



Capital Advisors

CONSTRUCTION MATERIALS OUTLOOK

JUNE 2023

www.fmicapitaladvisors.com

FMI Capital Advisors, Inc. is a wholly-owned subsidiary of FMI Corporation
Registered Broker / Dealer | Member FINRA

FOR DISCUSSION PURPOSES ONLY



WHO we are

**Industry
Insiders**

Capital Advisors

Consulting & Research



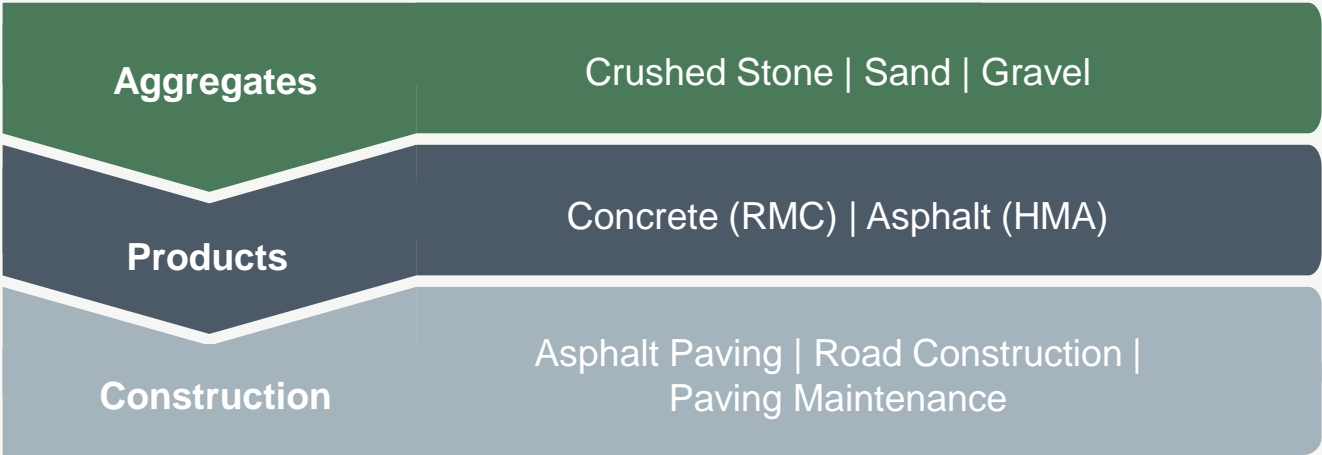
FMI is a leading investment banking and consulting firm dedicated exclusively to the built environment. We serve as the industry's trusted advisor, providing current market insights, deep industry research, and key relationships that deliver tangible results for our clients.

Specializing in **CONSTRUCTION MATERIALS**

35+ YEARS OF
EXPERIENCE

100+ TRANSACTIONS
More than any peer advisory group

Servicing All Segments of the Supply Chain



Active Members in Industry Organizations

Logos of industry organizations:

- NAPA** NATIONAL ASPHALT PAVEMENT ASSOCIATION
- PIT & QUARRY**
- NSSGA** NATIONAL STONE, SAND & GRAVEL ASSOCIATION
- NRMCA** NATIONAL READY MIXED CONCRETE ASSOCIATION

Recent Transaction Advisory

Recent Transaction Advisory cases:

Client/Company	Acquisition Status	Advisors
BRANSCOME INCORPORATED (a COLAS COMPANY)	has been acquired by COLAS	FMI Capital Advisors
SYAR INDUSTRIES	has been acquired by Vulcan Materials Company	FMI Capital Advisors
RAZORBACK CONCRETE COMPANY (a subsidiary of SUMMIT Materials)	has been acquired by FARMER COMPANIES	FMI Capital Advisors
SCC materials	has been acquired by Martin Marietta	FMI Capital Advisors
KUHLMAN	has been acquired by THE GERKEN COMPANIES	FMI Capital Advisors
BARRIERE CONSTRUCTION	has been acquired by CRH	FMI Capital Advisors
John S. Lane & Son, Inc. (TRAP LANE ROCK)	has been acquired by PECKHAM INDUSTRIES, INC.	FMI Capital Advisors
MIDWEST MINERALS ("Rock Solid Since 1943")	has been acquired by SUMMIT Materials	FMI Capital Advisors
PALMER PAVING CORP.	has been acquired by PECKHAM INDUSTRIES, INC.	FMI Capital Advisors

Each case is categorized as **SELL-SIDE ADVISOR**.

Consulting and Research

CM Focused Consulting



Wallace Marshall
*Head of Construction Materials,
Management Consulting*
O: 919.785.9382
E: wallace.marshall@fmicorp.com

Education: B.A. Appalachian State University
Ph.D. Boston College
Experience: Construction Materials and Market Research



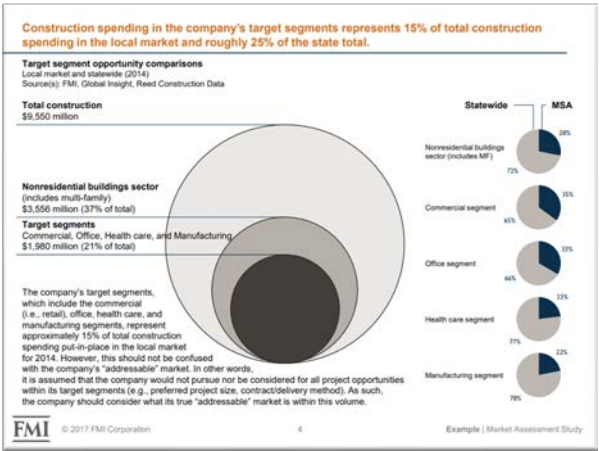
Jay Bowman
*Partner,
Research and Analytics*
O: 919.785.9336
C: 919.782.6679
E: jay.bowman@fmicorp.com

Education: B.A. University of Georgia
MBA East Carolina University
Experience: Market Sizing and Forecasting



Brian Strawberry
*Senior Economist
& Research*
O: 919.785.9246
C: 919.760.5656
E: brian.strawberry@fmicorp.com

Education: B.A. Elon University
MBA UNC Greensboro
Experience: Market Sizing and Forecasting



Management Consulting Capabilities:

- Leadership development
- Field productivity improvement
- Business strategic planning
- Acquisition integration
- Compensation analysis
- Market studies

Global Research











**Capital
Advisors**

Economic & Construction Materials Update

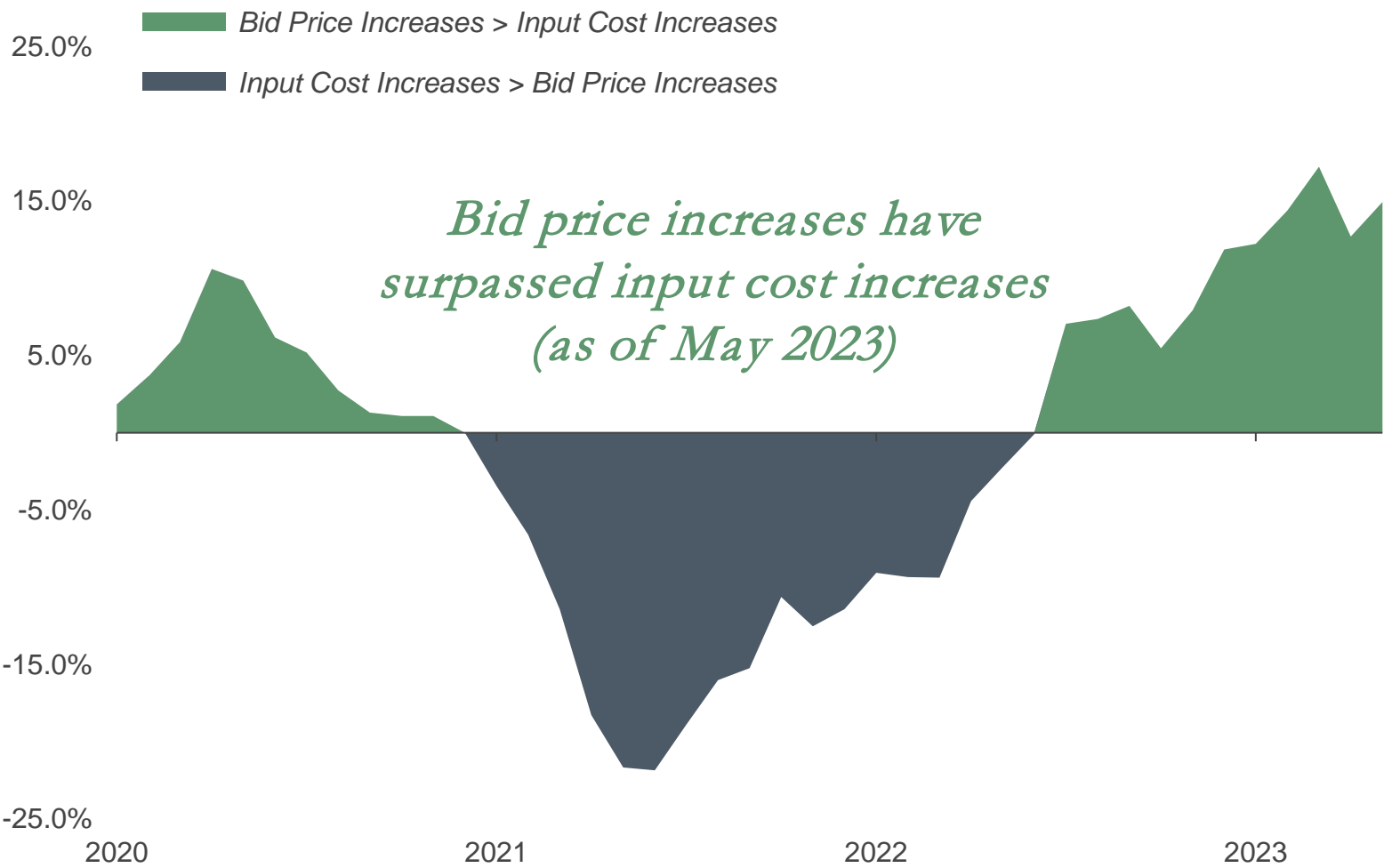
Outlook for Construction Materials

Despite the negative headlines, there are reasons to be optimistic for Construction Materials

Category	Sentiment	Earnings Call Quotes
<u>Demand</u>	↑	 <i>"Market demand remains strong in cement, aggregates and ready-mix in the U.S.A and Canada."</i>
<u>Pricing</u>	↑	 <i>"In the U.S... EBITDA rose 15% to a record first quarter...driven by pricing, with cement and concrete rising approximately 20% while aggregates rose 30%."</i>
<u>Backlogs</u>	↑	 <i>"...we are not seeing any cancellations and continue to have a substantial backlog that we're focused on moving."</i>
<u>Public Funding</u>	↑	 <i>"...historic legislation including the Infrastructure Investment and Jobs Act or IIJA...are expected to provide funding certainty for large infrastructure, manufacturing and energy projects through the current period"</i>
<u>Weather</u>	↓	 <i>"...the first quarter of 2023 was not a typical winter quarter. Extreme weather events occurred across the country, with the Western U.S., particularly impacted."</i>
<u>Residential</u>	↓	 <i>"Volumes were down low double digits, primarily due to weakness in single-family residential and wet weather that impacted volumes early in the quarter."</i>

Pricing Dynamics

Bid Prices vs. Input Costs (Nonresidential)

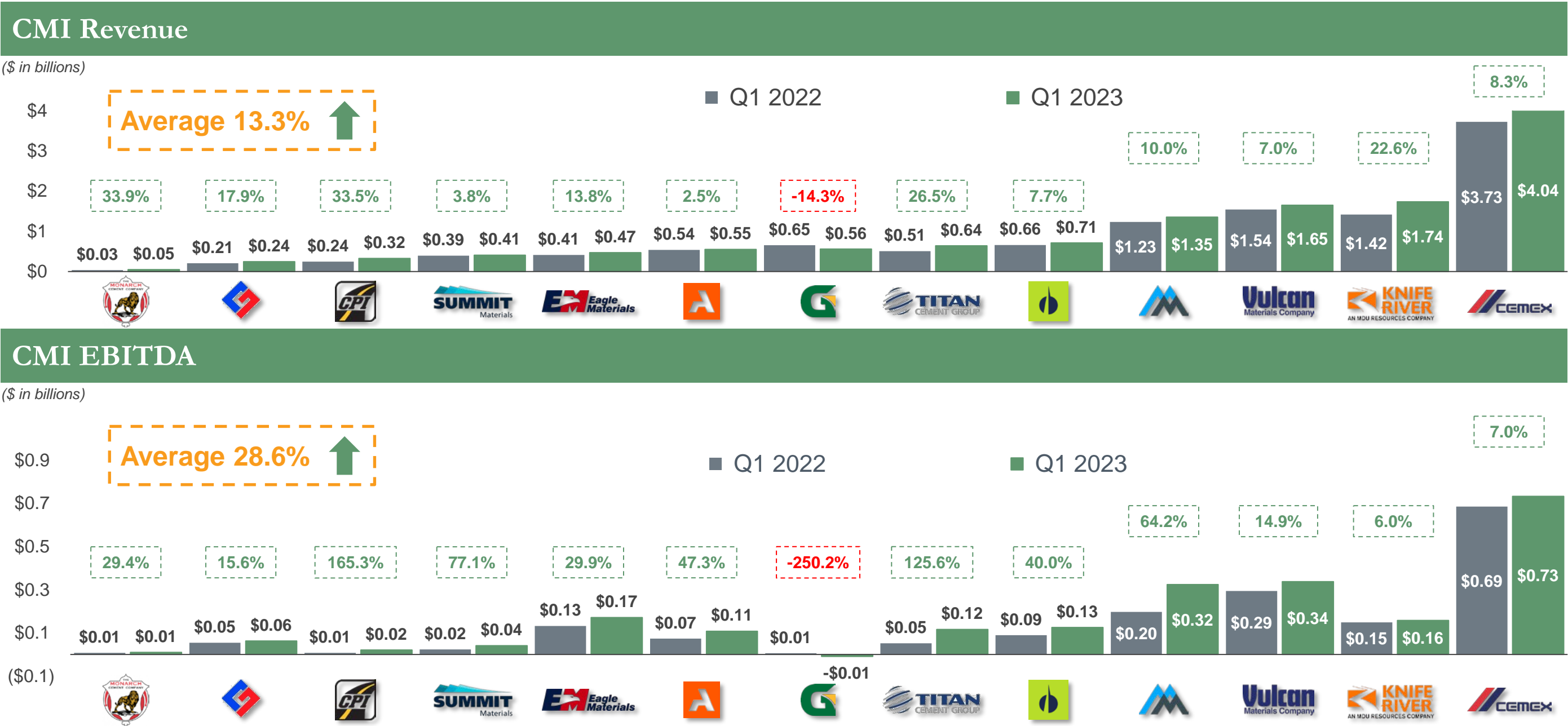


Public Company Product Pricing (YoY)

Q1 23 vs. Q1 22	Aggs.	HMA	Cement	RMC
Summit Materials	20.6%	20.8%	14.8%	15.3%
Eagle Materials	17.5%	N/A	16.4%	10.0%
Cementos Argos	N/A	N/A	15.2%	21.3%
Martin Marietta	22.6%	9.9%	32.2%	20.2%
Vulcan Materials	20.0%	15.0%	N/A	12.0%
Cemex	30.0%	N/A	22.0%	24.0%
Avg. Increase	22.1%	15.2%	20.1%	17.1%

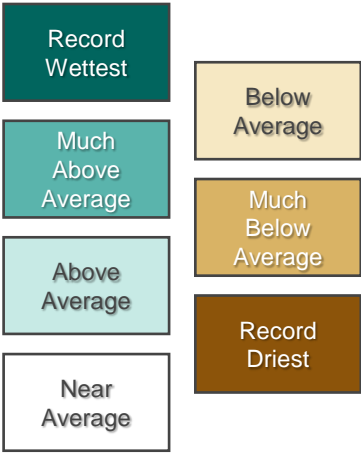
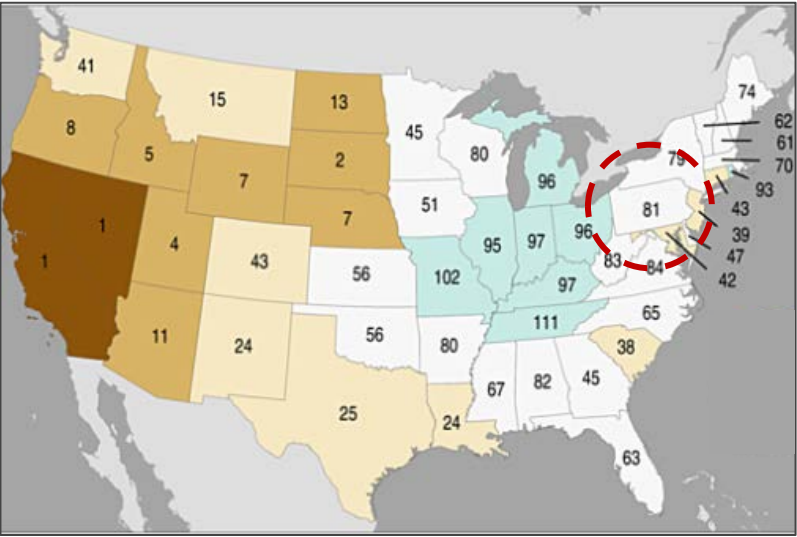
Producers were able to pass along price increases to customers

Construction Materials Index (CMI) Performance – Q1 2023 / Q1 2022 Comparison

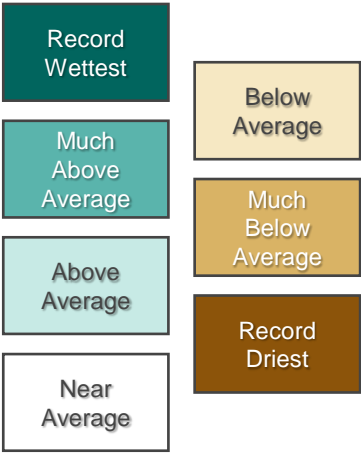
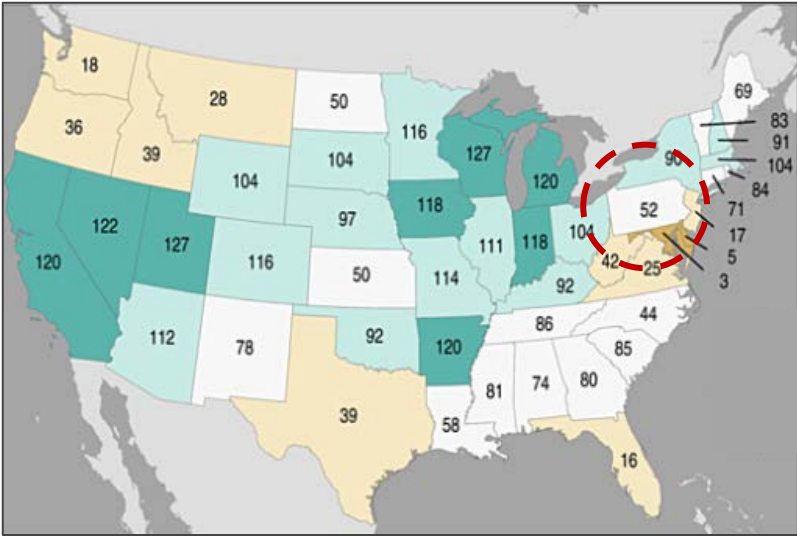


Aggregate Volumes – Q1 Shows Decline (Weather Related?)

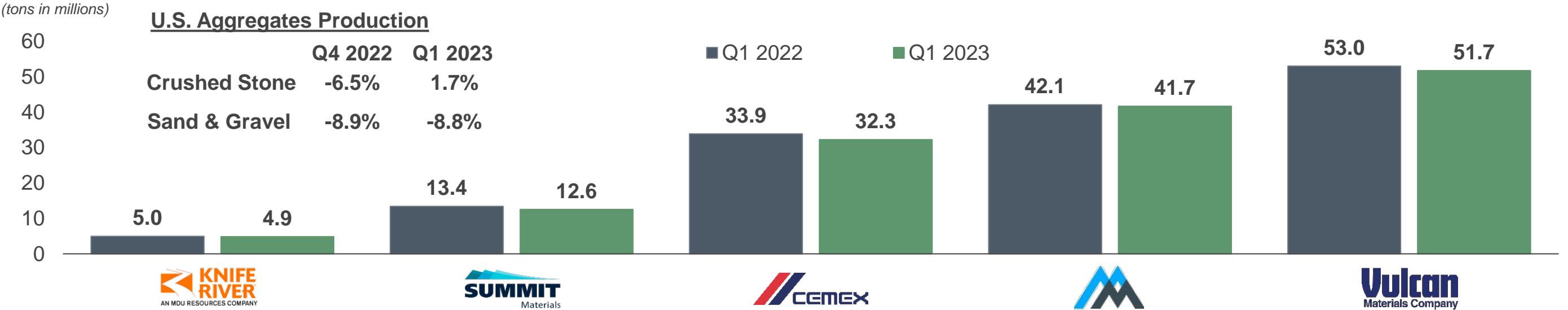
Q1 2022 Precipitation by State



Q1 2023 Precipitation by State



CMI Aggregate Sales Volumes (Q1 2022 vs Q1 2023)

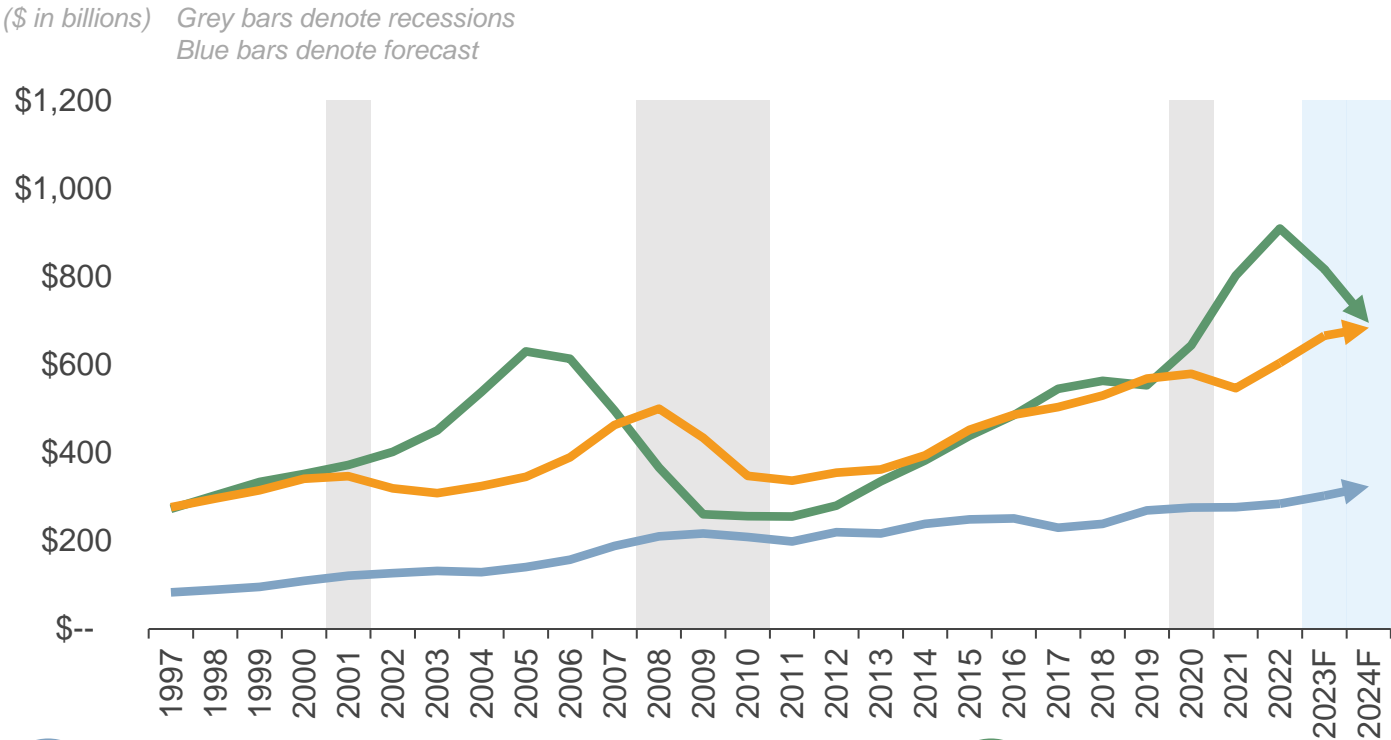


Source: NOAA, Regulatory Filings, USGS
Note: Cemex volumes inclusive of all markets

Total U.S. Market – Construction Put-in-Place (CPiP)

Macro uncertainties abound, but strong demand and funding secure the outlook for construction materials

Construction Put-in-Place (1997 – 2024F)*



	Actuals		Forecasts*	
(% Annual Change)	2021	2022	2023	2024
Residential	25%	13%	(10%)	(15%)
Nonresidential	(6%)	10%	10%	3%
Nonbuilding	0%	3%	6%	7%
Total Put-in-Place	8%	11%	(1%)	(5%)

1 Nonbuilding Structures

- Highway & Street
- Power
- Sewage & Waste Disposal
- Water Supply
- Conservation & Development

2 Residential Buildings

- Single Family Building
- Multifamily Building
- Home Improvements

3 Nonresidential Buildings

- Commercial
- Manufacturing
- Transportation
- Health Care
- Educational
- Religious
- Public Safety
- Office
- Communication
- Lodging
- Recreation

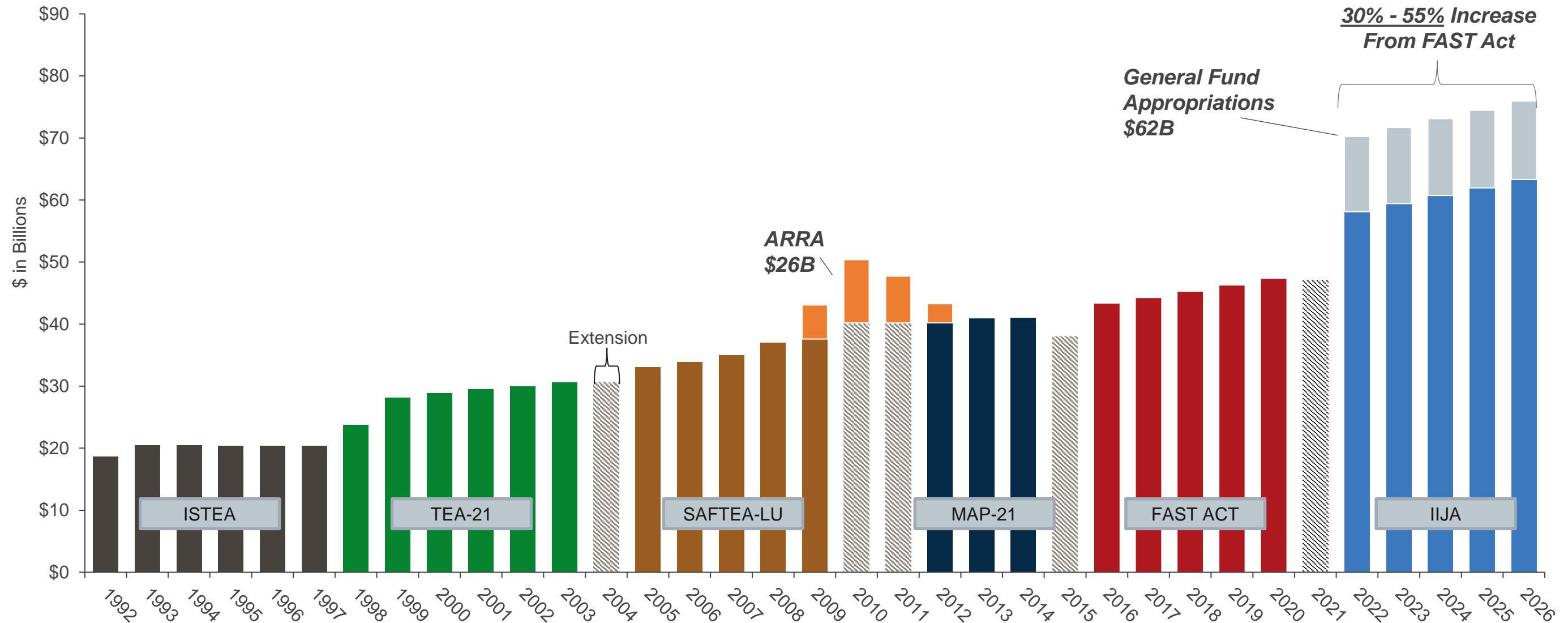
*Q2 2023 Forecast based on Q4 2022 Actuals and Q1 2023 Assumptions; CPiP Segments defined by U.S. Census Bureau; Source: FMI
BOLD CATEGORIES DENOTE STRONGEST CONSTRUCTION MATERIAL DRIVERS



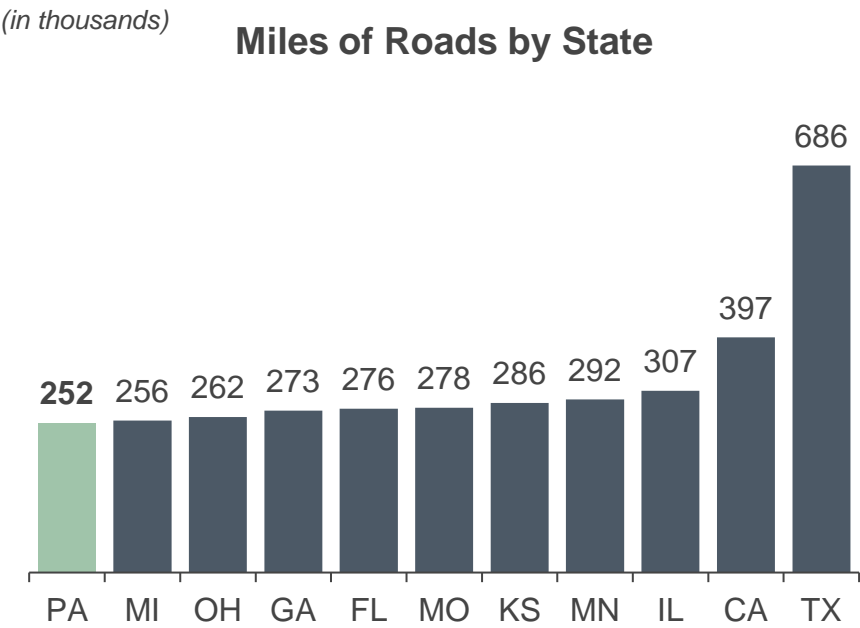
Nonbuilding Construction – Comparison of Highway Authorization Bills

The IIJA is a “once-in-a-generation” infrastructure bill with huge implications for Construction Materials

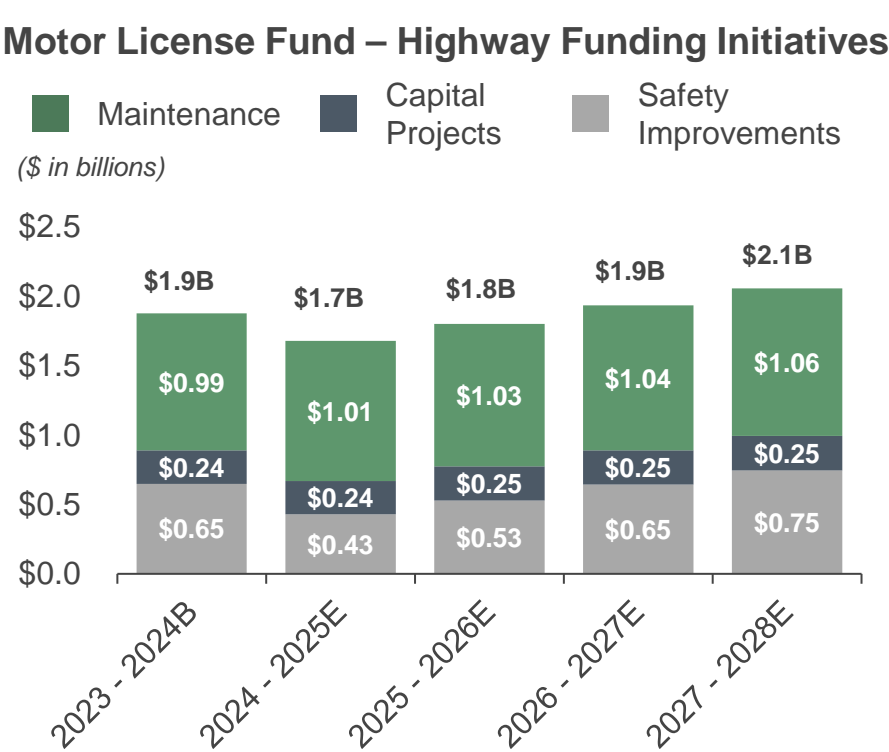
Federal Road and Bridge Funding



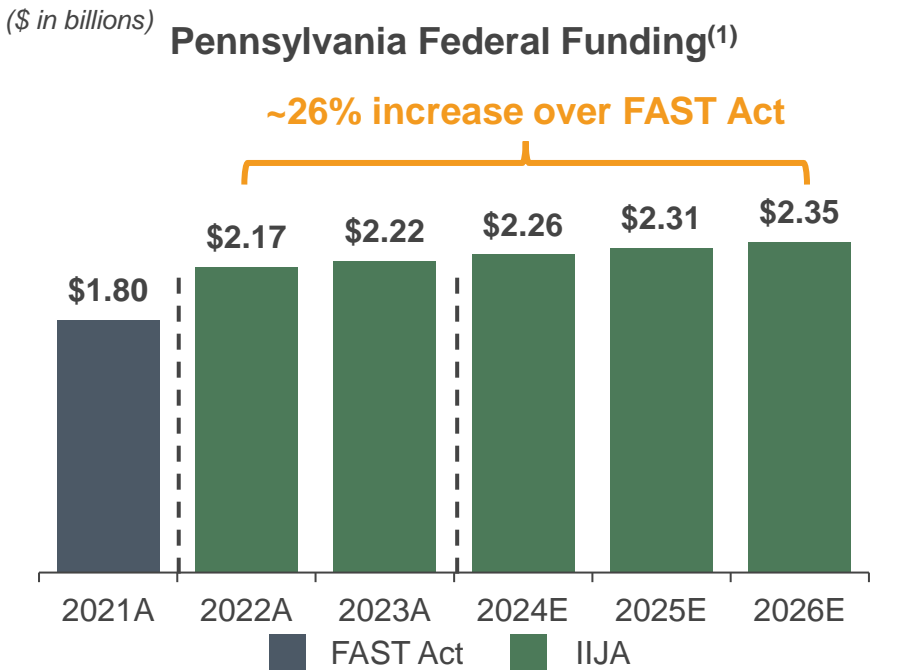
Nonbuilding Construction – Pennsylvania Funding



- Pennsylvania has the **11th most roadway** based on miles in the country
- Per FHWA, as of 2022 Pennsylvania had **13.4% of bridges in poor condition**



- According to the 2023 – 2024 PA State Budget, **~\$9.5B** will be apportioned to highway maintenance, capital projects, and safety initiatives over the **next five years** through the **Motor License Fund**

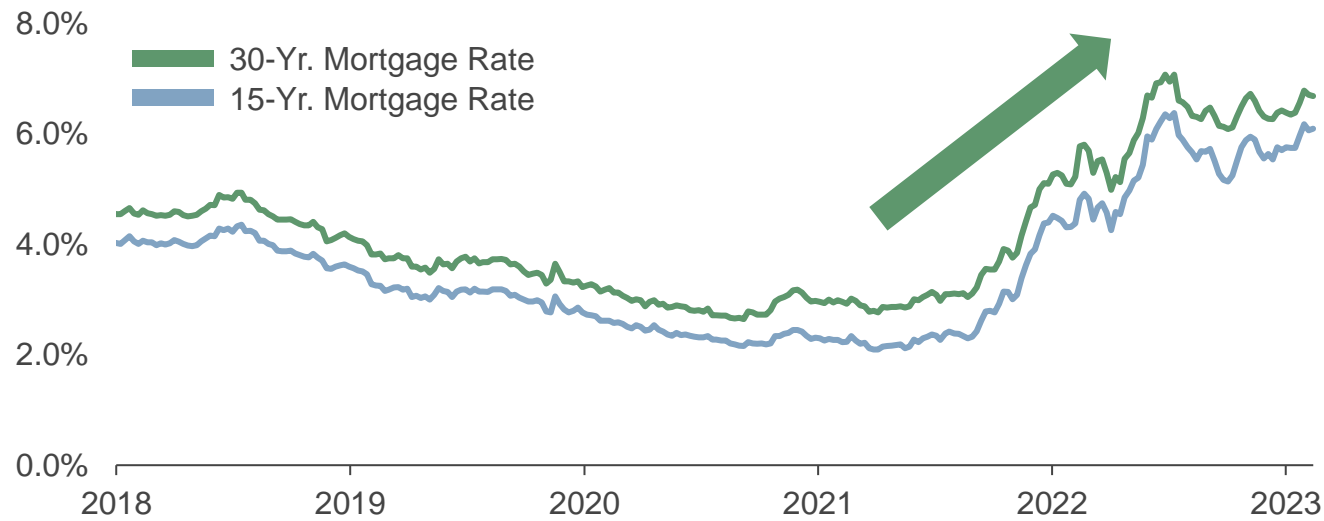


- IIJA provides Pennsylvania with **~\$11.5B** to improve its roadway and bridge infrastructure, which **represents ~26% increase over FAST Act**
- **Federal funds support ~43% of state capital** spending in PA for highway construction, right of way purchases, and planning & design work

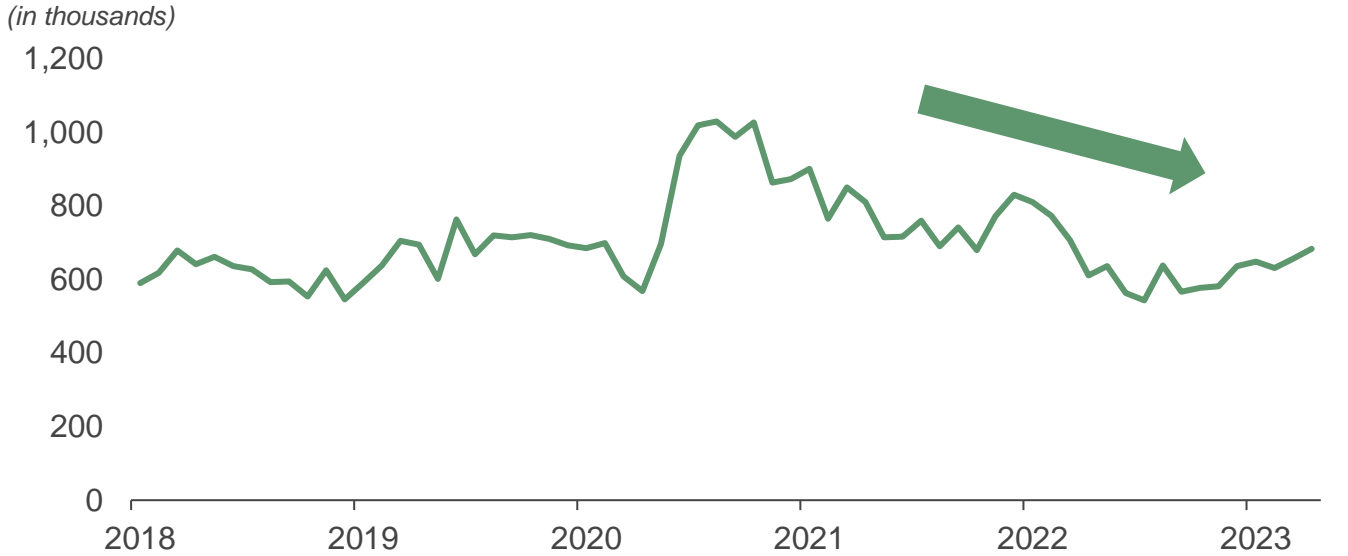
Single Family Residential Construction Dynamics



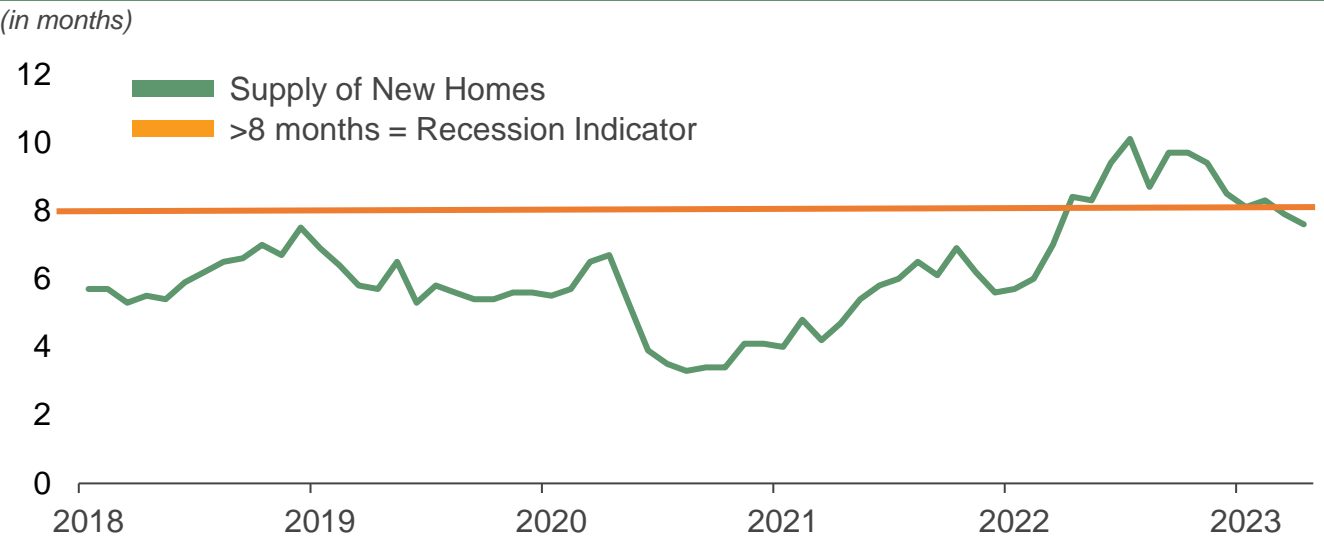
Mortgage Rates



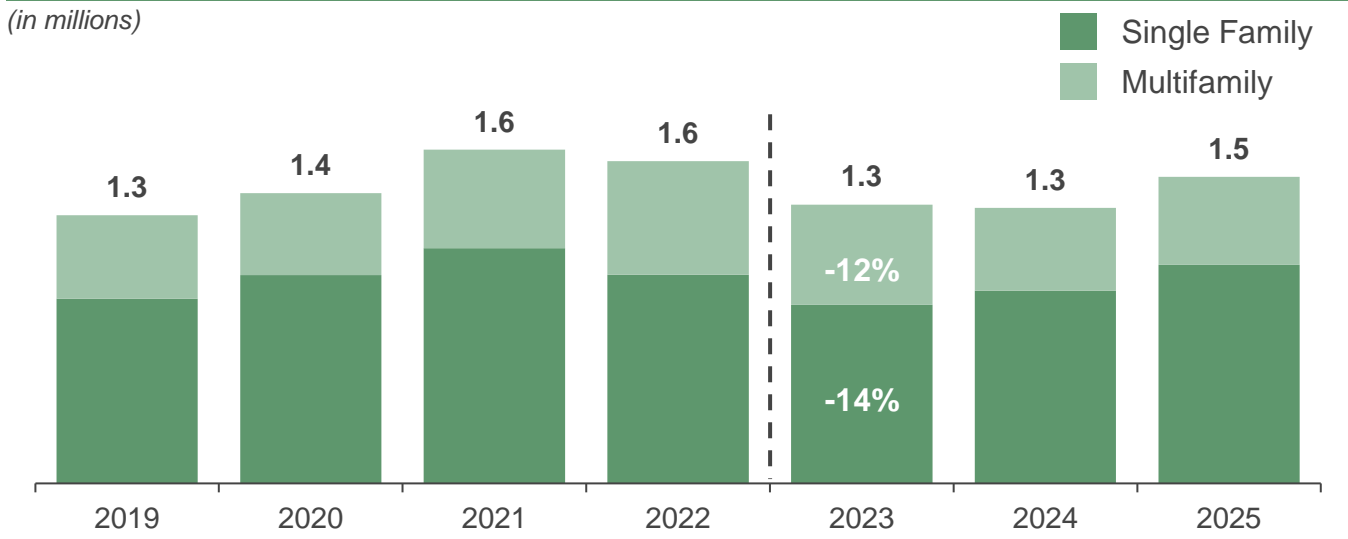
New Home Sales



Supply of New Homes

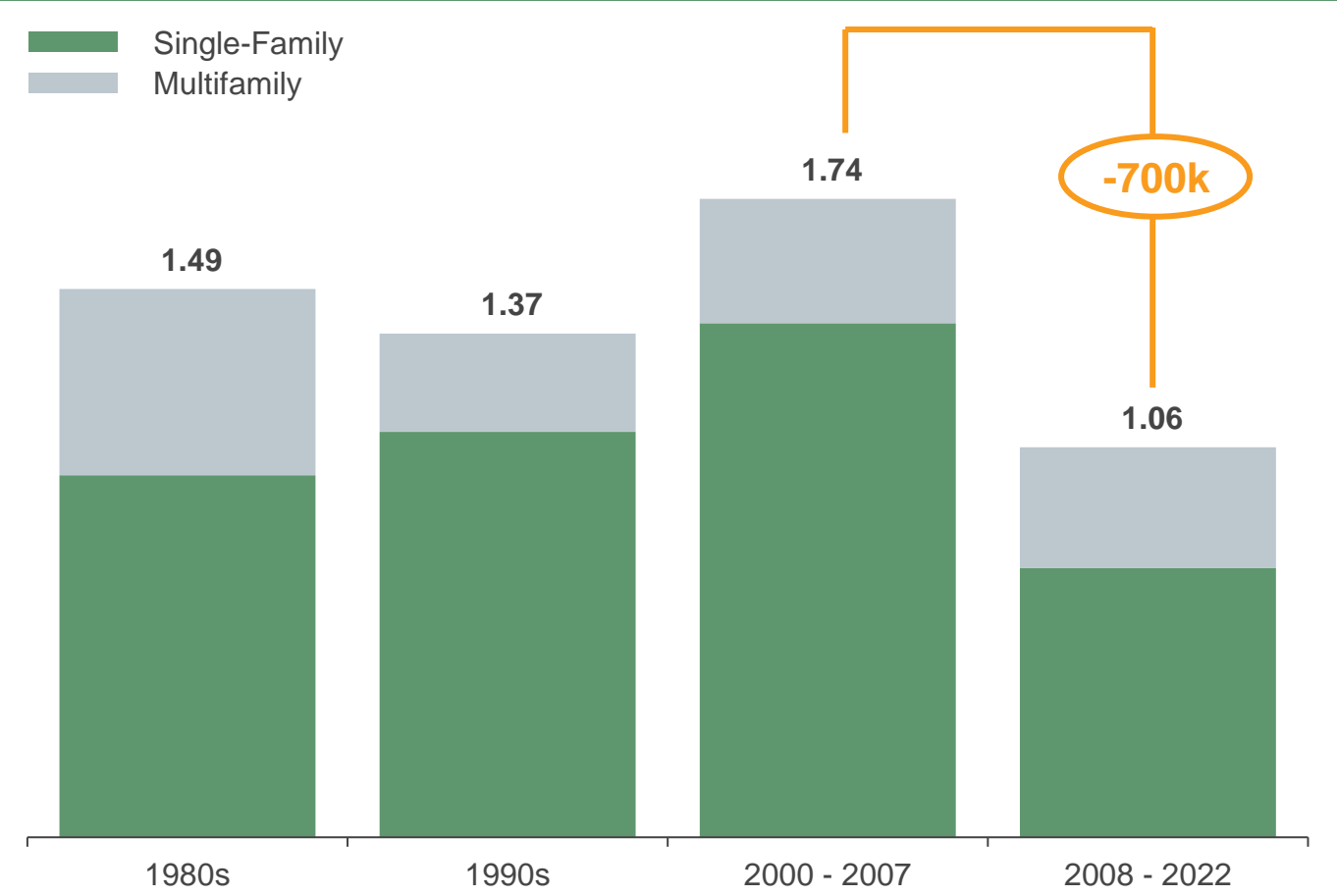


Housing Starts

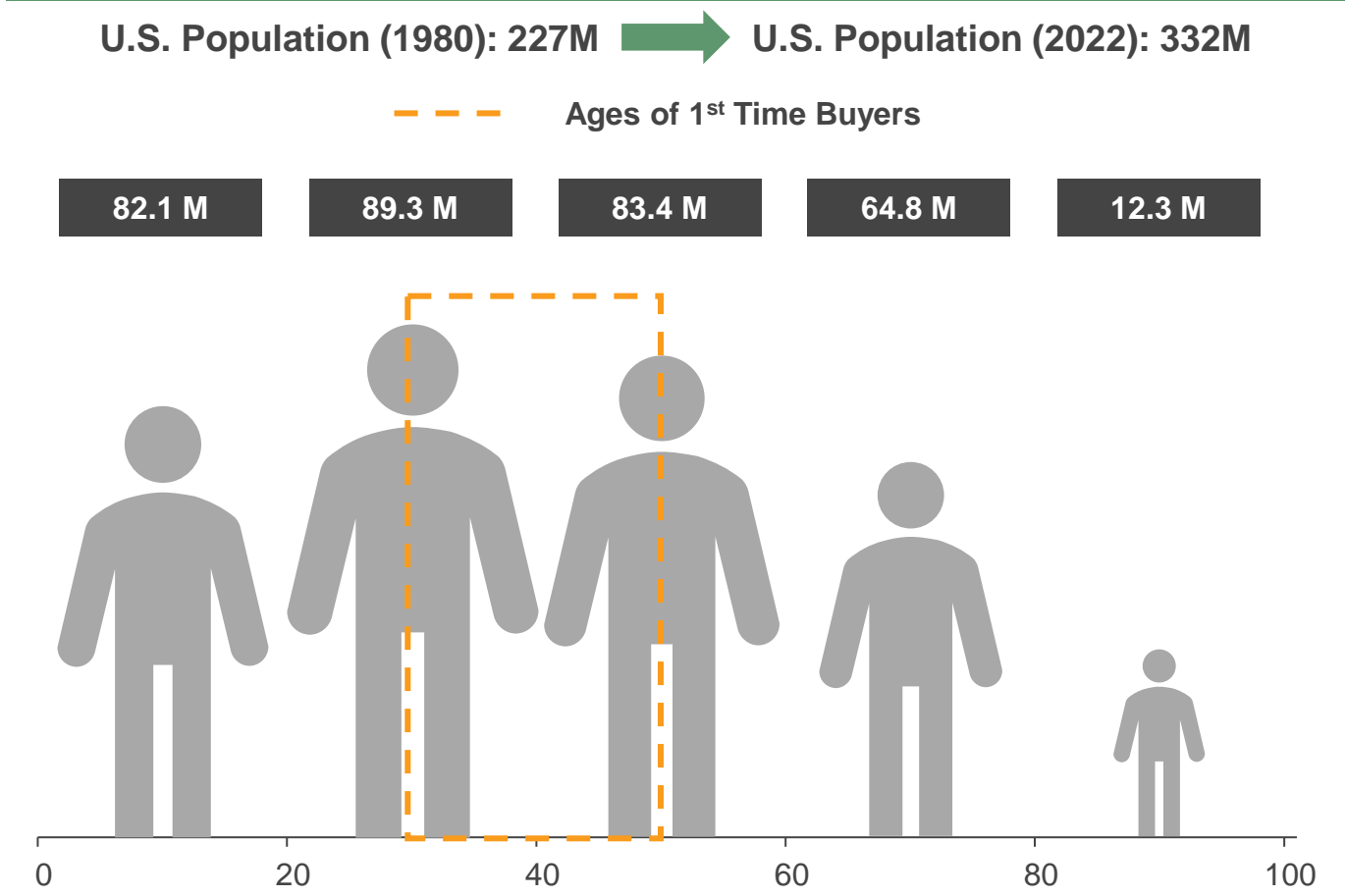




Housing Shortage – Avg. Annual Starts (in millions)



Increasing Generational Housing Demand



Continued demand for new housing brought on by:

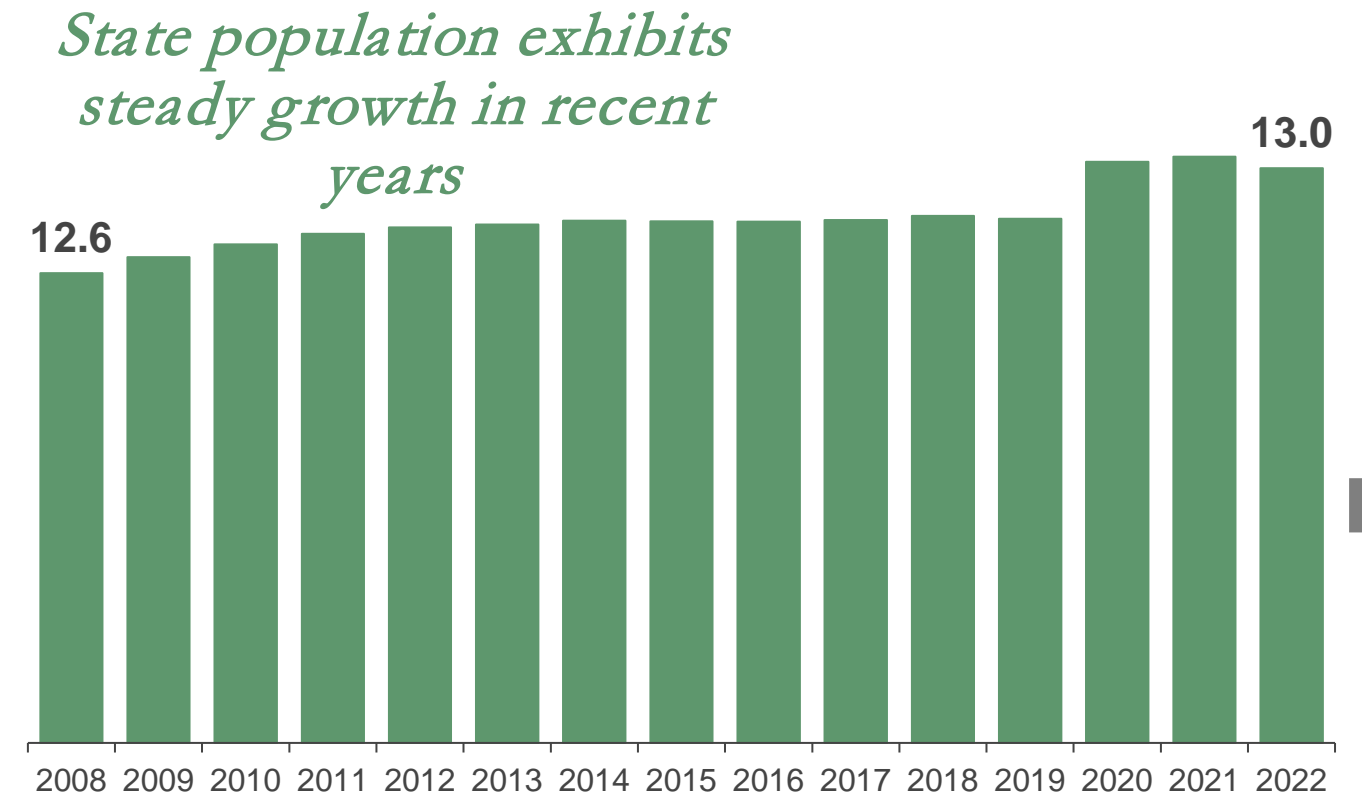
- 1) Existing homeowners unwilling to give up ~2% mortgage rates in current 6% to 7% environment
- 2) Decade+ period of declining housing starts
- 3) Generational demand with growing population of prime homebuying demographic

Residential Construction – Single Family



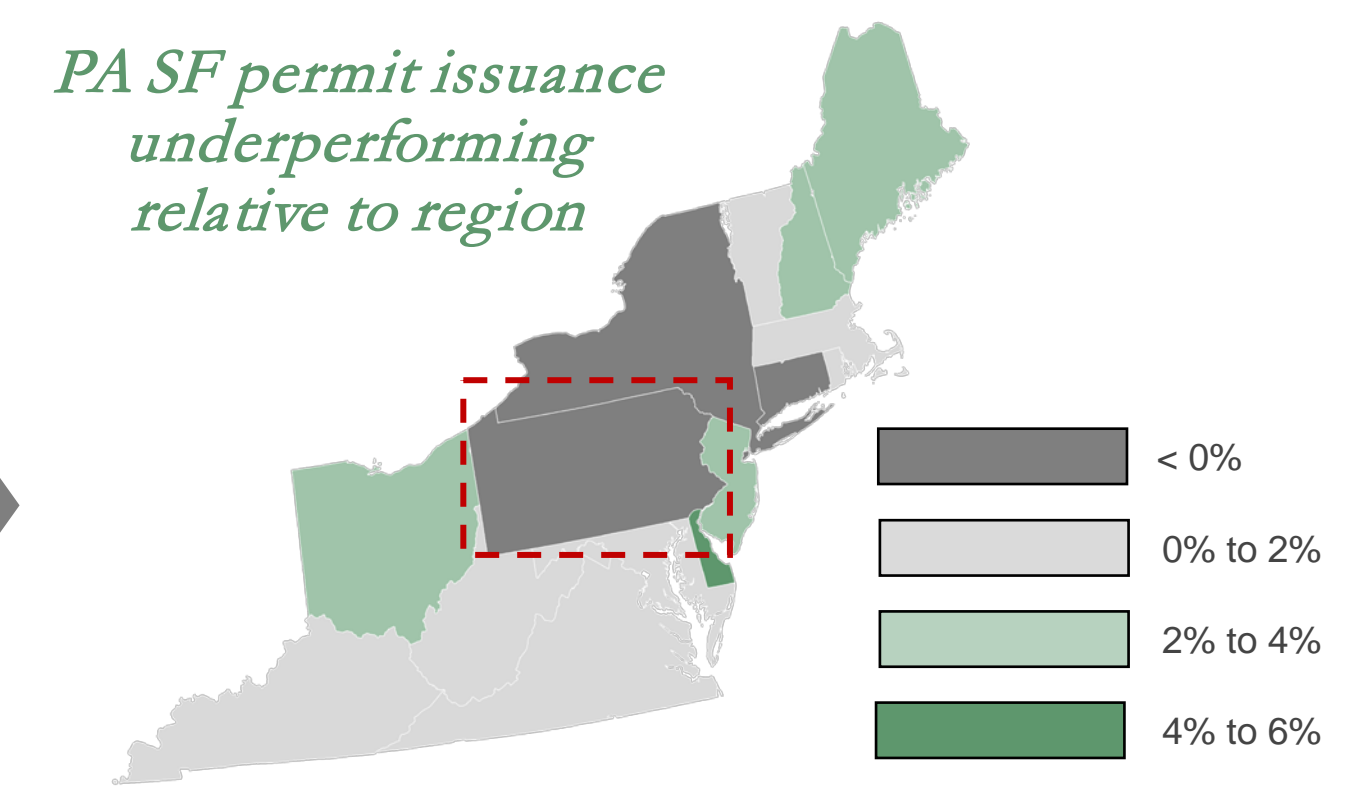
Population Migration

2008-2022 Pennsylvania Population Growth



Residential Construction – Single Family

Northeast Single Family Building Permit Issuance 2008-2022 CAGR



PA SF building permits outperform U.S. YoY through Apr '23

- Pennsylvania building permits: -25%
- U.S. building permits: -29%

PA SF starts show more resilience than the broader U.S. housing market

- Pennsylvania housing start projections 2023 & 2024: -10% and 14%
- U.S. housing start projections 2023 & 2024: -16% and 9%

Nonresidential Construction – A Mixed Bag



Key Areas of Nonresidential Construction Demand

One bad apple can spoil the barrel; one good egg doesn't make a dozen

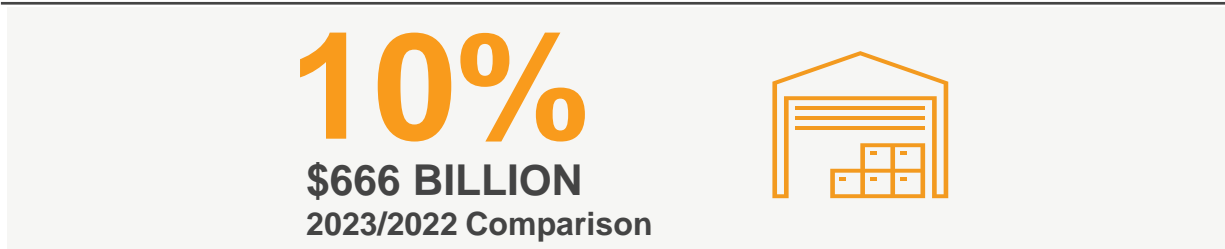
E-Commerce: Warehouse & distribution make up >50% of total Commercial spending

Manufacturing & CHIPS Act: CHIPS Act invests ~\$53B in funding over the next 5 years

Travel & Entertainment: Post-pandemic life shows tailwinds for lodging and amusement & recreation

Commercial and Office: Remain a question mark with work from home culture shifts

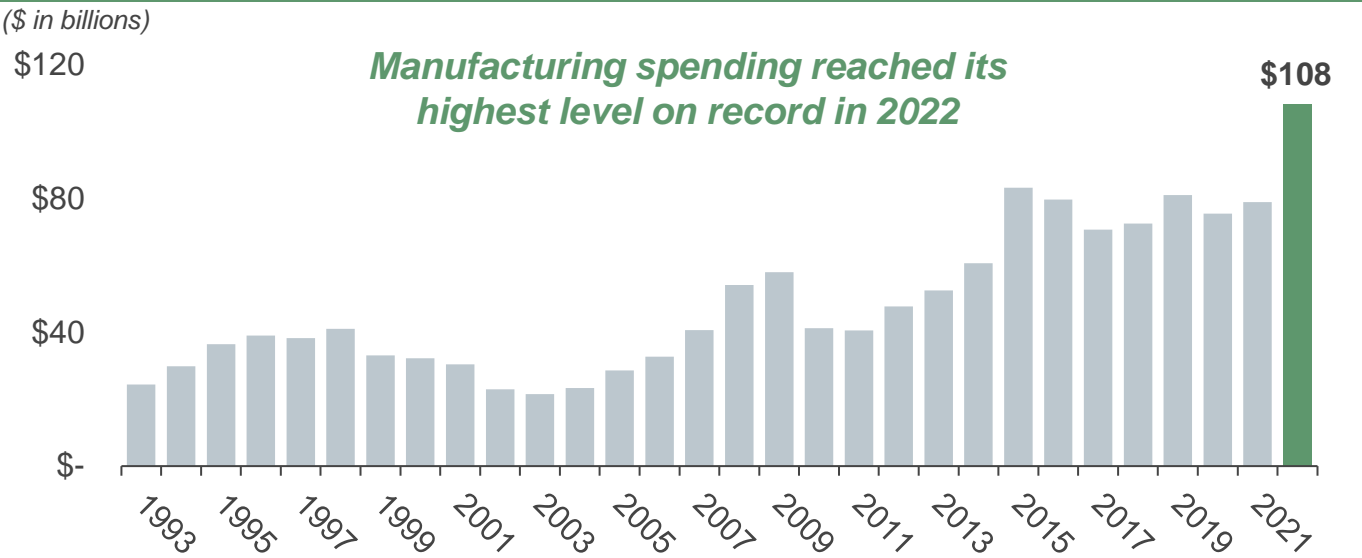
TOTAL NONRESIDENTIAL BUILDING



2021	DWN	(6%)	\$547 B
2022	UP	10%	\$604 B
2023	UP	10%	\$666 B
2024	STA	3%	\$684 B

YoY % Change	2021	2022	2023F	2024F
Manufacturing	5%	37%	27%	9%
Lodging	-36%	2%	16%	2%
Commercial	5%	22%	9%	-8%
Transportation	-7%	0%	8%	13%
Amusement and Recreation	-11%	7%	7%	3%
Health Care	0%	9%	6%	4%
Office	-7%	1%	5%	-3%
Educational	-11%	1%	4%	4%
Communication	3%	-1%	3%	6%
Public Safety	-31%	-8%	1%	8%
Religious	-16%	-1%	0%	-2%
Total Nonresidential Buildings	-6%	10%	10%	3%

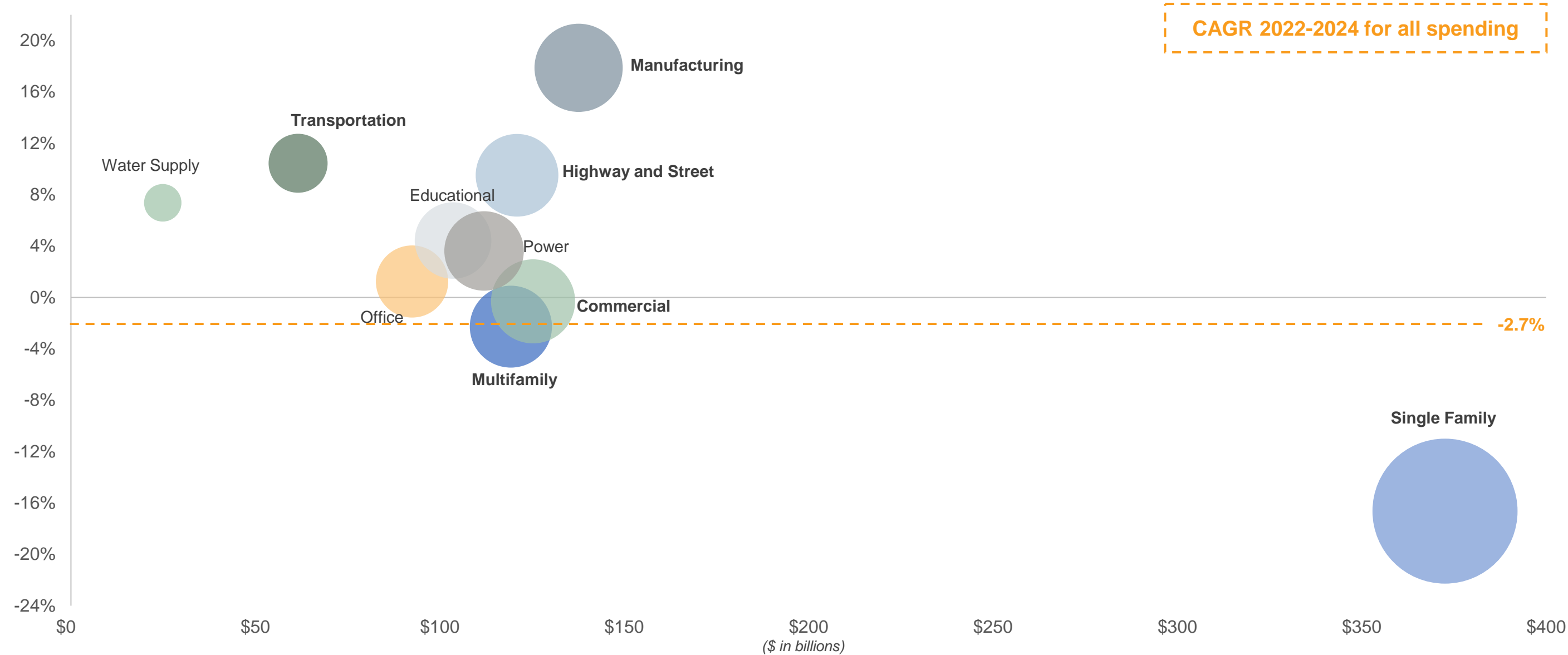
U.S. Manufacturing Construction Spending



Construction-Put-in-Place - Winners and Losers



2023 Construction Put-in-Place & Forecast Growth (2022-2024 CAGR)*



**Q2 2023 Forecast based on Q4 2022 Actuals and Q1 2023 Assumptions; CPiP Segments defined by U.S. Census Bureau; Source: FMI*
BOLD CATEGORIES DENOTE STRONGEST CONSTRUCTION MATERIAL DRIVERS

All Construction is Local

More than 1-in-3 Construction Dollars are Spent in just 12 Markets

35% of U.S. CPiP

1. New York 	2. Los Angeles 	3. Dallas 	4. Houston 	5. Phoenix 	6. Atlanta 
7. Seattle 	8. Washington, DC 	9. San Francisco 	10. Miami 	11. Chicago 	12. Riverside 

50% of U.S. CPiP

- | | | |
|------------------|-----------------|---------------|
| 13. Denver | 17. Orlando | 21. San Diego |
| 14. Austin | 18. Tampa | 22. Portland |
| 15. Boston | 19. Minneapolis | |
| 16. Philadelphia | 20. Charlotte | |

Headwinds



Capital
Advisors



Inflation



Potential Recession

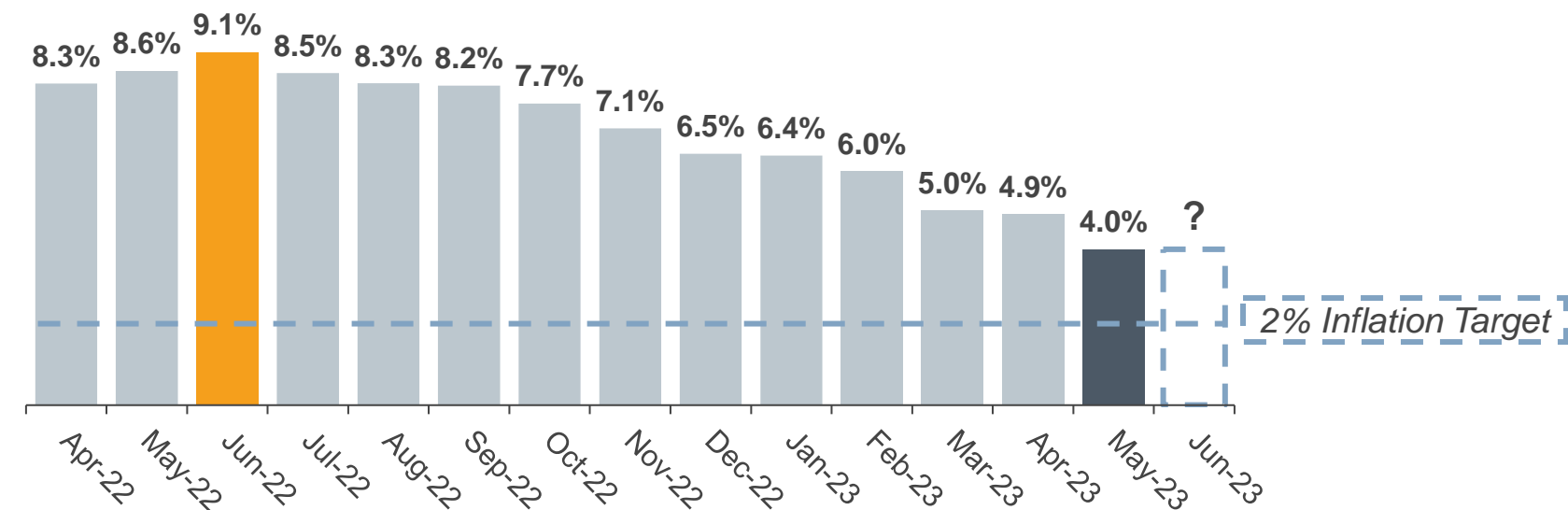


Labor

Inflation – What the Fed is Watching

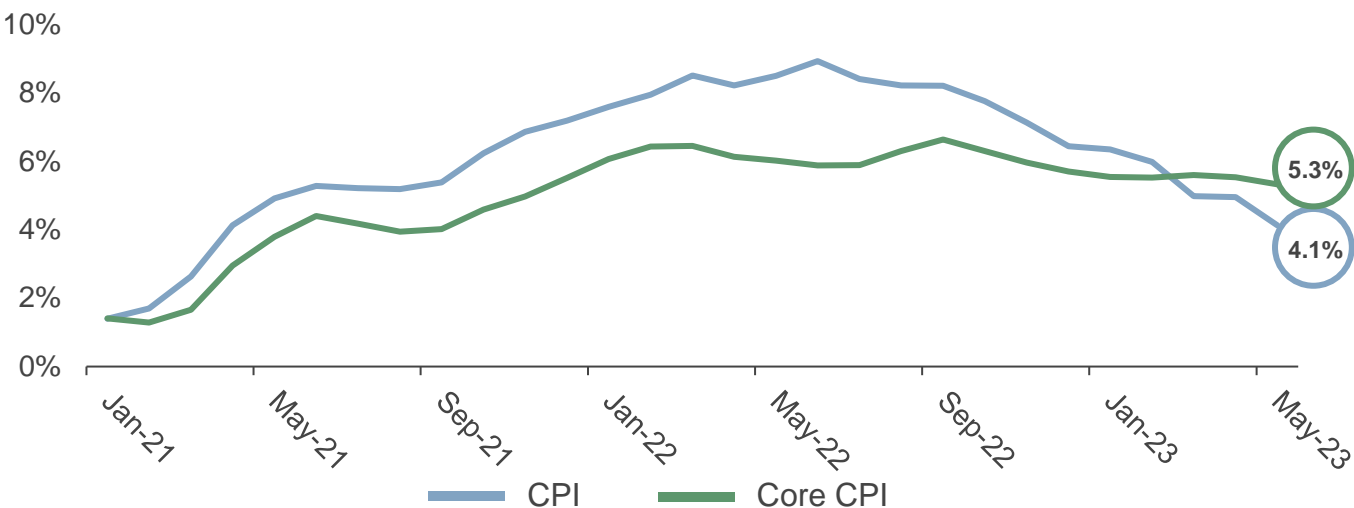


Headline CPI

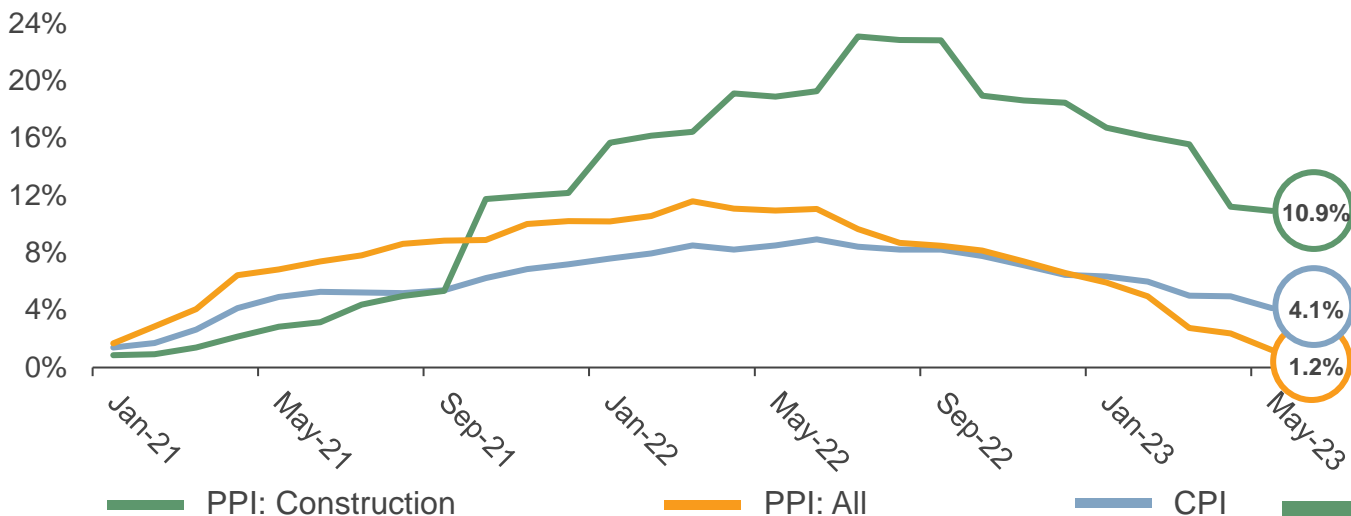


- CPI has declined 11 consecutive months
- Stubborn “Core” figures remain elevated relative to headline measurements
- Construction PPI is higher than broader inflation measurements

Inflation Metrics



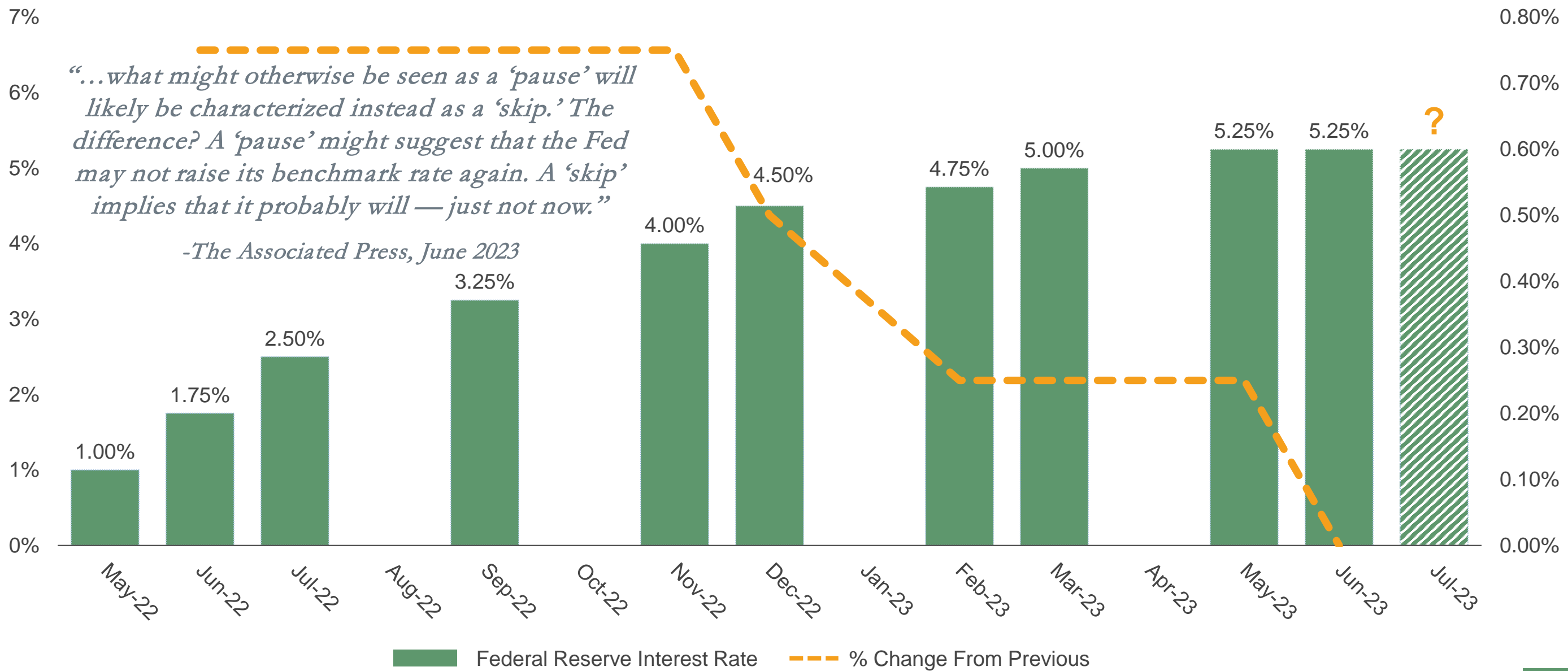
Producer Price Index – Construction vs All



Federal Reserve Easing Rate Hikes



Federal Reserve Interest Rate, May 2022 – June 2023

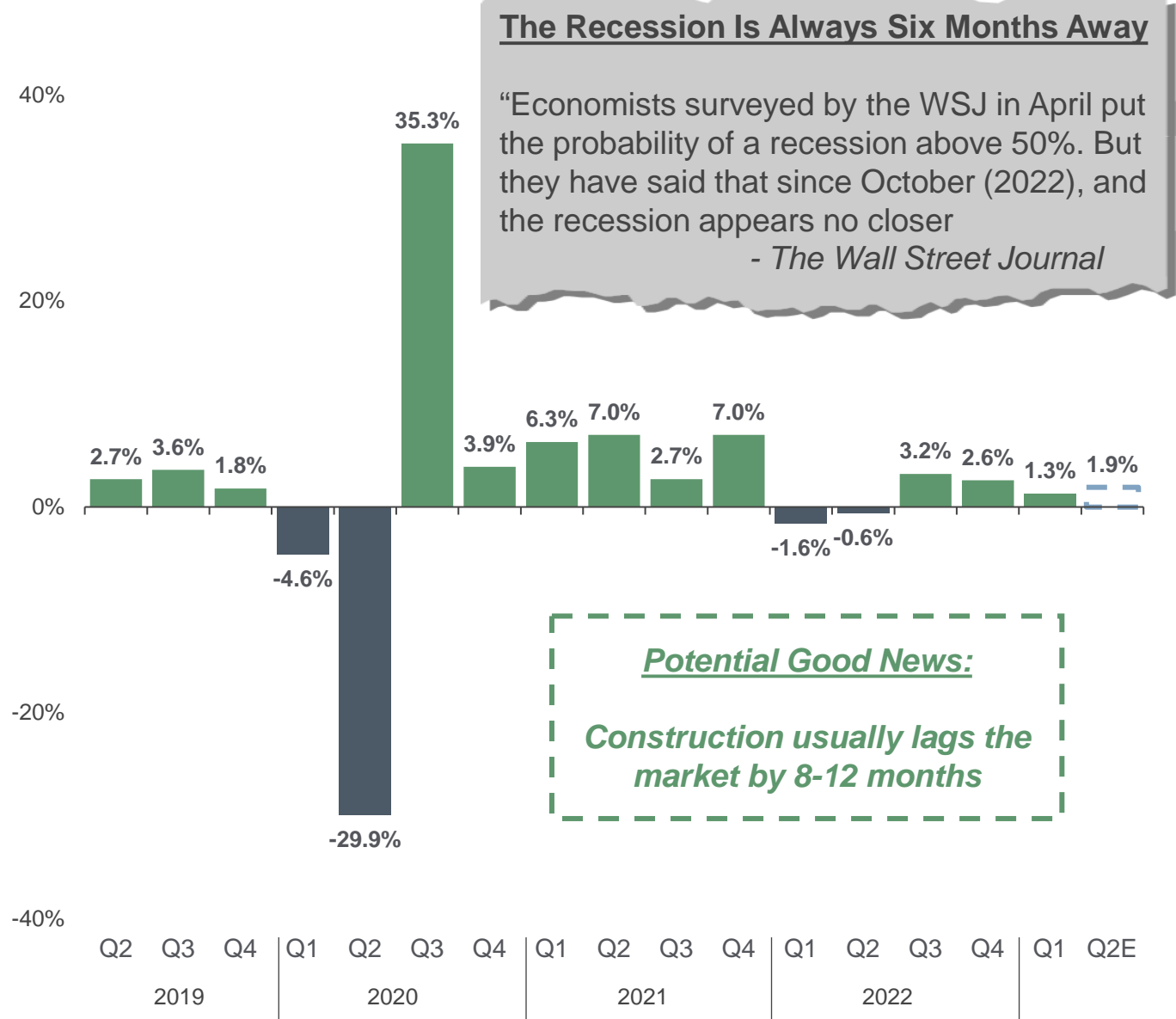


Potential Recession



Real GDP Change

(Annualized, seasonally adjusted)

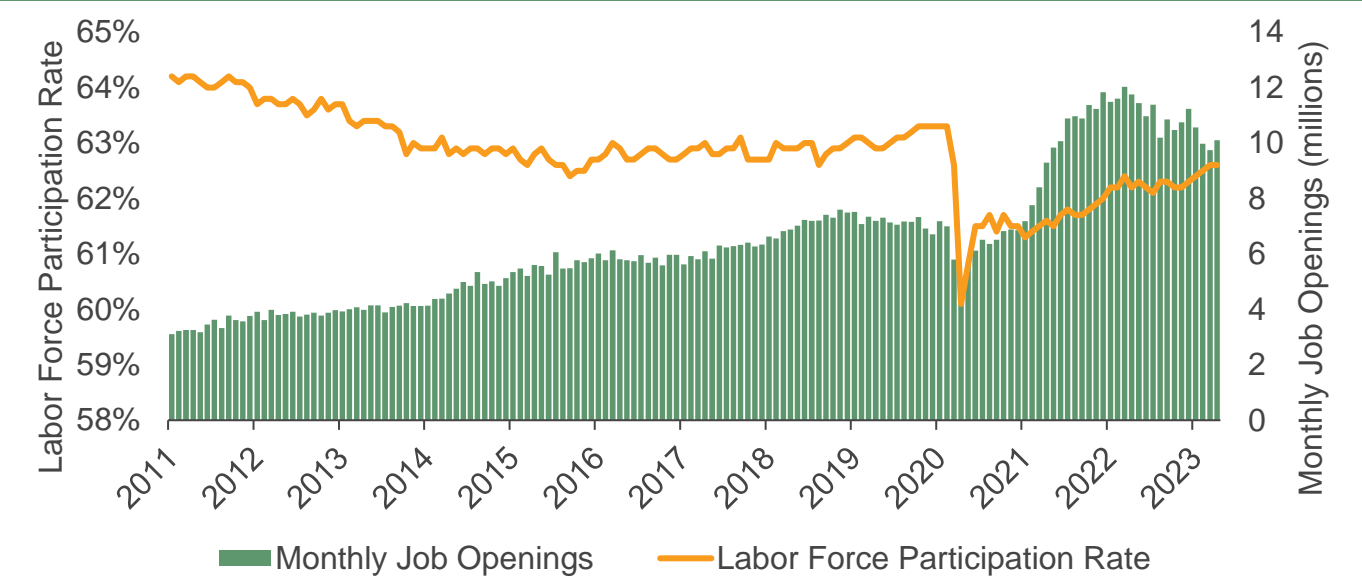


Predictive Indicators	Prediction Strength Historically	Risk Assessment
Yield Curve Inversion	100%	High
New Home Sales	86%	High
Money Supply	75%	High
U.S. Trade Balance (BOP % Change)	57%	High
MBS Held by Banks	50%	High
Months Supply of New Homes	50%	High
Unemployment Rate	71%	Moderate
Lumber Sales	67%	Moderate
Stock Market Performance	50%	Moderate
Copper Price	50%	Moderate

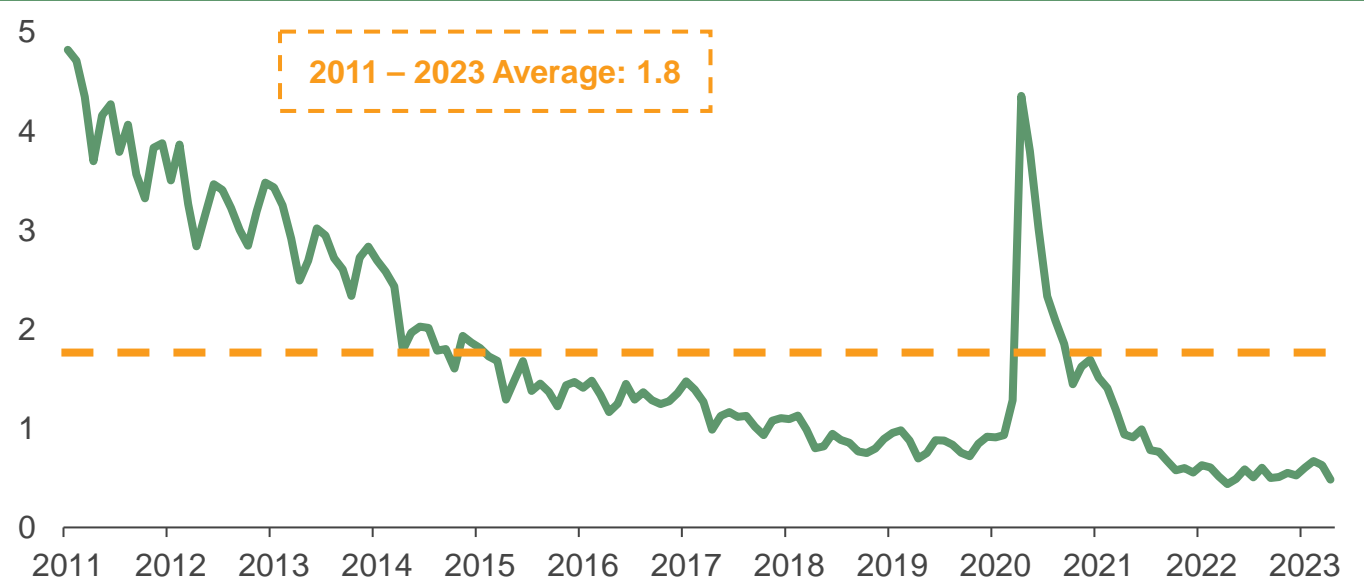
Source: U.S. Bureau of Economic Analysis, Federal Reserve Bank of Atlanta, FMI Research



Labor Force Participation Rate v Monthly Job Openings



Unemployed Persons to Job Openings Ratio



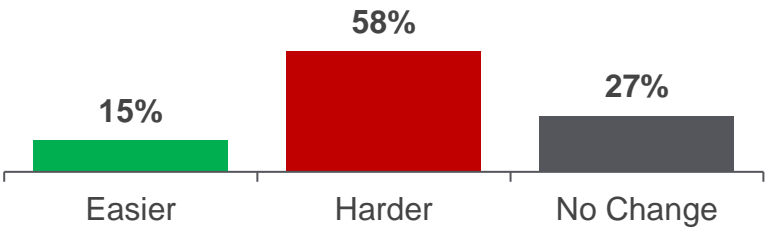
Labor force participation has not fully recovered to pre-pandemic levels while job openings remain high

Dwindling Construction Workforce



41% of the current construction workforce **will be retired by the year 2031**

AGC Survey – Hiring Will Become:



Recruiting the next generation of talent will be key in mitigating the construction labor shortage



**Capital
Advisors**

**Industry Sentiment &
Performance**

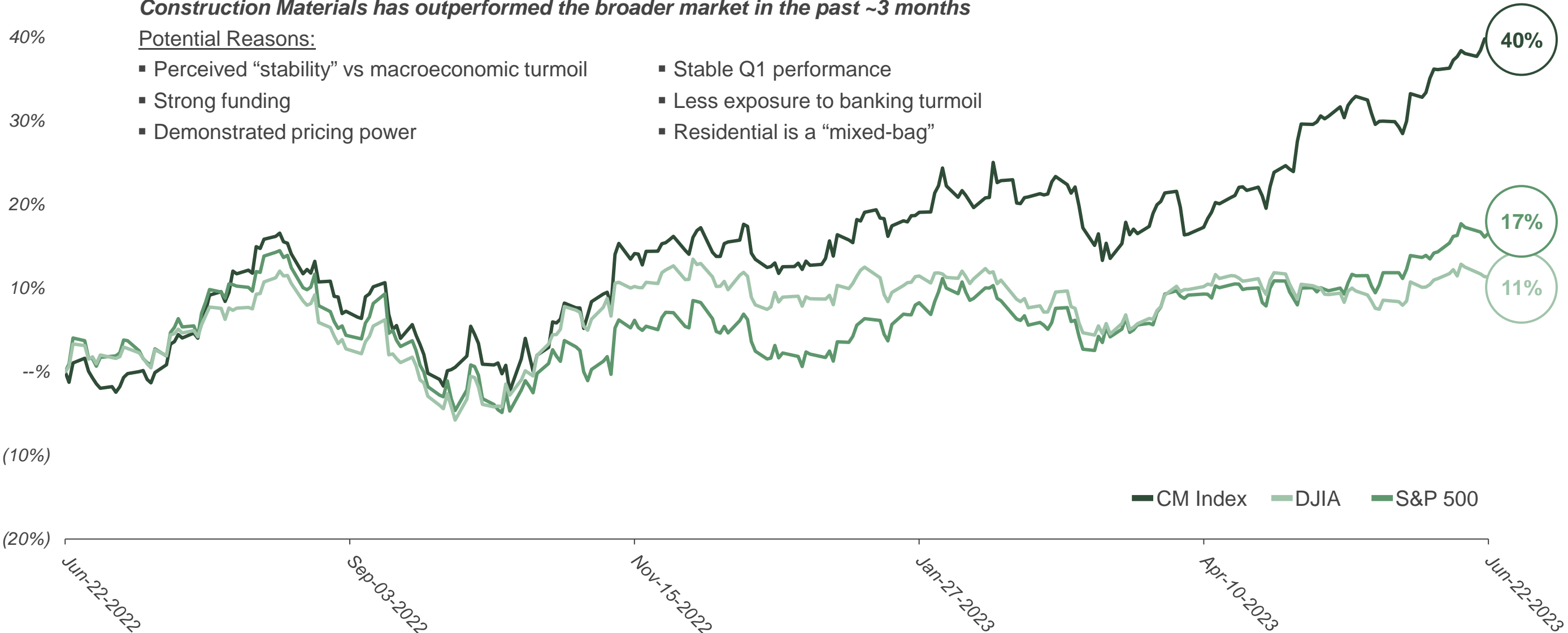
Public CM Company Performance

CMI v Major Indexes (June 2022 – June 2023)

Construction Materials has outperformed the broader market in the past ~3 months

Potential Reasons:

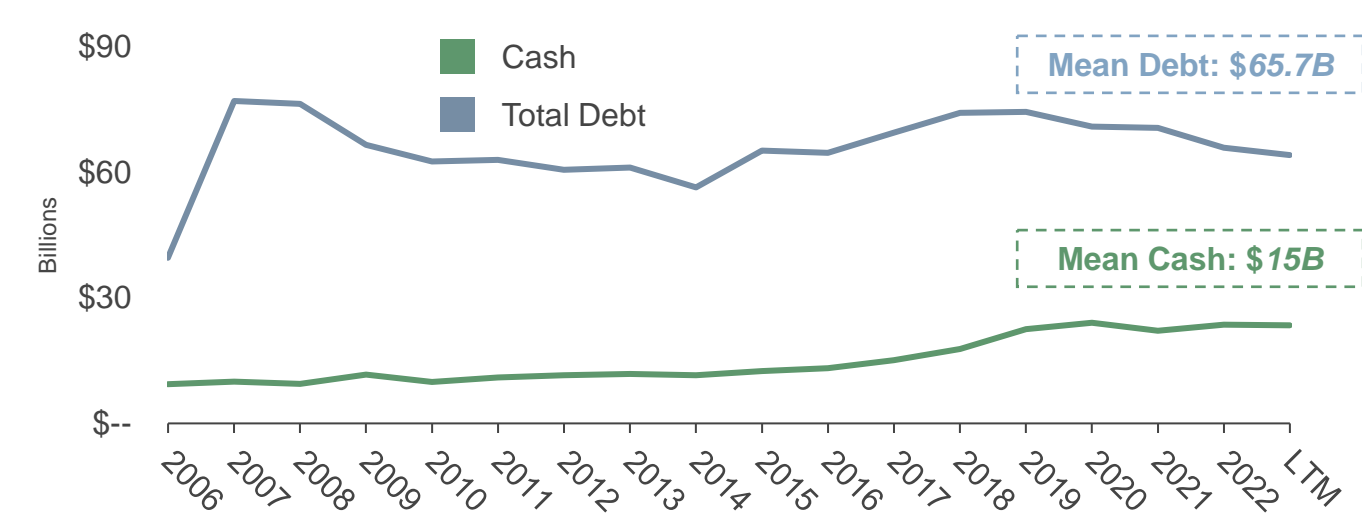
- Perceived “stability” vs macroeconomic turmoil
- Strong funding
- Demonstrated pricing power
- Stable Q1 performance
- Less exposure to banking turmoil
- Residential is a “mixed-bag”



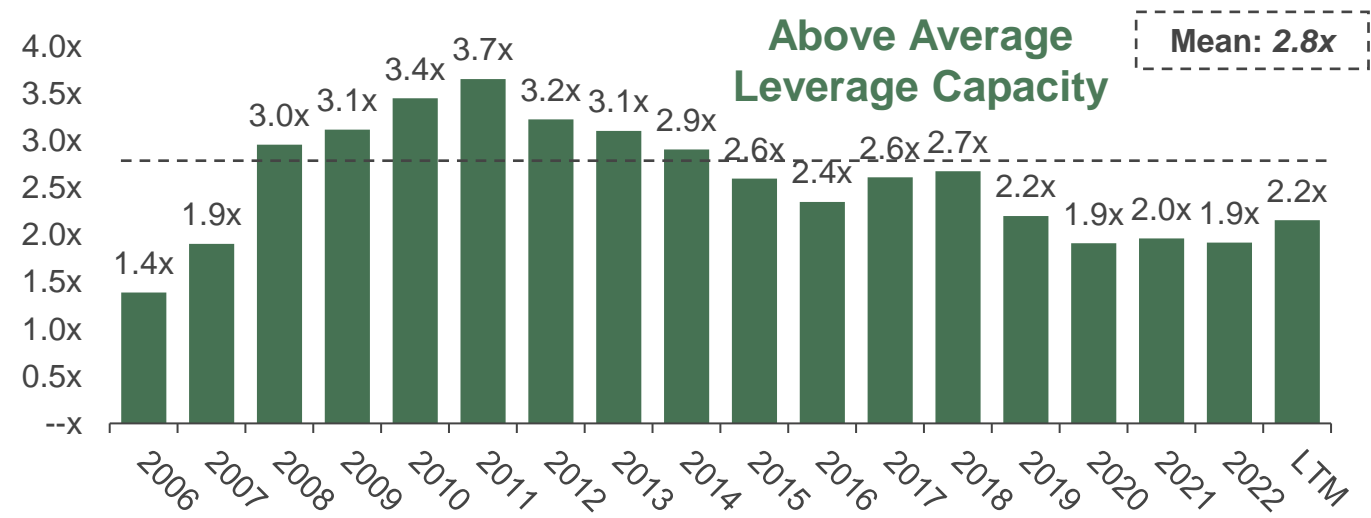
Source: S&P CapIQ as of 6/22/2023
FMI's CM Index includes: Arcosa, Inc., Buzzi Unicem S.p.A., Cementos Argos S.A., CEMEX, S.A.B. de C.V., Colas SA, Construction Partners, Inc., CRH plc, Eagle Materials, Inc., Granite Construction Incorporated, Grupo Cementos de Chihuahua, S.A.B. de C.V., HeidelbergCement AG, Holcim Ltd, Knife River Corporation, Martin Marietta Materials, Inc., Summit Materials, Inc., The Monarch Cement Company, Titan Cement International S.A., Vulcan Materials Company

Public CM Companies – Checking the “Vital Signs” (Positioned for Growth)

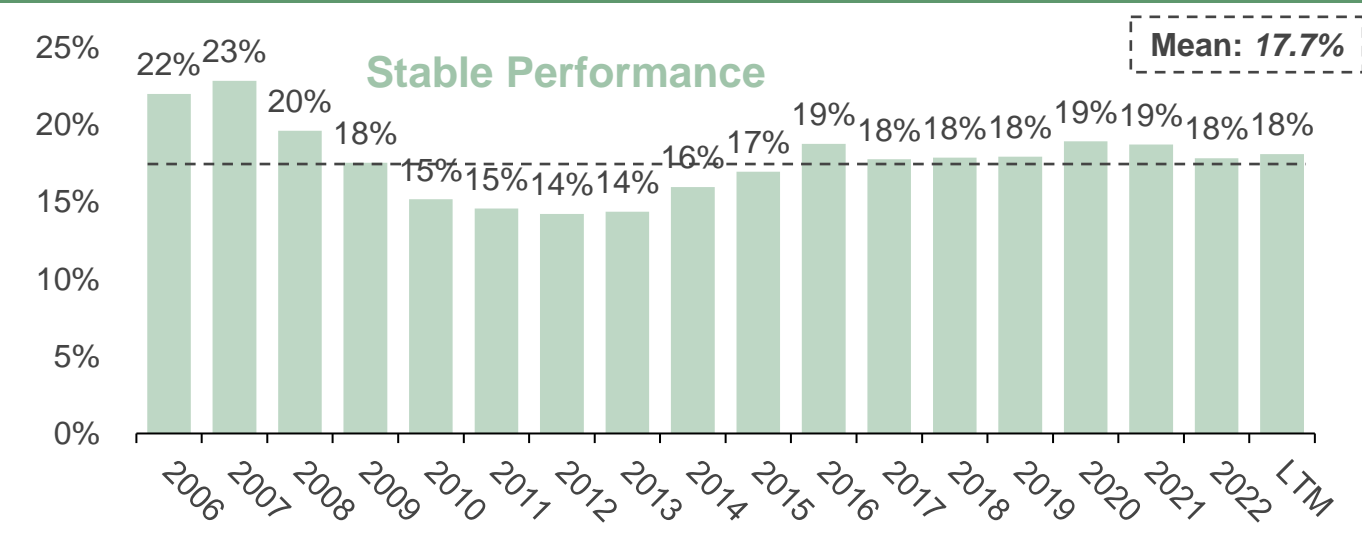
CMI Cash vs Total Debt



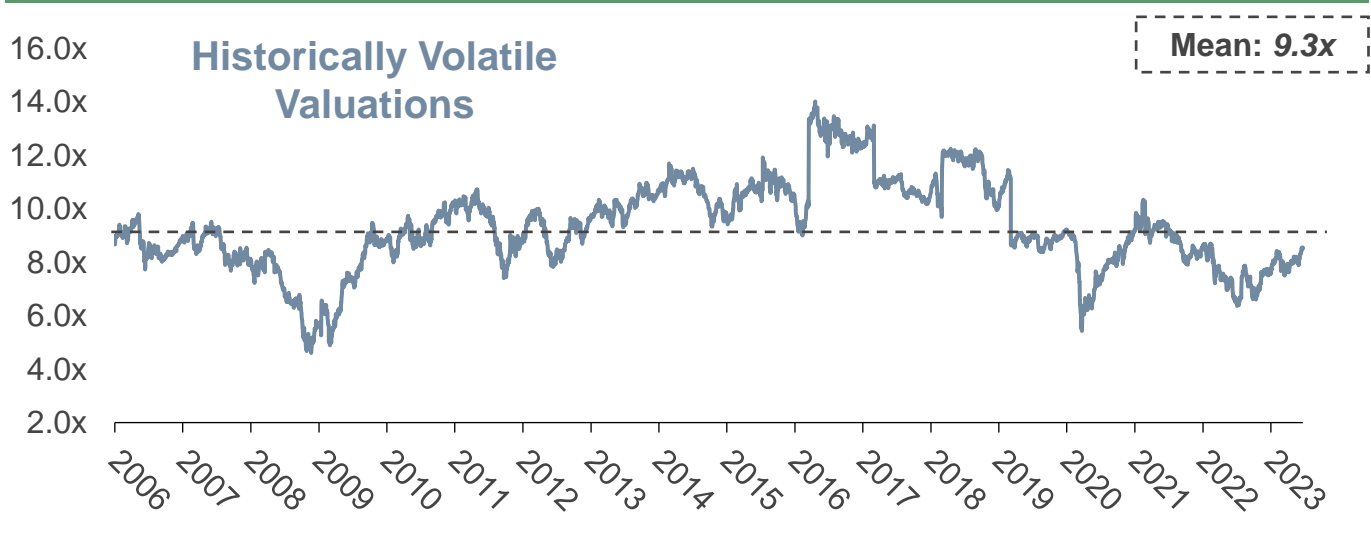
CMI Median Net Debt/EBITDA



CMI Average EBITDA Margin

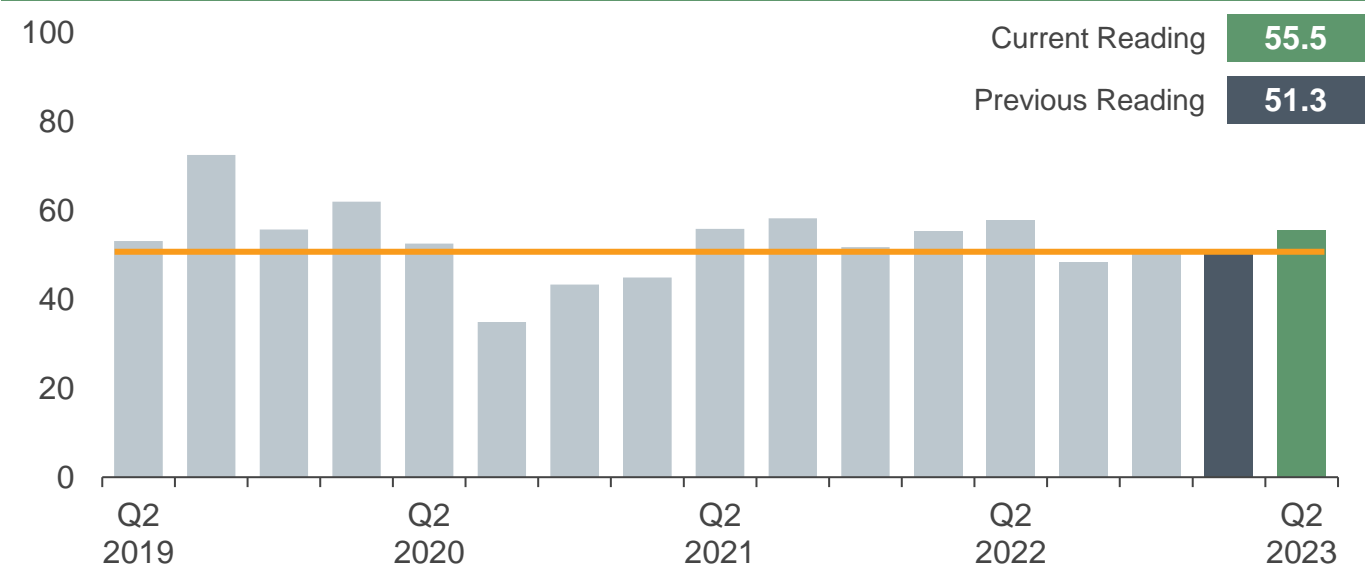


CMI TEV/EBITDA

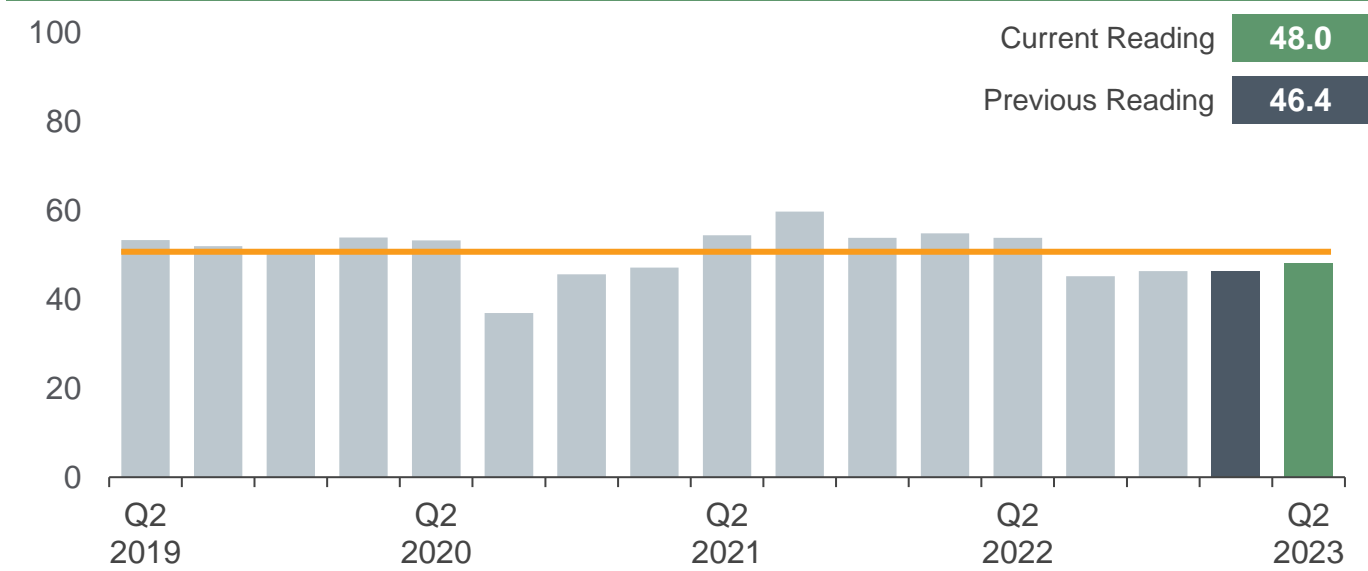


How Confident is the Market?

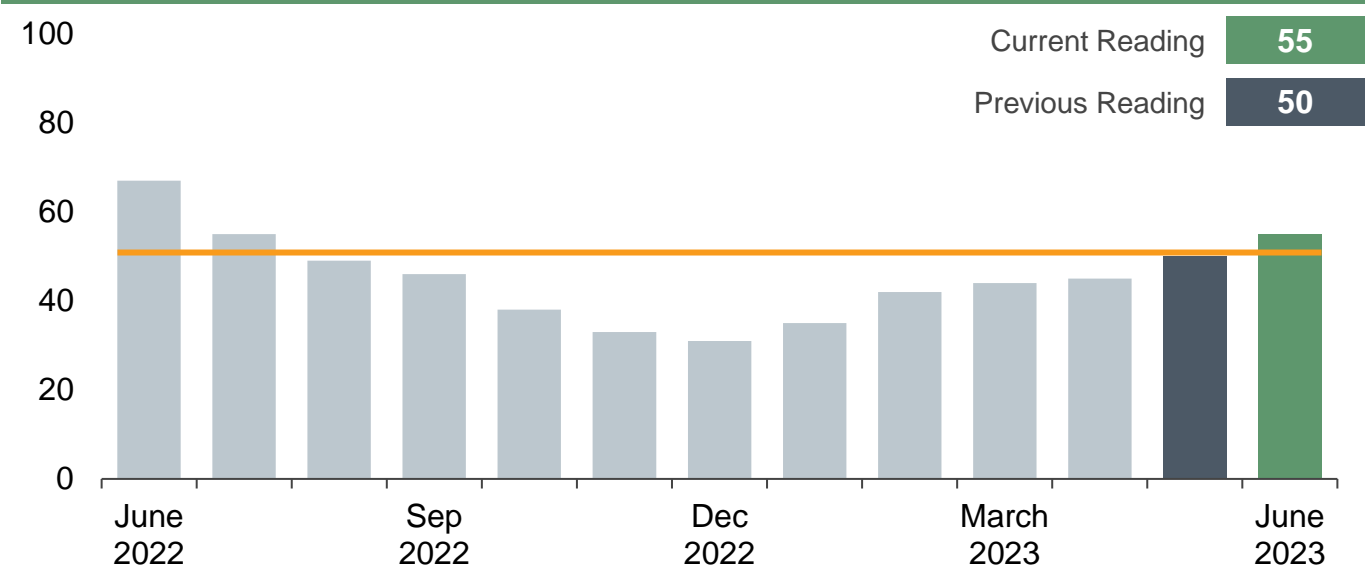
1) Heavy Civil Construction Index (HCCI)



2) Nonresidential Construction Index (NRCI)



3) NAHB/WF Housing Market Index (HMI)

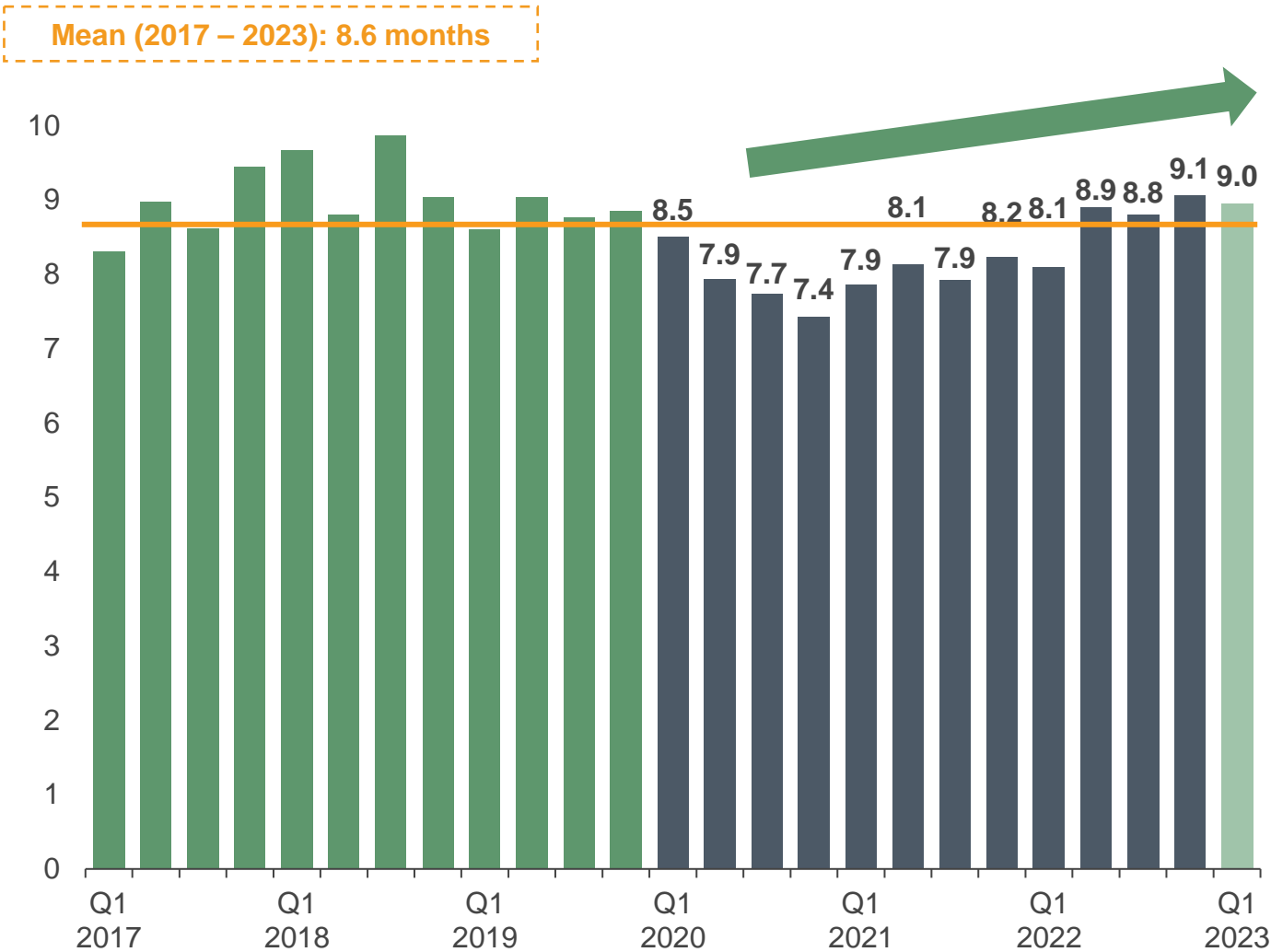


- FMI's NRCI and HCCI surveys ask one question: "What is the outlook for your business next quarter"
- Readings above 50 on all the indexes indicate expansion
- **Homebuilders & industry experts are hesitant but not overly pessimistic**

Backlogs and Employment

As backlogs continue to build, CM firms will be looking to add more employees to perform the work

U.S. Construction Backlog by Quarter (in months)



AGC Survey for Hiring Expectations over NTM



Trends & Takeaways



**Capital
Advisors**



ESG



Mergers & Acquisitions

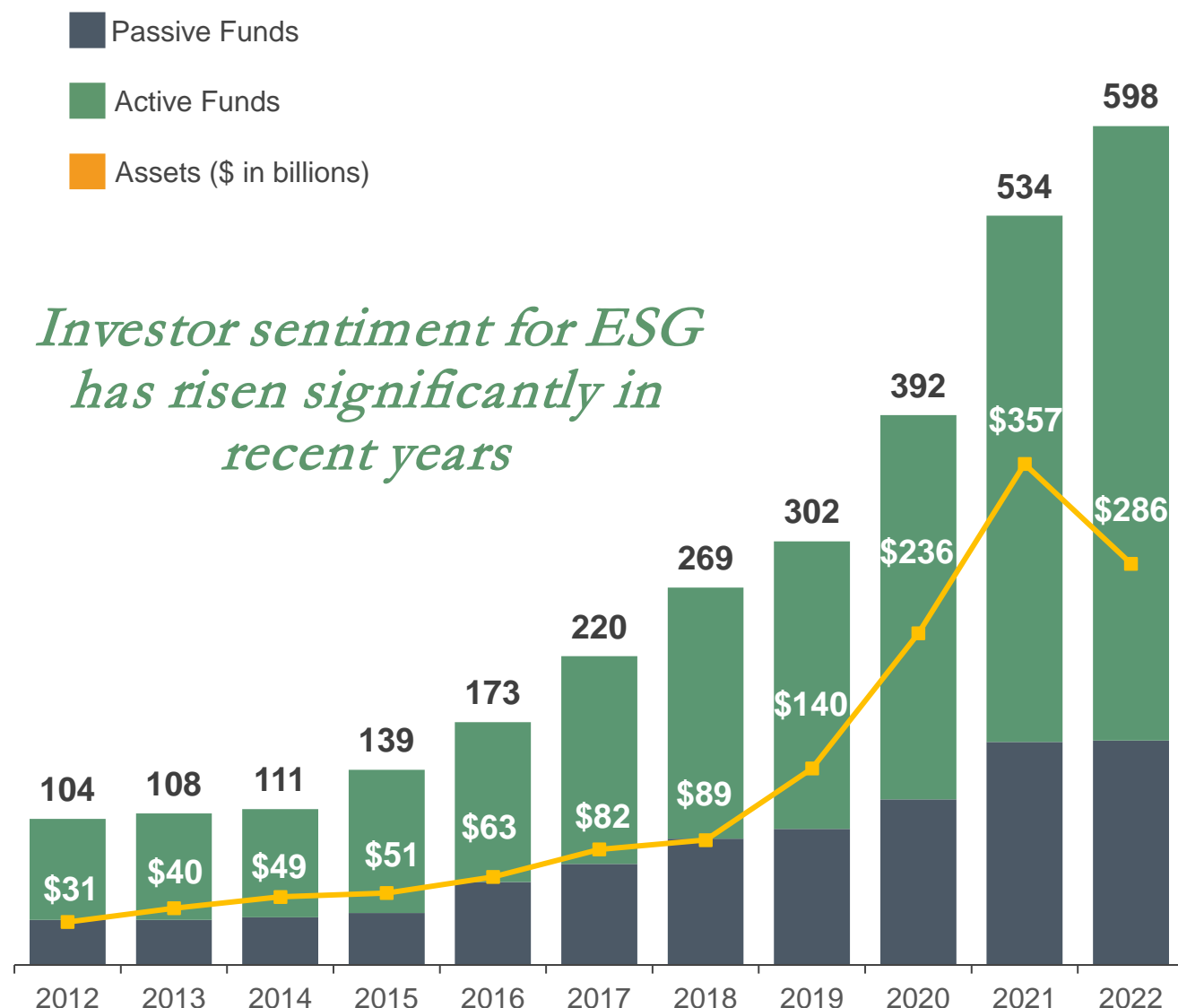


Industry Outlook Conclusion

Trends – Environmental, Social, and Governance (ESG): CM Specific



Growing Number of U.S. Sustainable Funds



CM-Specific Initiatives

1 Environmental



\$541M

Committed in
“Green CapEx”

2 Social



Vulcan Materials Company Foundation

- Uses company funds to match employee contributions to charitable organizations



\$34M invested over past 5 years in local communities

3 Governance – Board Diversity & Independence



Independent Directors

91%

89%

Diverse Directors

45%
Females & Minorities

56%
Female

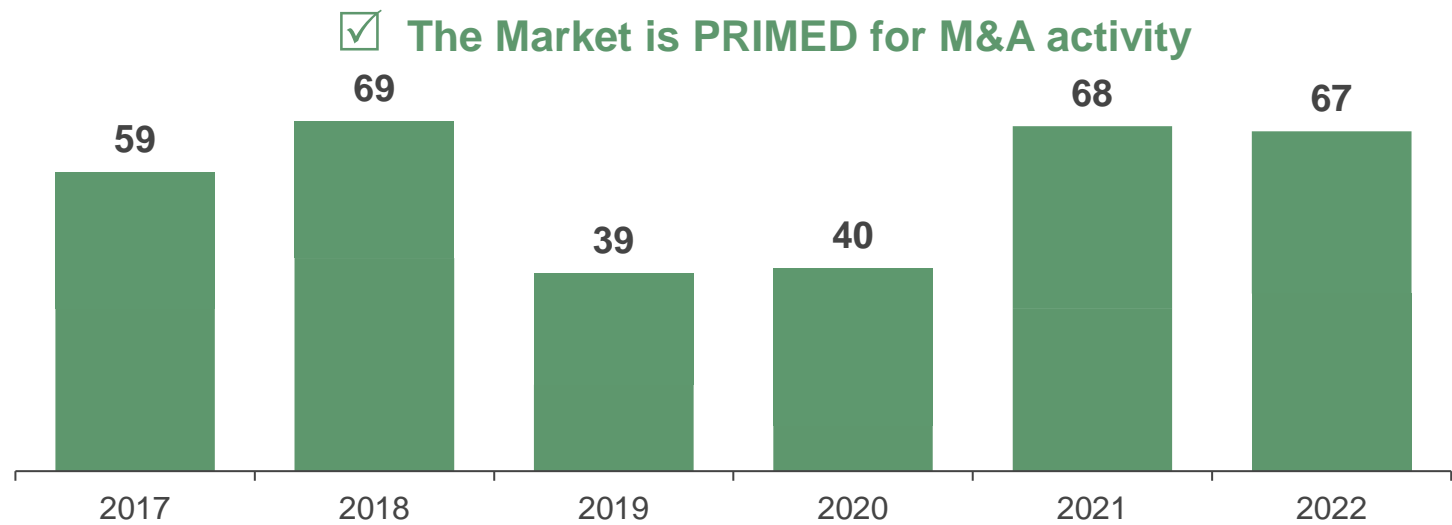


- Community Relations
- Humanitarian Relief
- Education & Employment
- Environment & Conservation
- Other

Mergers and Acquisitions



CM Deals 2017 – 2022



- **2019:** CM players lost substantial market cap in late 2018 leading to uncertainty in 2019
- **H1 2020:** Sector experienced low deal volume due to COVID
- **H2 2020 - 2021:** Deals have increased due to returned optimism
- **2022:** M&A continued at a high level due to IIJA expectations
- **2023:** Flight to safety with bolt-on acquisitions

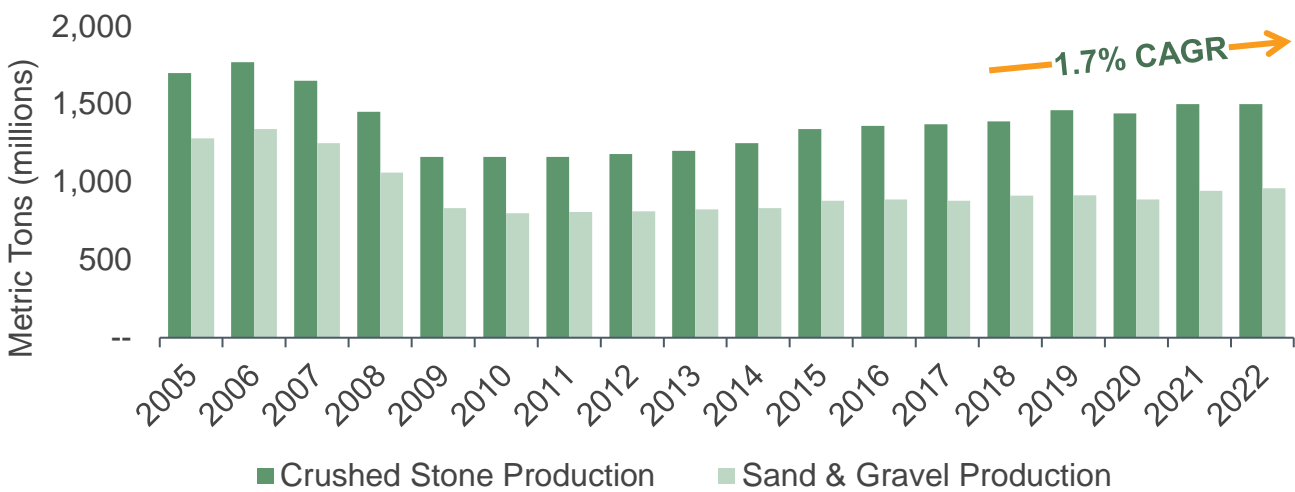
Recent activity from “Majors”

Major Buyers					
Select Acquisitions	 	 	 37 RMC plants in CO, TX, & WY 28 RMC plants in NY, NJ, & PA	 	 CA RMC and Cement Assets

Global uncertainty has forced investors to a “flight to safety” for CM buyers, those targets are bolt-on acquisitions

U.S. Construction Materials – Growth is Steady but Modest

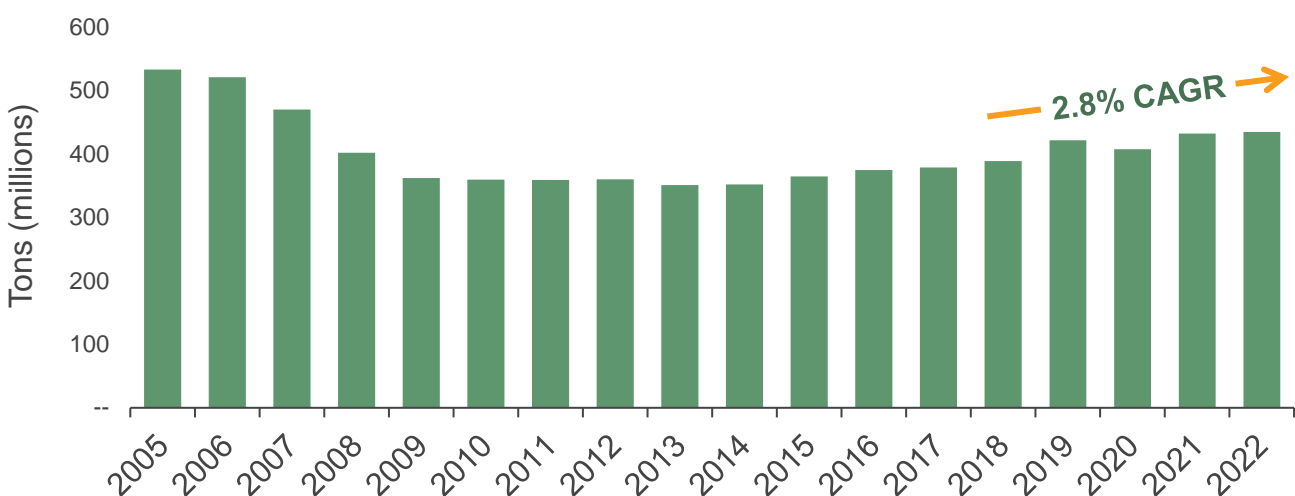
U.S. Construction Aggregates



U.S. Ready-Mixed Concrete Produced



U.S. Asphalt Tons Produced



U.S. Cement Production (Domestic)



Outlook for Construction Materials

Category	Sentiment	Outlook
<u>Demand</u>		Near-term demand remains strong
<u>Pricing</u>		Pricing will continue to improve
<u>Backlogs</u>		Backlogs remain healthy
<u>Public Funding</u>		Committed public funding will sustain the CM Sector
<u>Weather</u>		CM Companies will continue to closely monitor weather patterns in their markets
<u>Residential</u>		Any downturn or recession will depend on strength/weakness of the private sector residential in particular

The Construction Materials industry is well-positioned to weather a potential macroeconomic downturn



Scan for industry
insights, recent
transactions, and an
overview of FMI
Capital Advisors
Construction
Materials

FMI Capital Advisors

223 S. West Street
Suite 1200
Raleigh, NC 27603

George Reddin

Managing Director
919.349.1919
george.reddin@fmicorp.com

Rob Mineo

Director
919.539.6861
rob.mineo@fmicorp.com

Evan Coughlin

Vice President
919.407.0469
evan.coughlin@fmicorp.com

Mark Schachte

Analyst
919.616.4573
mark.schachte@fmicorp.com

Matt Berendsen

Analyst
919.943.9902
matt.berendsen@fmicorp.com