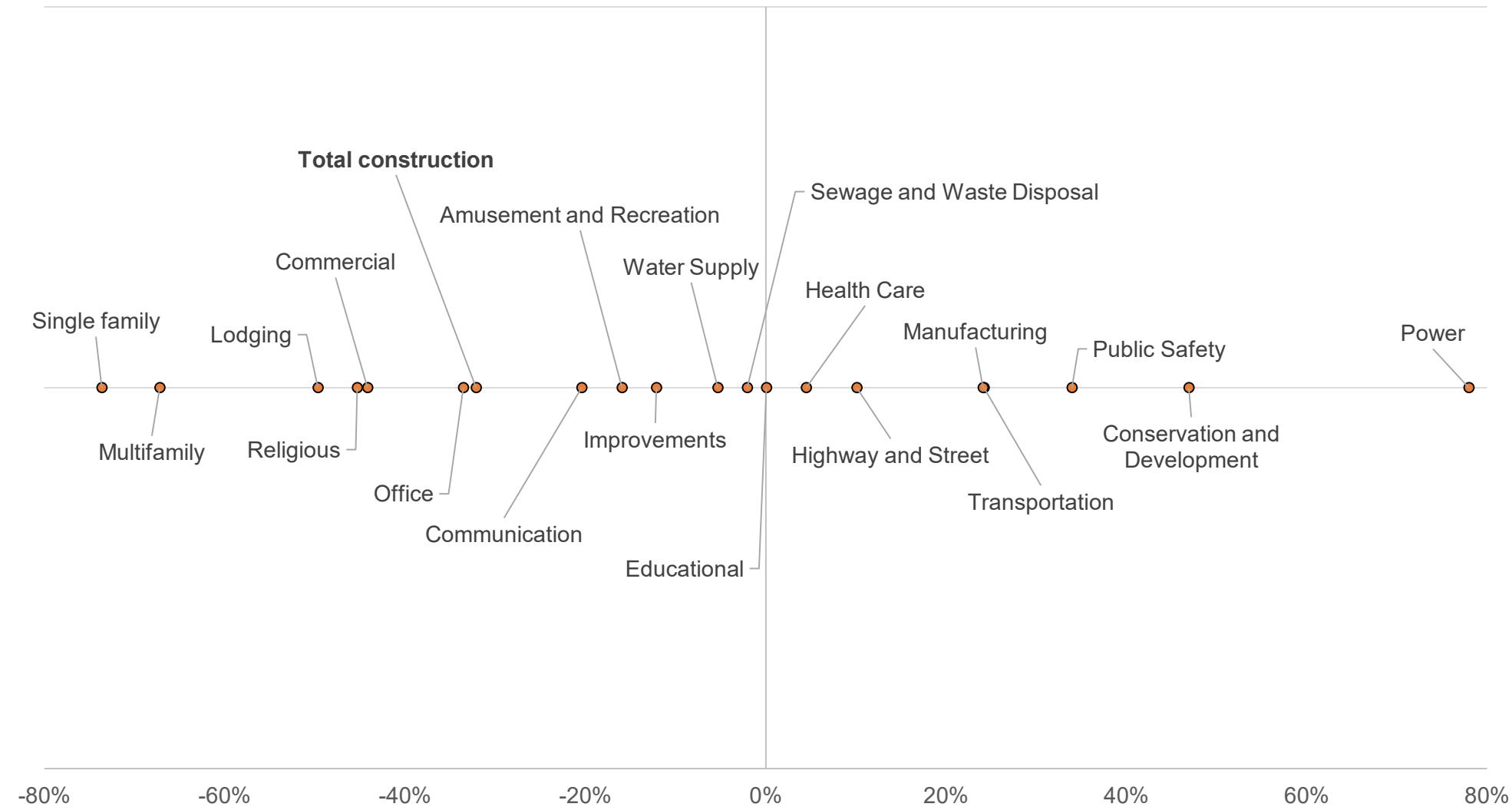


## Bulls and bears coexist in all economies

2006-2011 Percent Change in Construction Spending Put in Place

US total

Source: FMI



# Who are the most likely Bulls and Bears this time around?



**Manufacturing**



**Distribution**



**Communications/  
Data Centers**



**Intelligent Transportation Systems**



**Lodging**



**Commercial**



**Amusement & Recreation**



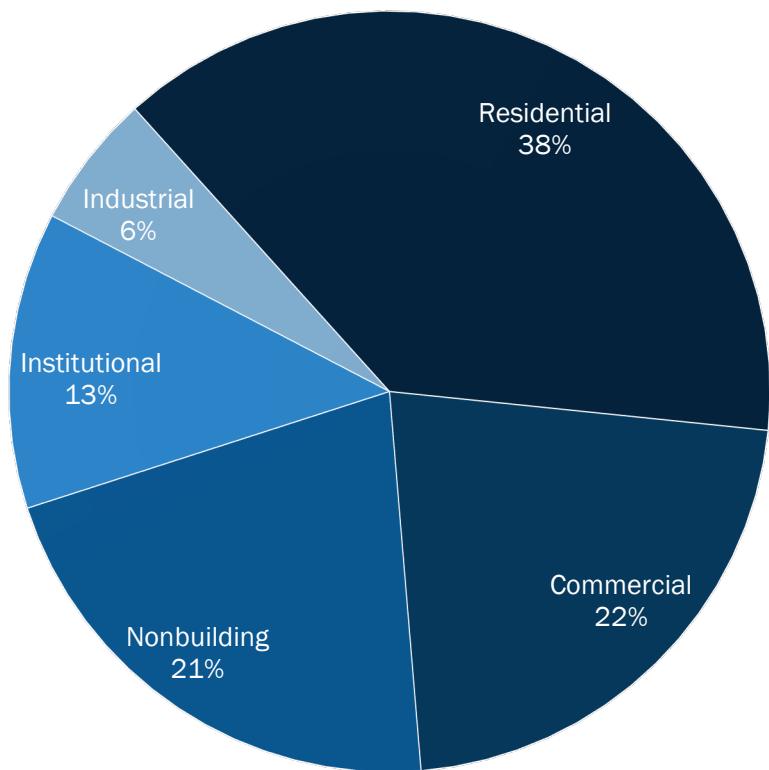
**Office**

## Segment growth will be led by nonbuilding, industrial and institutional spending.

Distribution of forecast spending by segment (2020 - 2024)

U.S. CPiP

Source(s): FMI

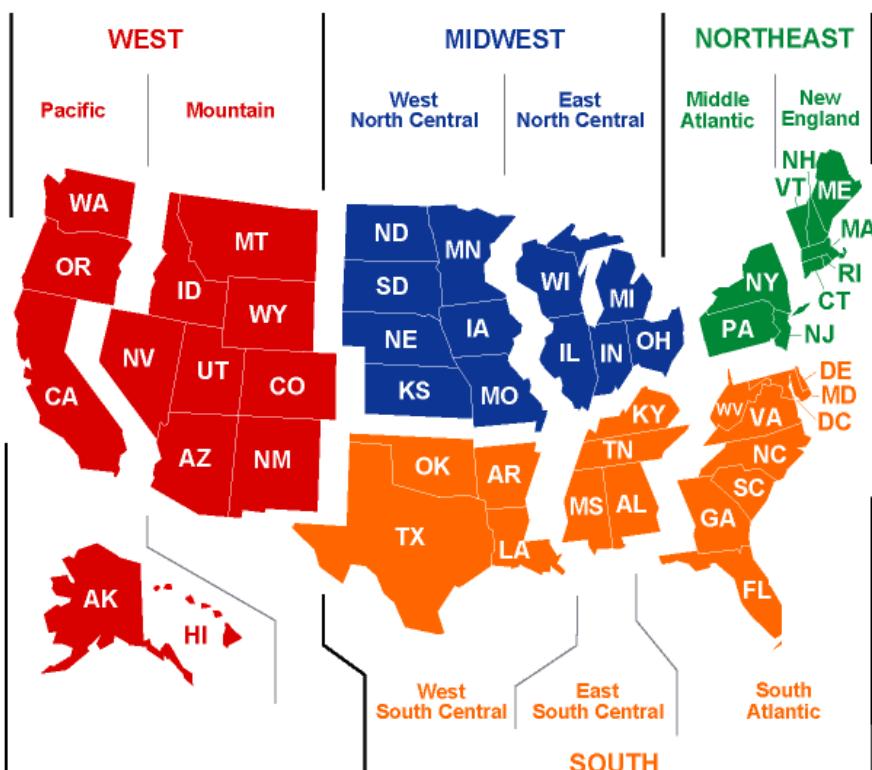


Total construction spending 2020 - 2024 = \$6.2 trillion

Forecast U.S. CPiP by segment	CPiP 2020 – 2024		Growth 2020 – 2024	
	%	\$B	Total, %	CAGR, %
Residential	38%	2,461	-15%	-3.4%
Commercial	22%	1,364	-19%	-4.1%
Nonbuilding	21%	1,322	2%	0.5%
Institutional	13%	705	-2%	-0.6%
Industrial	6%	313	-11%	-2.3%
<b>Total</b>	<b>100%</b>	<b>\$6,165</b>	<b>-10%</b>	<b>-2.7%</b>

All regions and divisions of the country are forecast to experience declines through 2024. The Midwest and the South, however, are both expected to outperform national averages.

## Total combined targeted construction put in place by Census Division

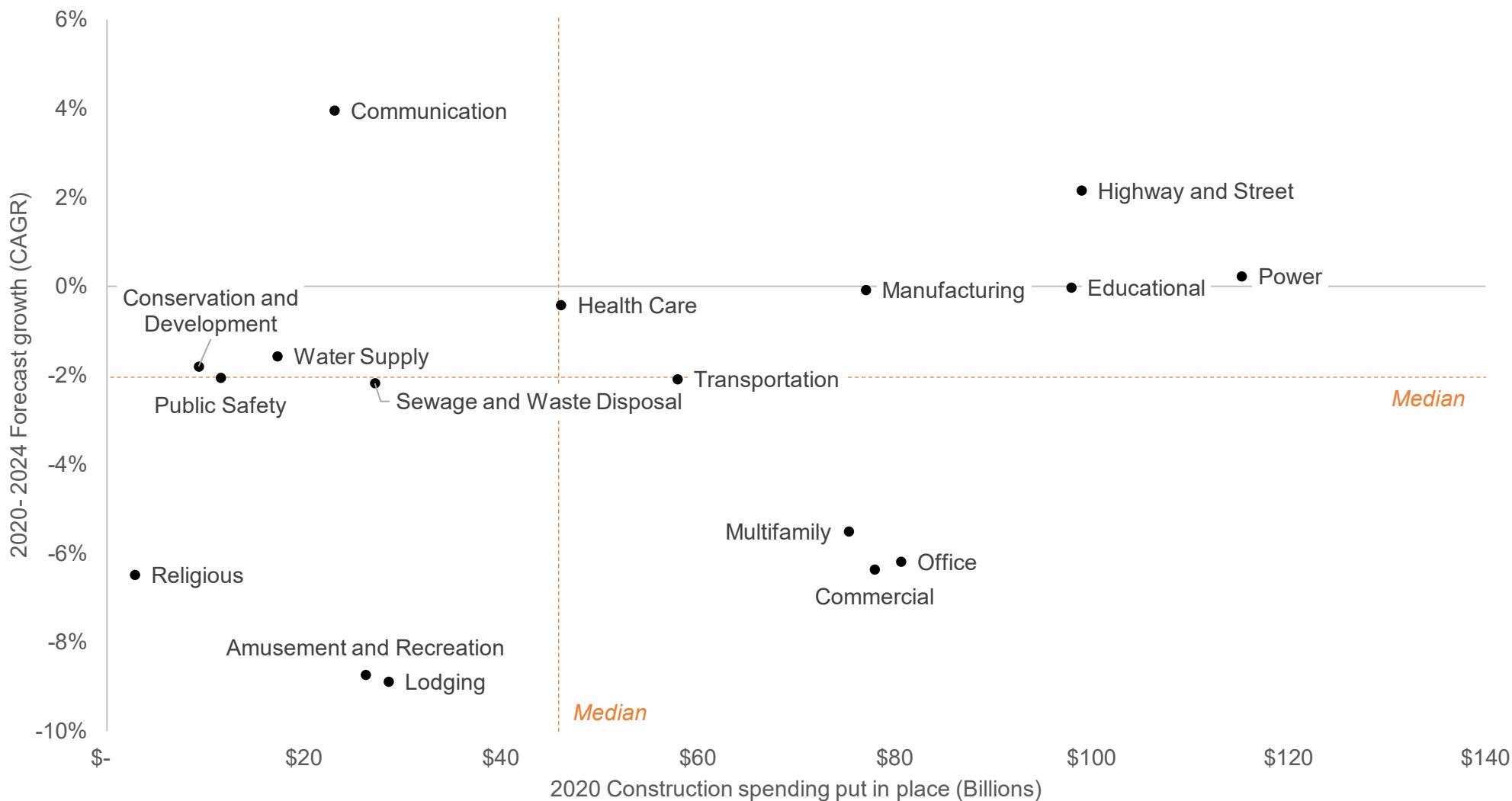


(Billions of current dollars)		2015	2019	2024f	CAGR (19-24)
WEST	Pacific	206	239	194	-4.0%
	Mountain	88	111	93	-3.4%
MIDWEST	West North Central	114	124	112	-1.9%
	East North Central	109	121	110	-2.0%
NORTHEAST	Middle Atlantic	142	154	133	-2.9%
	New England	46	52	47	-2.0%
SOUTH	West South Central	184	203	181	-2.3%
	East South Central	47	50	44	-2.5%
	South Atlantic	197	253	224	-2.4%
U.S. Total		\$1,131	\$1,365	\$1,230	-2.7%

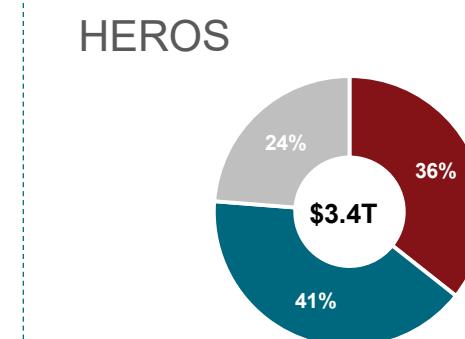
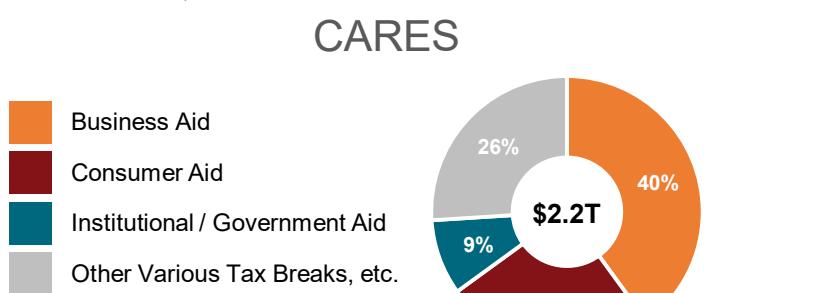
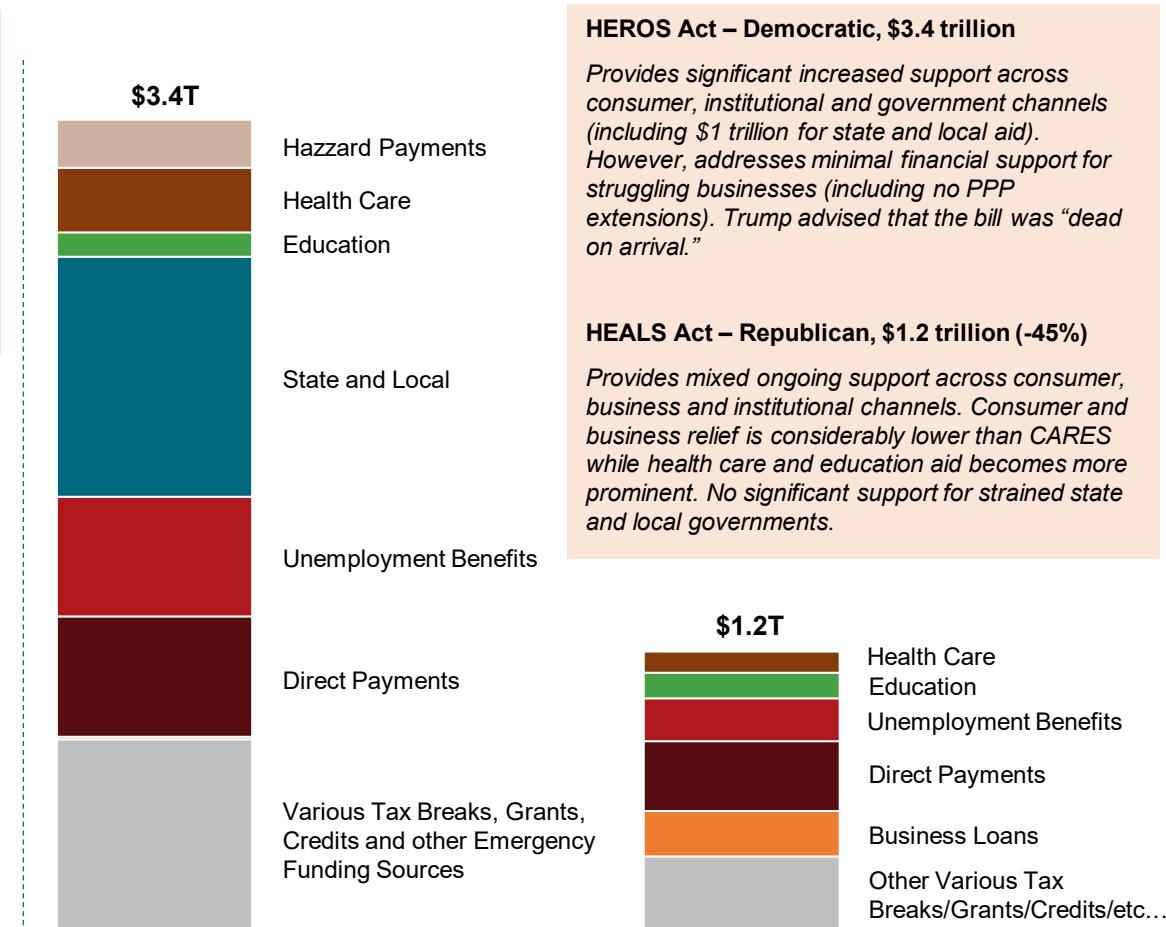
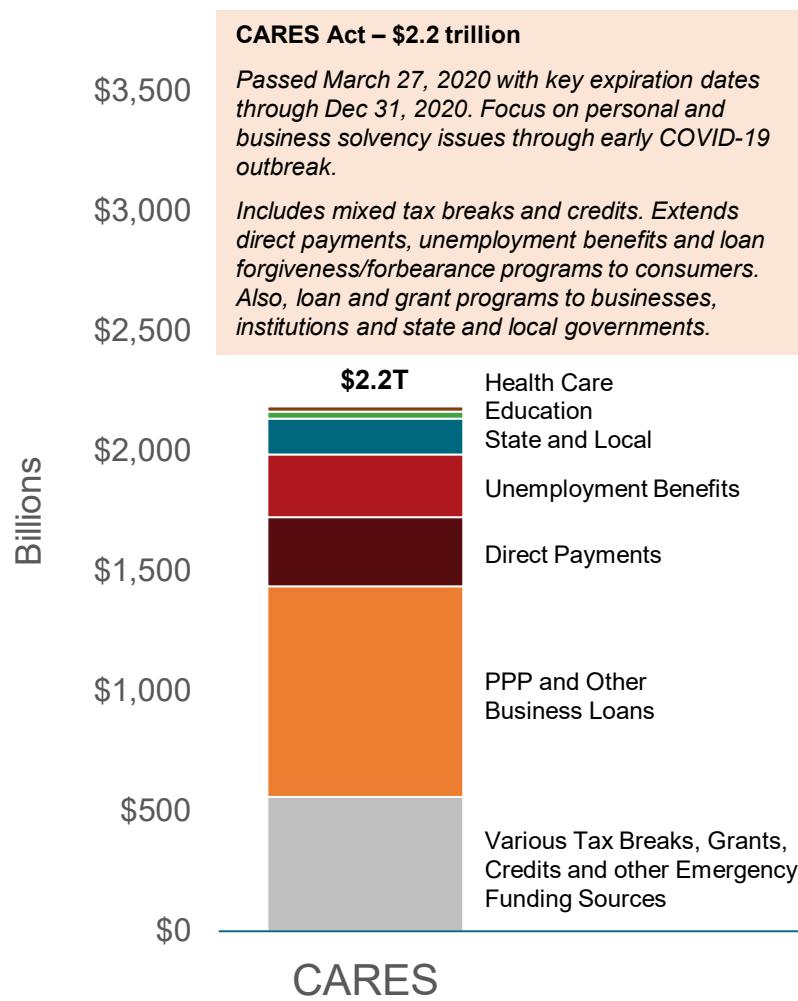
## *Nonresidential building activity suffers for several years*

### Segment comparisons (US)

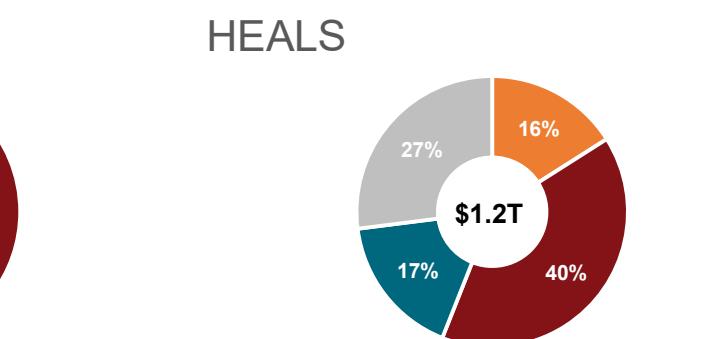
Source: FMI



# Proposed stimulus program extensions take different views



55% MORE funding support than CARES

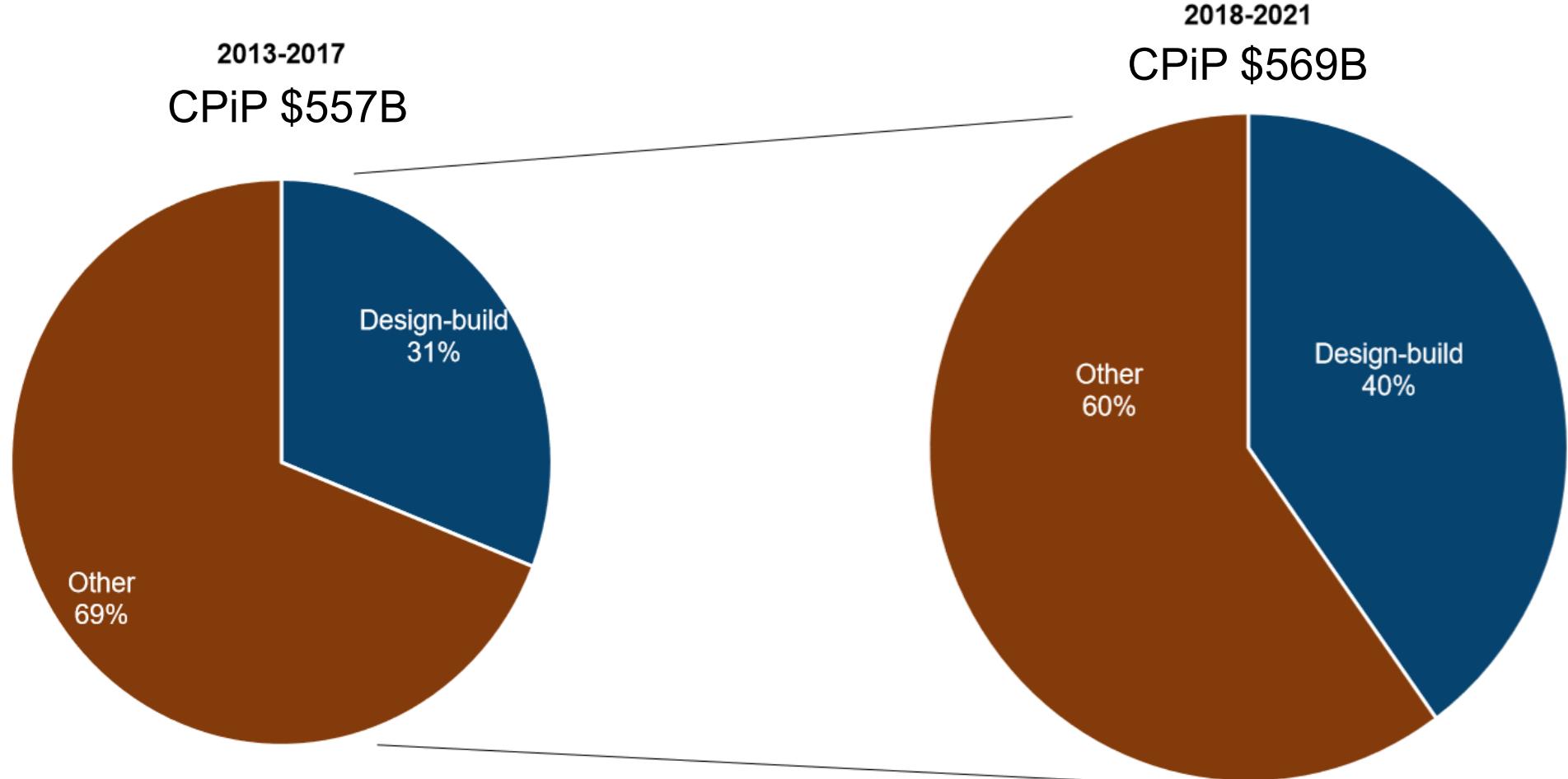


## Design-build continues to gain share as a delivery method of choice in the highway/street and water/wastewater segments.

Design-build as a percentage of total highway/street and water/wastewater construction spending

Billions of dollars

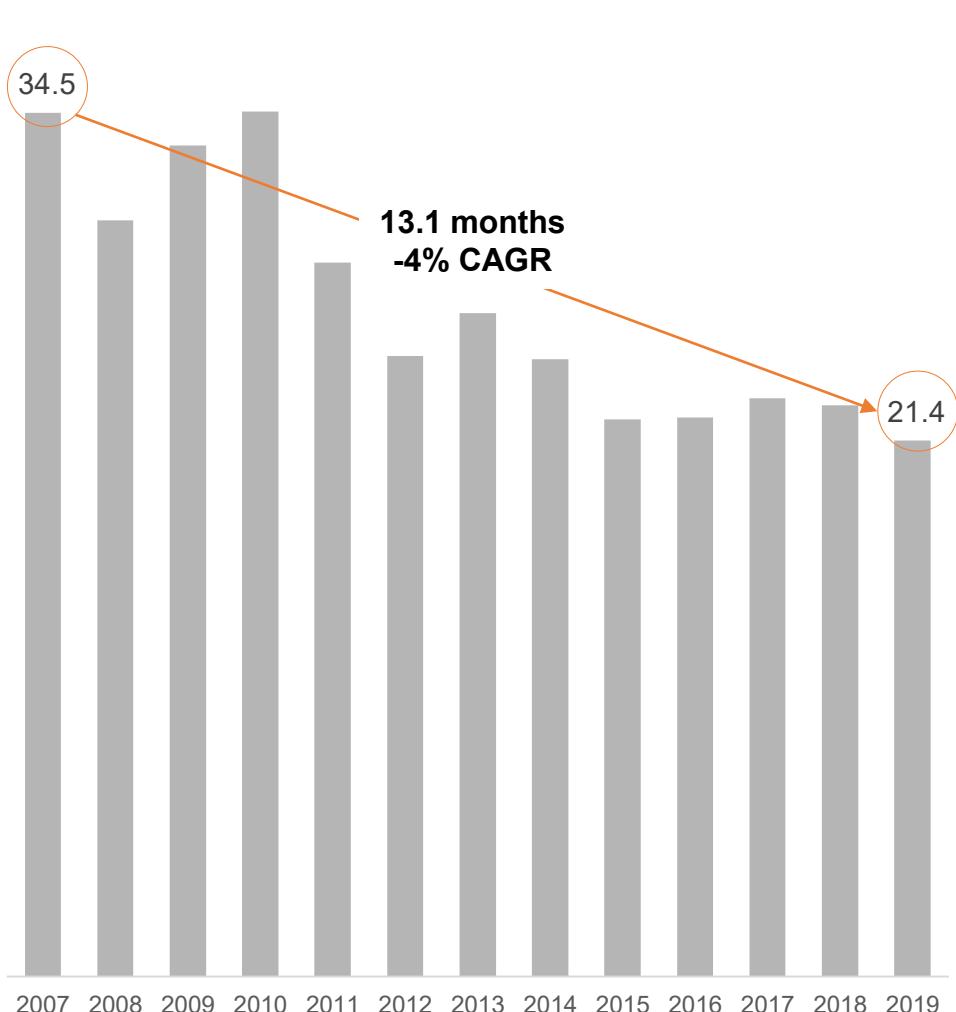
Source(s): FMI analysis of multiple sources



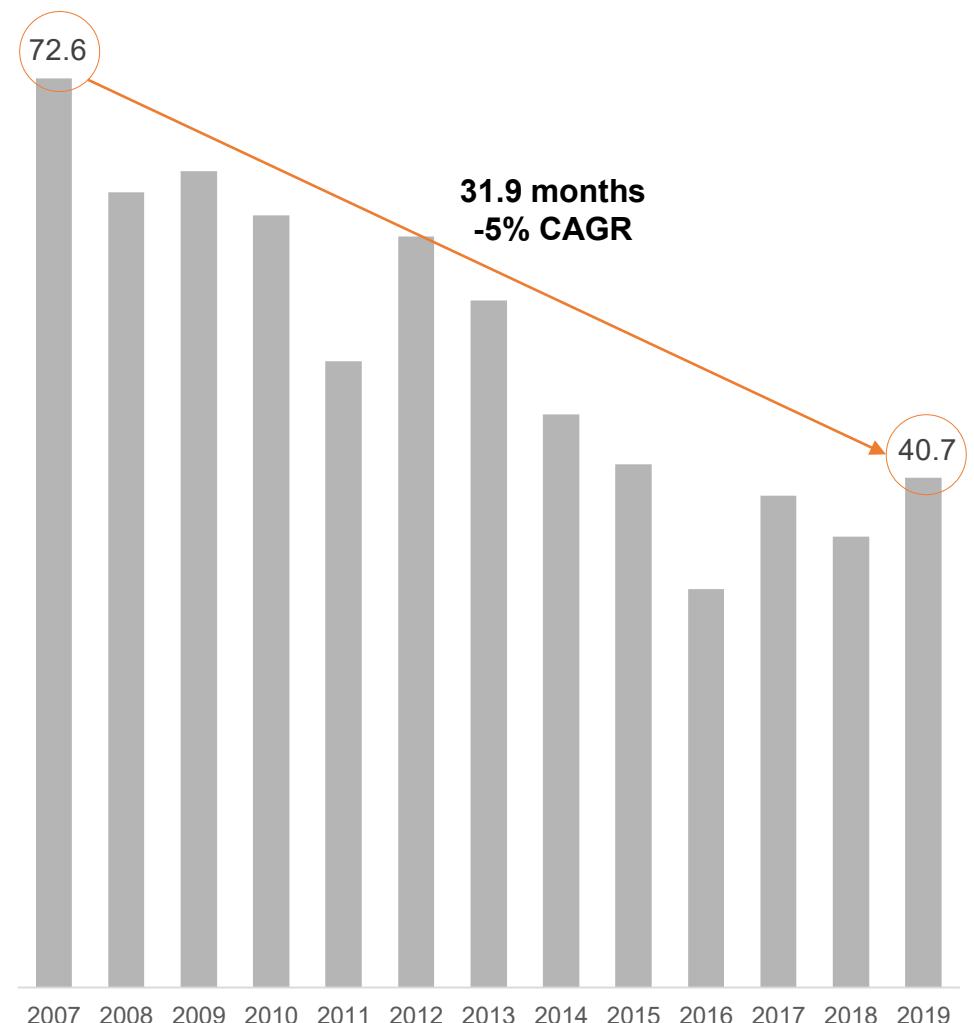
# Speed to market has accelerated

Average construction schedule in months excluding single family

*Projects valued \$25 million or more*



*Projects valued \$250 million or more*



*Avoiding poor—if not dangerous—decision making*

## Market Potential

- Growth prospects
- Underlying demand drivers, influences and risks
- Composition
- Addressable opportunity



## Market Position

- Procurement practices and preferences
- Competitive intensity
- Value proposition receptivity
- State of readiness



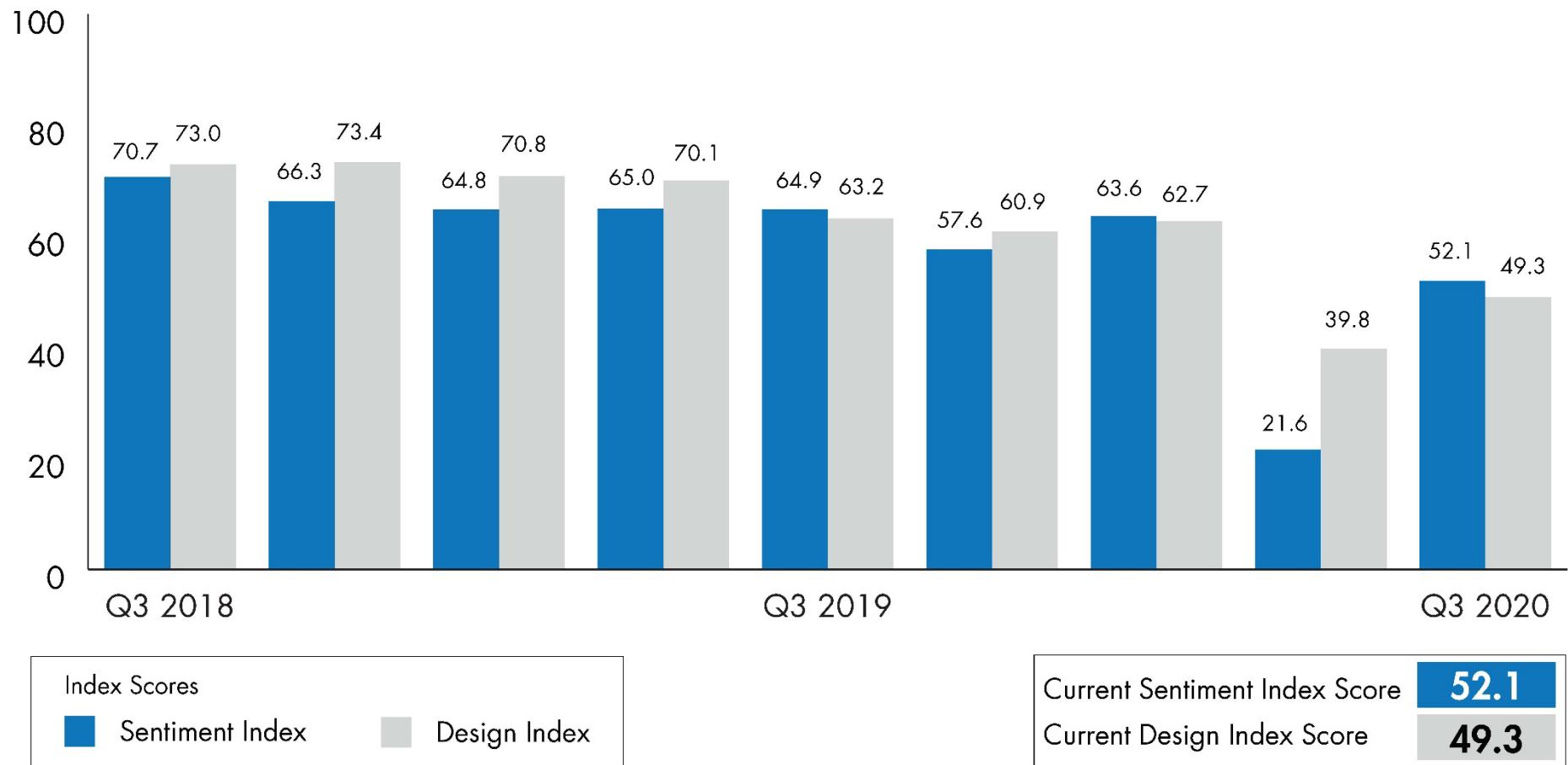
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## CIRT Survey Results

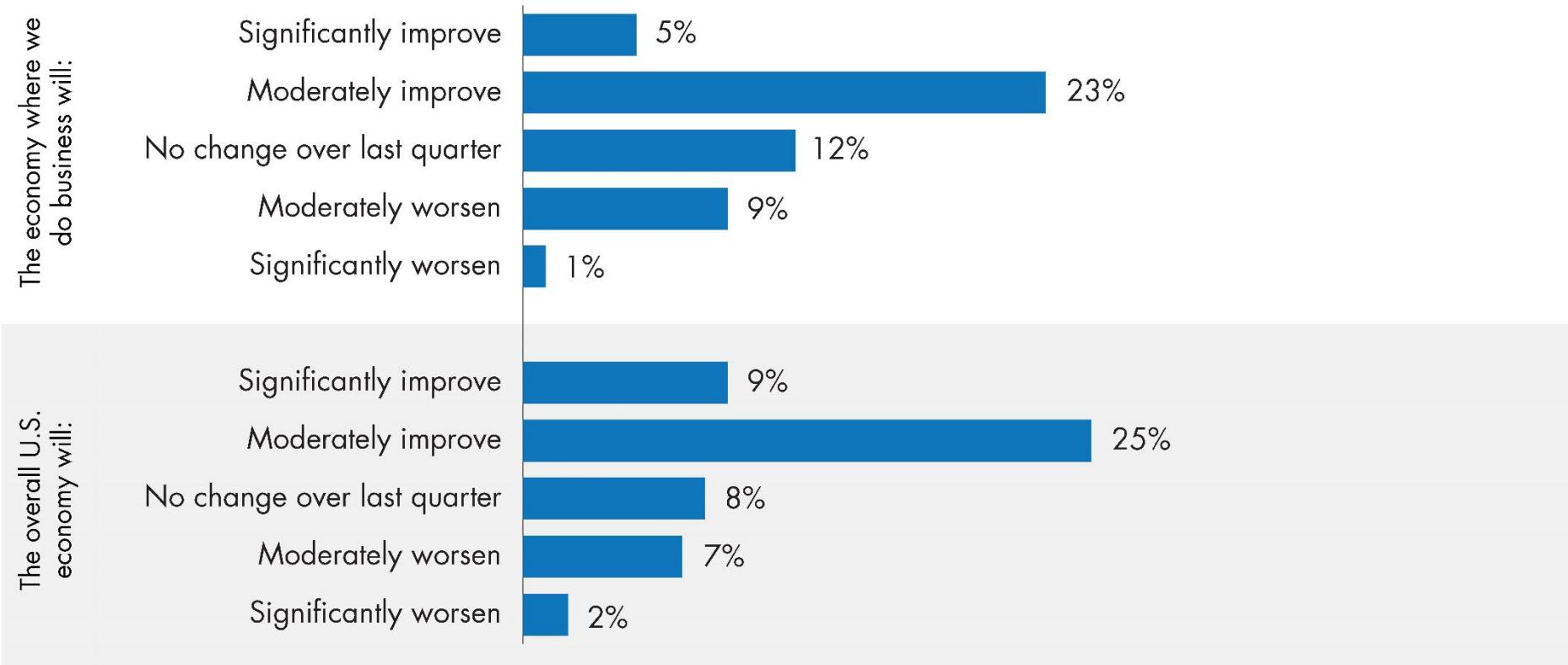
CEO Input

# CIRT Sentiment Index and Design Index Scores

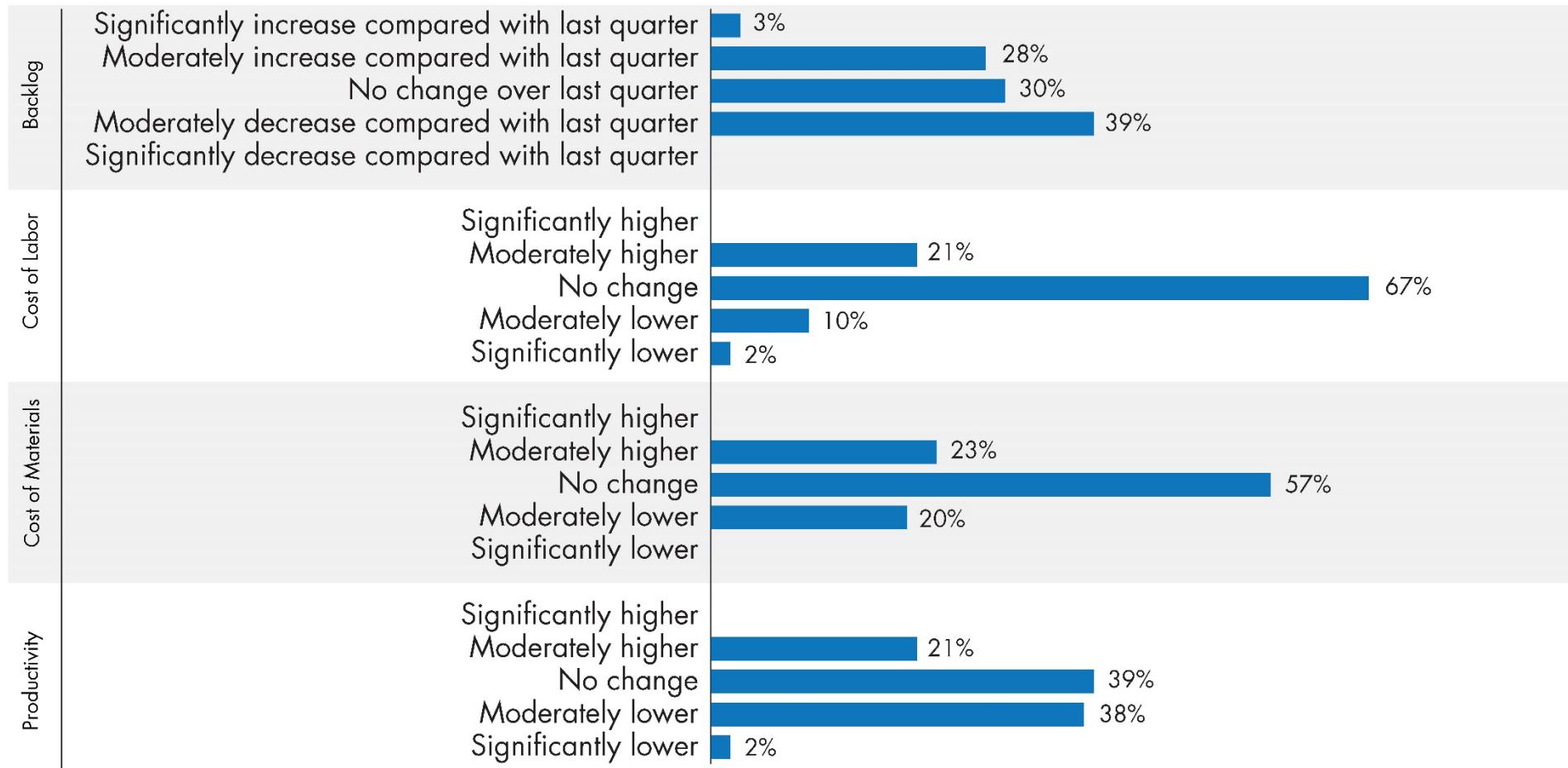
Q3 2018 TO Q3 2020



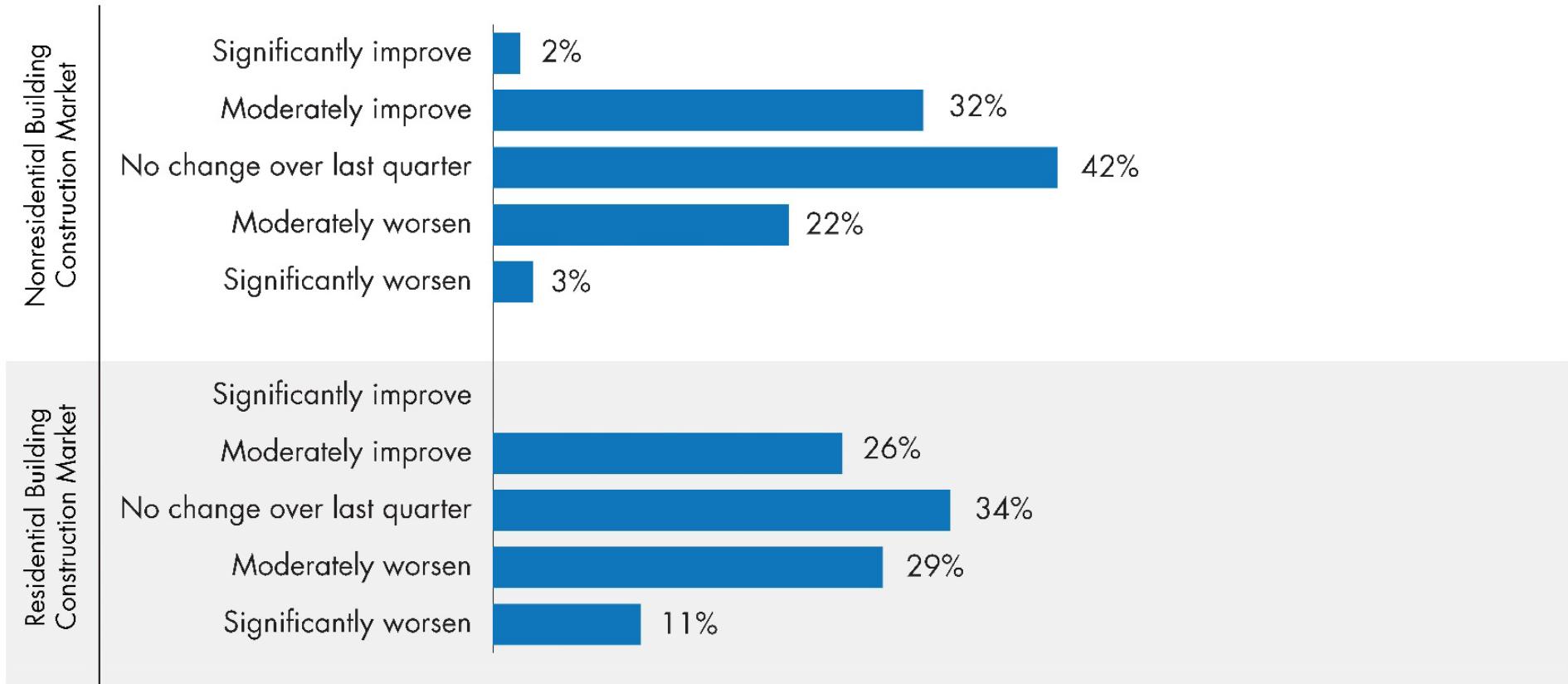
# Local and National Economic Predictions for Next Quarter



# Construction Input Predictions for the Next Quarter

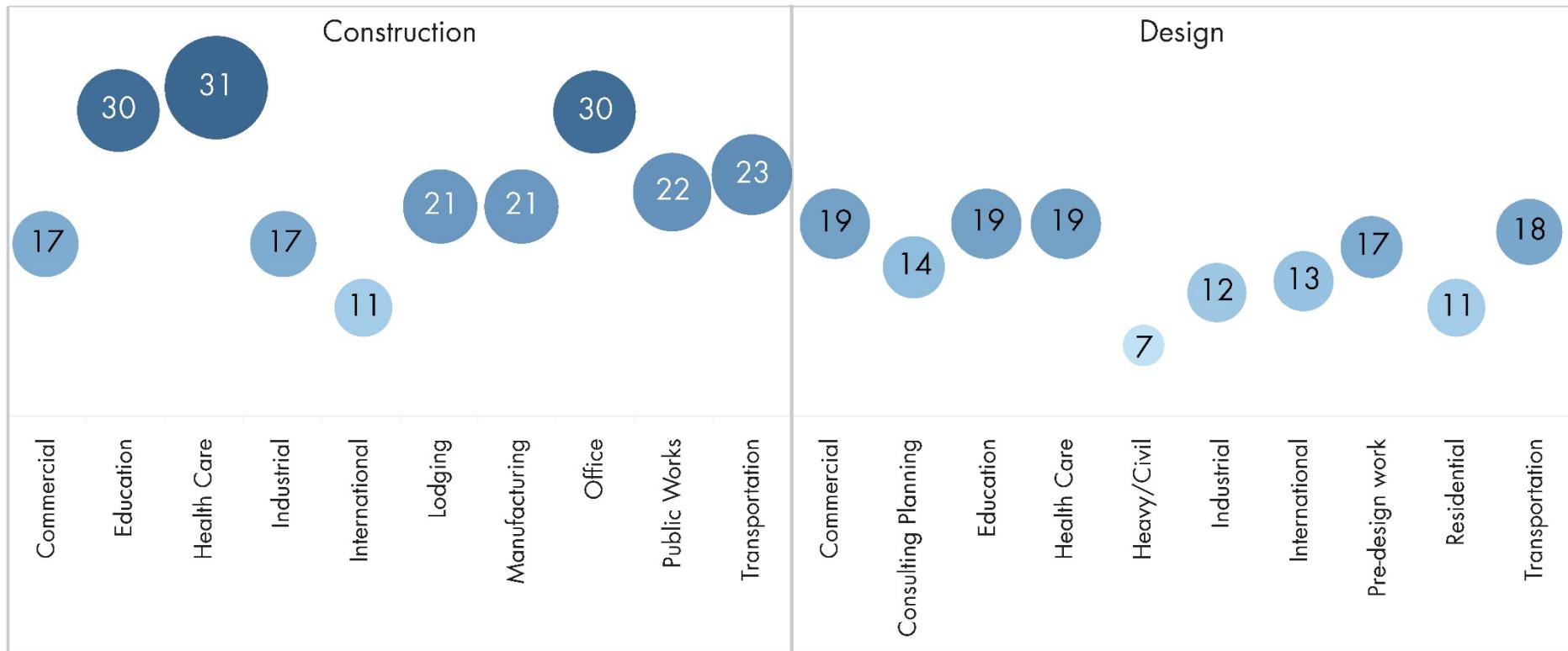


# Expectations for the Residential and Nonresidential Building Markets for Next Quarter



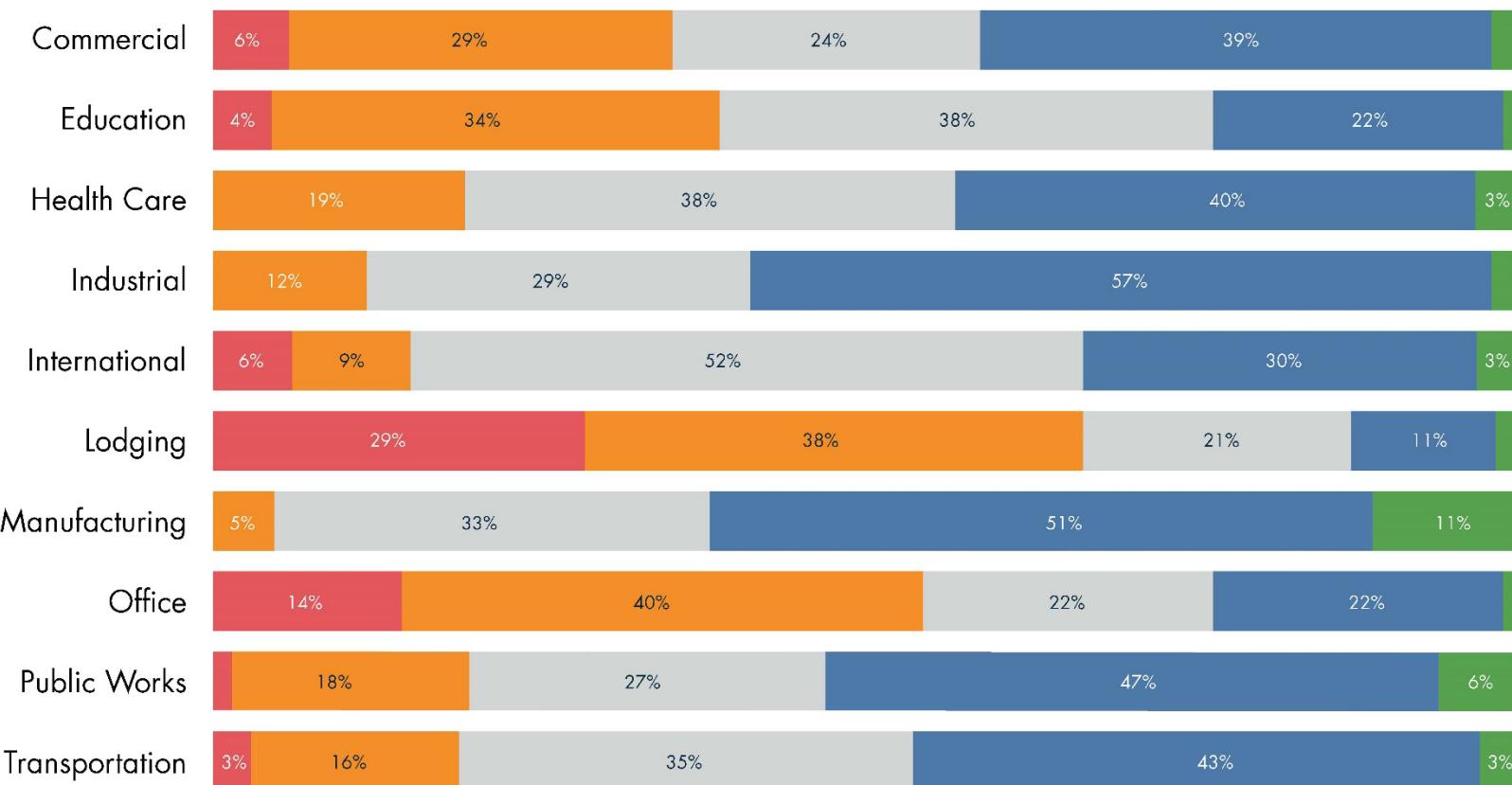
# Member Profile

## Number of CIRT Member Companies in Each Sector



# Perception of Change for Next Quarter

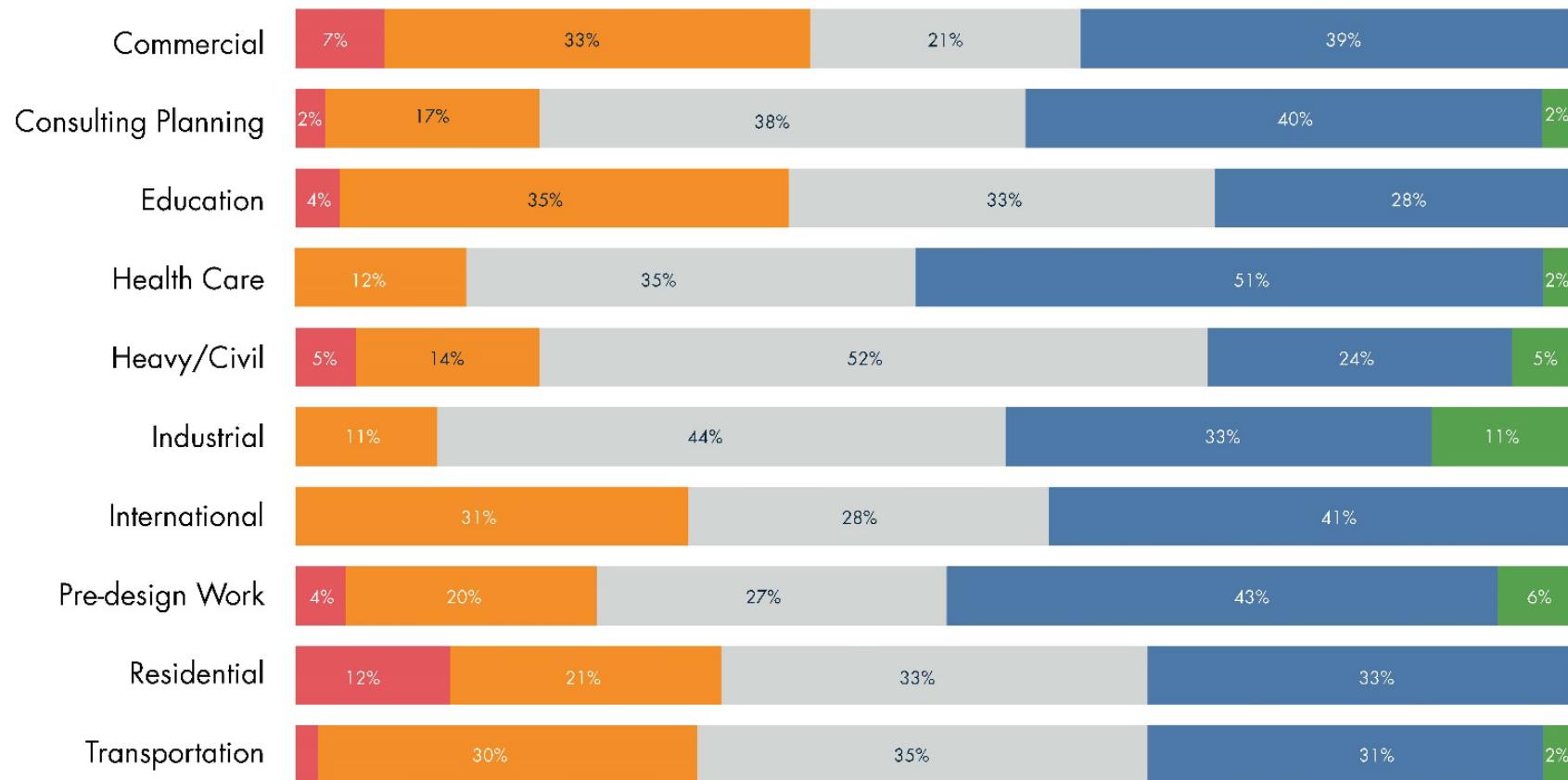
## Construction



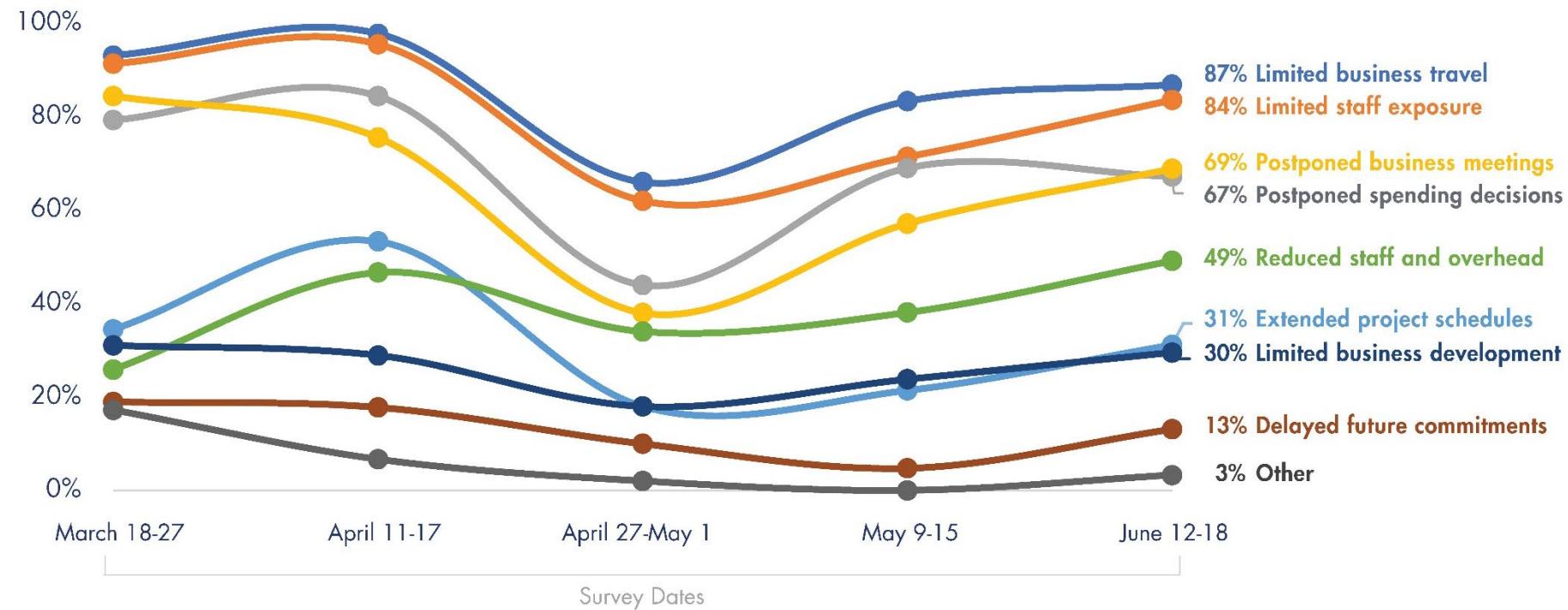
■ Significantly worsen    ■ Moderately worsen    ■ No change  
■ Moderately improve    ■ Significantly improve

# Perception of Change for Next Quarter

## Design



# How Has Your Organization Responded To the Convergence of Economic Disruptions?



*Regardless of the shape, the recovery will be reinvented*

Considering possible changes...

- Project suspensions become more common
- The public sector does not provide a safe haven
- Business model/ Corporate adaptations (e.g., Target emulates Amazon, Walmart enters healthcare)
- National/ Super regional consolidation creates a preference for a limited number of select contractors (this may require serving a broader range of markets/ traveling)
- Moving from social distancing to community distancing (e.g., suburban markets overtake urban markets)
- Relationships still matter, and there will not be a mad rush to the lowest price (therefore value propositions become even more important)