

BUILD WITH STRENGTH

**Opening Comments to the
Maryland Ready Mixed Concrete
Association**

Mike Philipps, President - NRMCA

Agenda

- Market News & Forecasts
- Concrete News
- Challenges to Growth
- Market Share and Build with Strength Program
- NRMCA Programs & Services

2022 Market News & Forecasts

- Concrete Production Nationally in 2022:
 - Total US Concrete Production will exceed 400m cubic yards, up ~4% over prior year (most since 2007)
 - Maryland State Production(2022 through Q3):Volume forecast - over 4.87m cubic yards, flat over PY
- Success despite challenges in 2022
- PLC adoption
- Heavy focus on Sustainability and Resiliency

2023 Market News & Forecasts

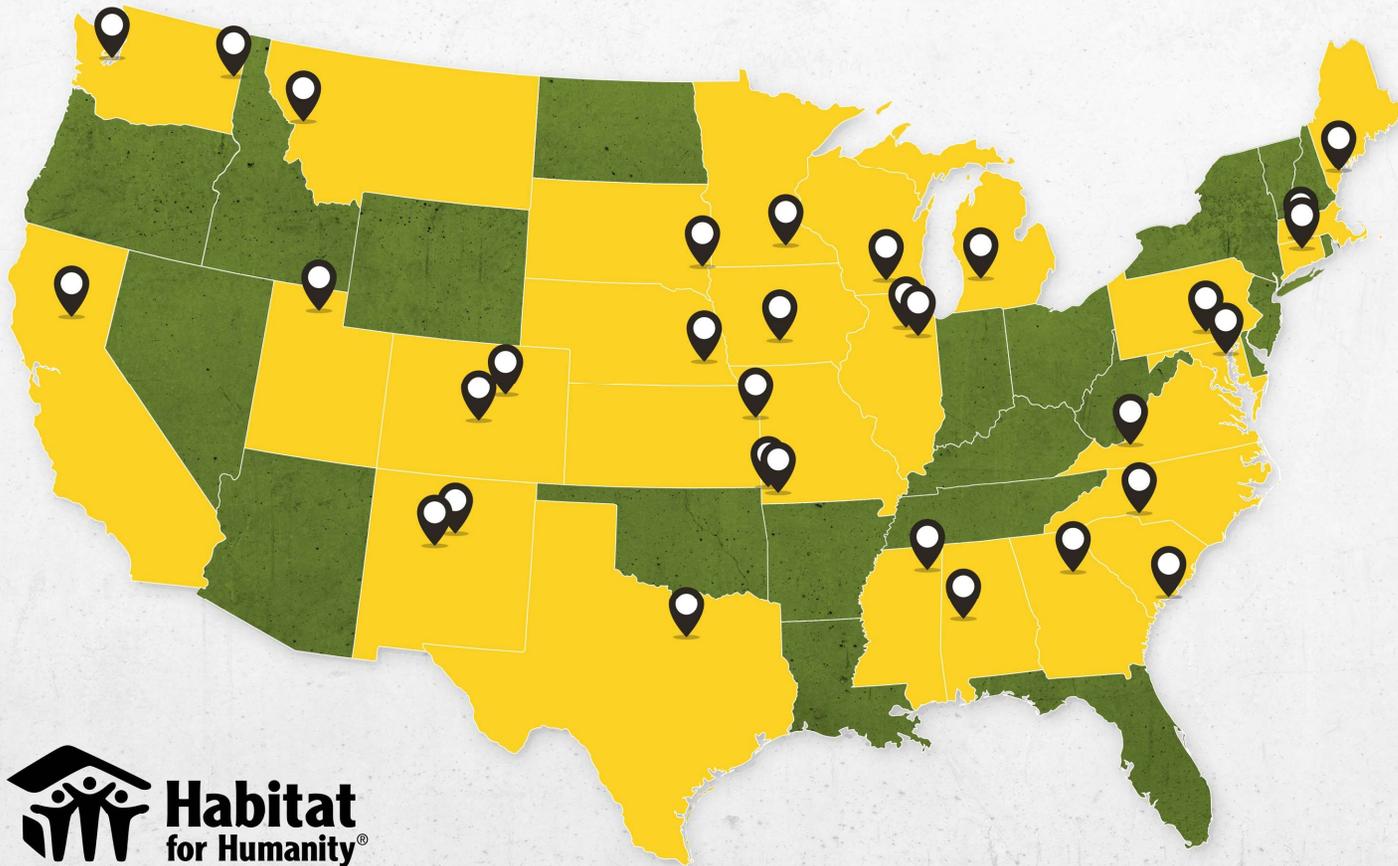
- Robust backlogs strong through Q2
- Will Infrastructure spending minimize impact of downturn in residential? (producer business portfolio)
- Concerns:
 - Inflation / Housing Affordability / Interest Rates / Supply Chain / Shortages
- Forecasts:
 - PCA – down 3.5%
 - FMI – down 2% (strong infrastructure, weak residential)

NRMCA Concrete News

- Support for PCA Sustainability Roadmap and need for faster adoption of EPDs (Environmental Product Declarations)
- Continued focus on communication and two-way support to State Associations, Codes & Standards and A/E communities
- Better defined our National/Maryland Lab competencies and confirmed that the lab is both revenue-generating and a valued resource to our members, our region and our industry
- Refreshing all Education, Training and Certification Programs
- Driver Retention and Recruitment tools – April launch
- Community Outreach – Habitat for Humanity Program

47 PROJECTS IN 27 STATES

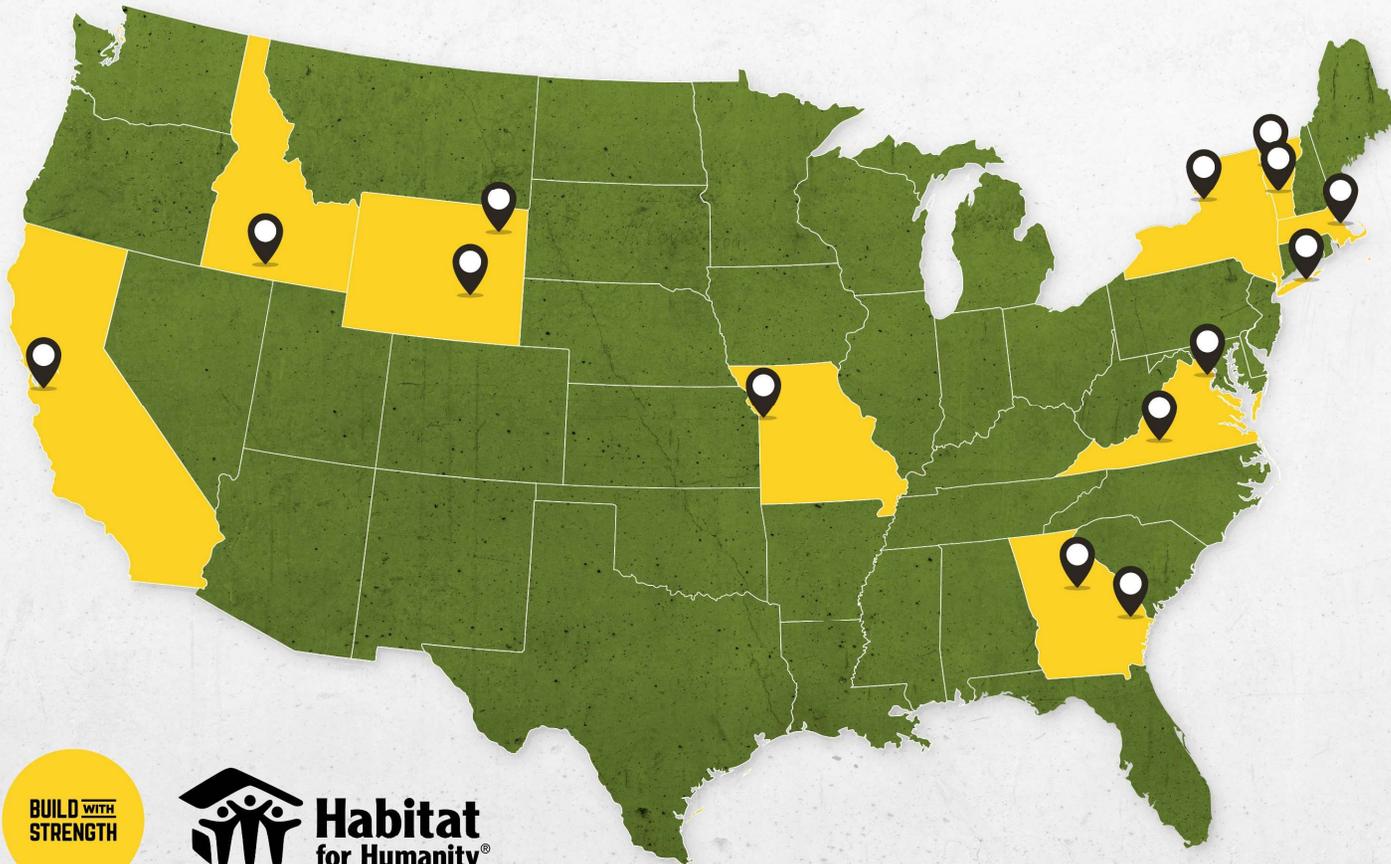
**BUILD WITH
STRENGTH**



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- | | |
|-------------------|------------------|
| Tuscaloosa, AL | Joplin, MO |
| Paradise, CA | Neosho, MO |
| Woodland Park, CO | Missoula, MT |
| Denver, CO | Lincoln, NE |
| Hartford, CT | Albuquerque, NM |
| Athens, GA | Santa Fe, NM |
| Elwood, IL | Charlotte, NC |
| Montgomery, IL | Harrisburg, PA |
| Des Moines, IA | Charleston, SC |
| Kansas City, KS | Sioux Falls, SD |
| Baltimore, MD | Dallas, TX |
| Springfield, MA | Brigham City, UT |
| Portland, ME | Pearisburg, VA |
| Grand Rapids, MI | Gig Harbor, WA |
| Northfield, MN | Spokane, WA |
| Tupelo, MS | Madison, WI |
-



LOOKING AHEAD TO 2023



2023 Builds:

- HFH East Bay Silicon Valley - San Leandro
- HFH of Suffolk - Riverhead on Long Island
- HFH Roanoke Valley - Roanoke City
- HFH Heart of Wyoming - Casper, WY
- HFH Energy Capital - Gillette, WY
- HFH Northern Virginia - Alexandria
- HFH South Shore - Cohasset, MA
- HFH Green Mountain - Williston, VT
- HFH Putnam County - Georgia
- HFH Niagara - New York
- HFH Rutland County - Vermont
- HFH Bulloch County - Statesboro, GA
- HFH Magic Valley - Twin Falls, Idaho
- HFH of Kansas City - Missouri

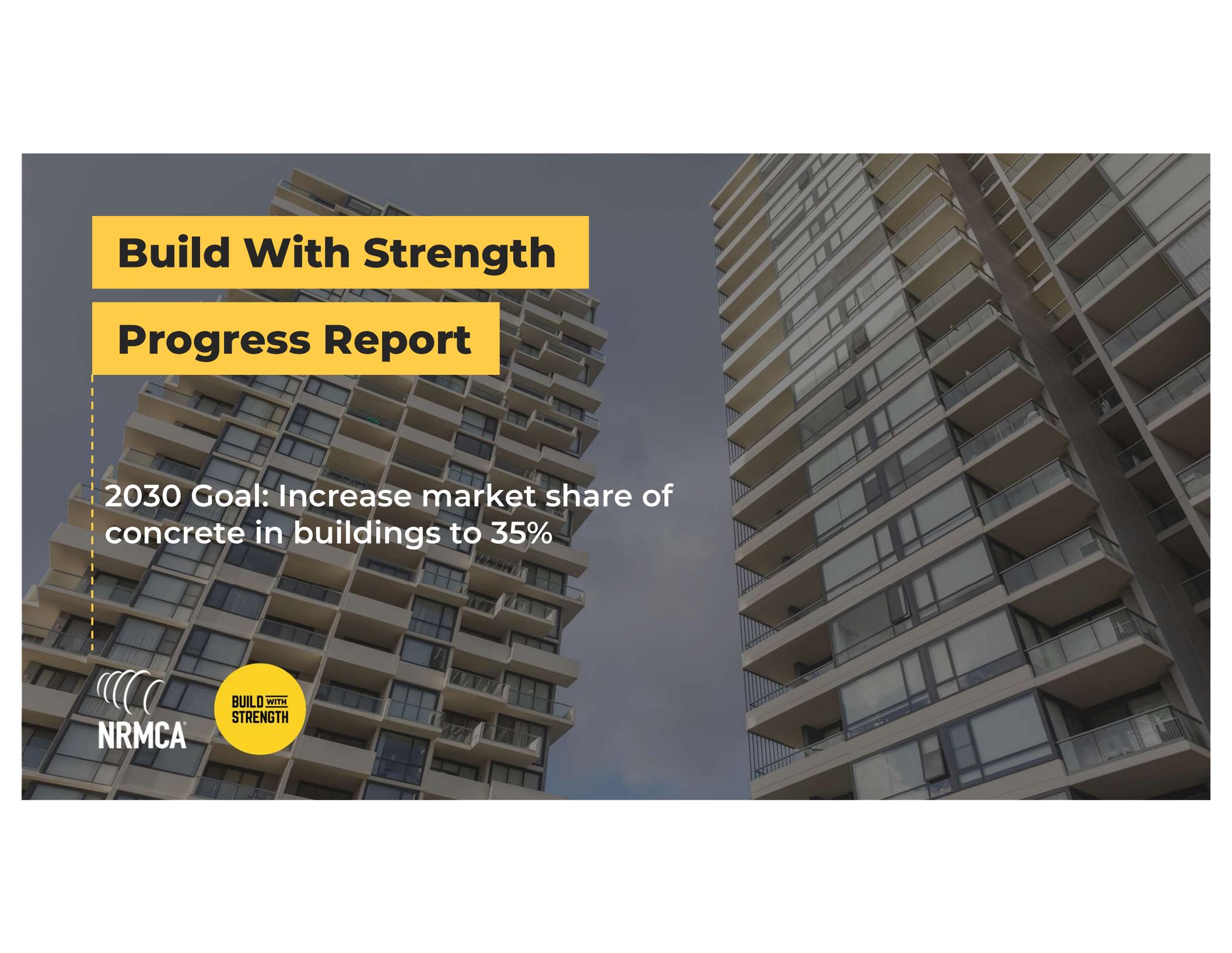
2023 (possible) builds:

- HFH Pensacola - Florida
- HFH Raritan Valley - Bedminster, NJ
- HFH Tillamook - Oregon
- HFH Benton County - Arkansas
- HFH Greater Indy - Indiana
- HFH Las Vegas - Nevada
- HFH Pemi Valley - Plymouth, NH
- HFH Hawaii Island - Kona
- HFH Lexington - Kentucky
- HFH New Orleans - Louisiana
- HFH Buckhannon River - West Virginia
- HFH Montgomery County - Tennessee



Challenges to growth

- Workforce Shortages
- Recession & Consumer Confidence
- Inflation & Interest Rates
- IIJA Rollout / Governmental bureaucracy and lag
- Demand & Backlogs
- Remote Workforce impact on commercial office space
- Global Events (War, COVID, etc.) – impact on supply chain
- Continued Market Share fight vs. Wood (Build with Strength Program)



Build With Strength

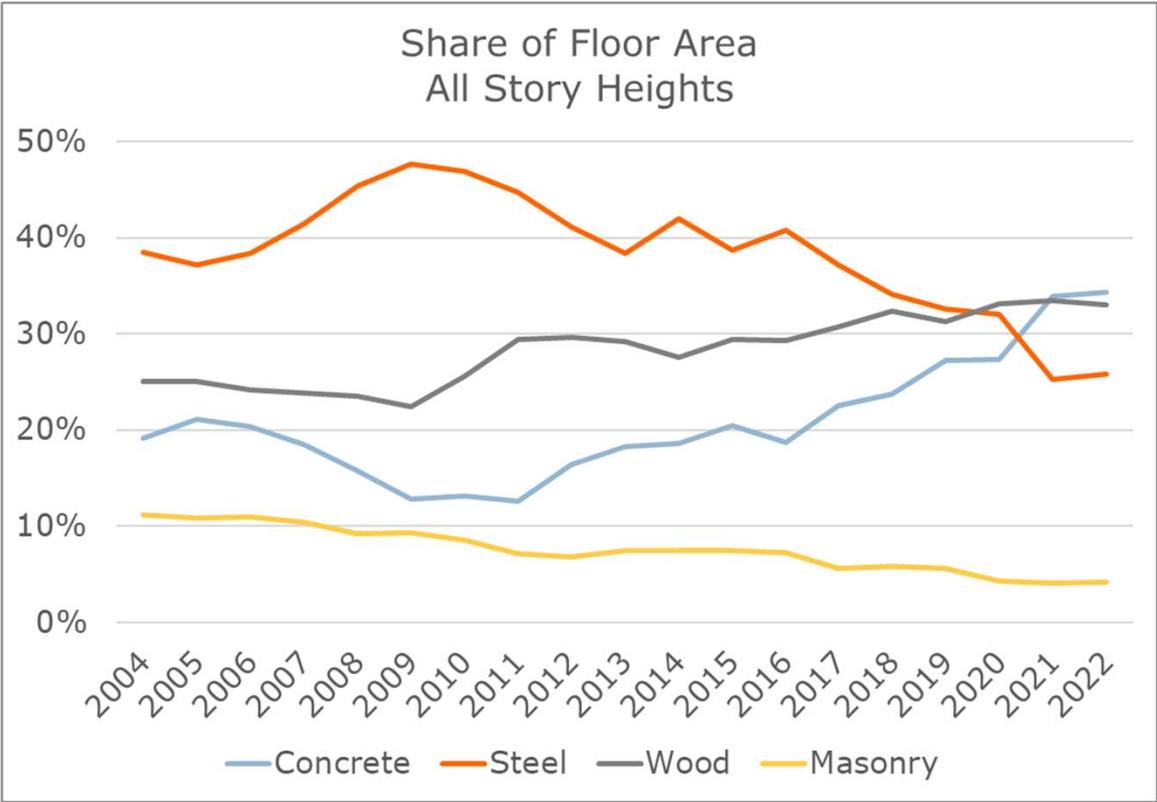
Progress Report

2030 Goal: Increase market share of concrete in buildings to 35%

A yellow circular logo with the text "BUILD WITH STRENGTH" in a bold, sans-serif font. The word "WITH" is smaller and positioned between "BUILD" and "STRENGTH".

**BUILD WITH
STRENGTH**

Build With Strength: Market share for concrete



2030 Goal

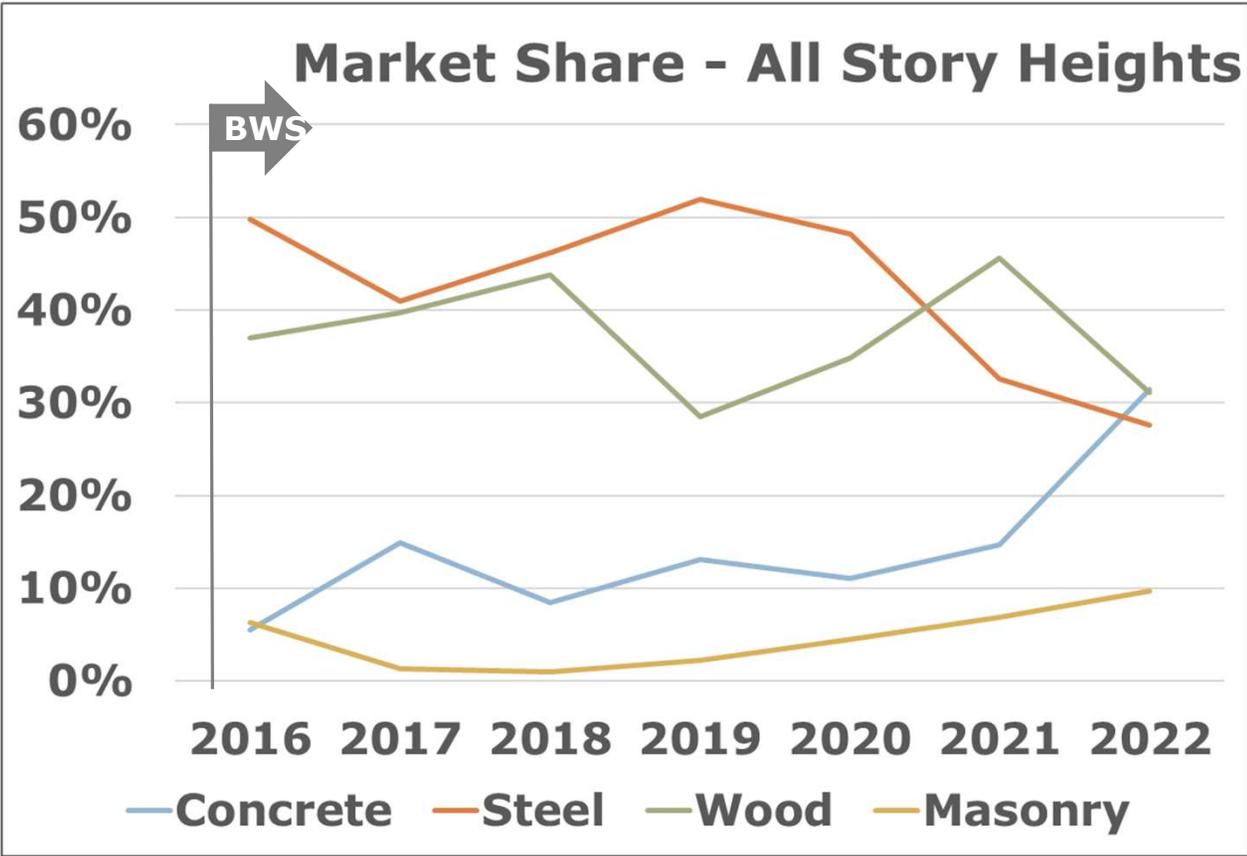
35%

2022 Progress

33%

Source: Dodge Construction Data
*Excludes parking garages

Build With Strength: Maryland



Concrete

+26%

Wood

-6%

Steel

-22%

Source: Dodge Construction Data
*Excludes parking garages

Promoting Concrete



**CONCRETE
DESIGN
CENTER**

WE CAN HELP YOU BUILD FOR A LIFETIME.

2016
Conversion Rate

1/6 

2018
Conversion Rate

1/4 

2022
Conversion Rate

1/2.5 



522 **Projects
Converted**

Advocate: Change building codes in favor of concrete

Goals	2019	2020	2021	2022	Total
Energy	3	2	1	1	7
Structural	3	2	1	2	8
Fire Safety		3	10	3	16
Green Building	4	2	3	6	15
Sound Attenuation				1	1
Resilience	1	1		1	3
	11	10	15	14	50

2030 Goal

100

2022 Progress

50

Educate: Design and Build Community

Educate the design and build community

CONTINUING EDUCATION

LIFE CYCLE ASSESSMENT OF CONCRETE BUILDINGS



Presented by
WILLIAMS BROTHERS

LEARNING OBJECTIVES

Upon completion of this course the student will be able to:

1. Recognize how concrete can reduce the life cycle impacts of a building.
2. Understand life cycle assessment (LCA) and how it can be used to help measure and reduce the environmental impacts of a building.
3. Explain how LCA is used in the green building standards.
4. Explain an example of how LCA software tools can be used to reduce the environmental impact of a building.

CONTINUING EDUCATION

AIA CREDIT | 1.00 HSW
AIA CREDIT NUMBER | AIA2023-014

Use the learning objectives below to focus your study as you read this article. To earn credit and obtain a certificate of completion, visit <https://www.aiaa.org/education> and complete the quiz for this course. If you are unable to complete the course, you may retake the quiz. If you are unable to complete the course, you may retake the quiz. If you are unable to complete the course, you may retake the quiz.

By: Lowell Lemay, P.E., SE, LEED AP, Executive Vice President, Structures and Sustainability, National Ready Mixed Concrete Association



INTRODUCTION

Concrete offers several environmental benefits that can help reduce the overall impact of a building. For example, the production of concrete is a resource-efficient and the ingredients require little processing. Most materials for concrete are acquired and manufactured locally which minimizes transportation energy and associated greenhouse gas emissions. Concrete incorporates recycled industrial byproducts such as fly ash, slag and silica fume which helps reduce embodied energy, carbon footprint and landfill disposal. Concrete has a long service life thereby decreasing reconstruction, repair and maintenance and associated environmental impacts.

Most importantly, because of concrete's thermal mass, concrete buildings can be extremely energy efficient. From a life cycle perspective, concrete buildings perform well when compared to steel and wood frame buildings. As a result, concrete buildings have a lower carbon footprint over their entire life cycle. This paper explores how life cycle assessment (LCA) methods can be used to quantify and improve the environmental performance of a building.

WHAT IS LIFE CYCLE ASSESSMENT?

LCA is the investigation and evaluation of the environmental impacts of a product, process or service. LCA evaluates all stages of a product's life and considers each stage interdependently. There are several inputs, life cycle stages and outputs as shown in Figure 2. Inputs include raw materials and energy. Life cycle stages include raw material acquisition, manufacturing, construction, maintenance and end-of-life including recycling and waste management. The outputs include atmospheric emissions, waterborne wastes, solid wastes, coproducts and other wastes. These inputs and outputs are converted to potential environmental impacts based on scientific knowledge of how these outputs affect the planet, ecosystems and human health.

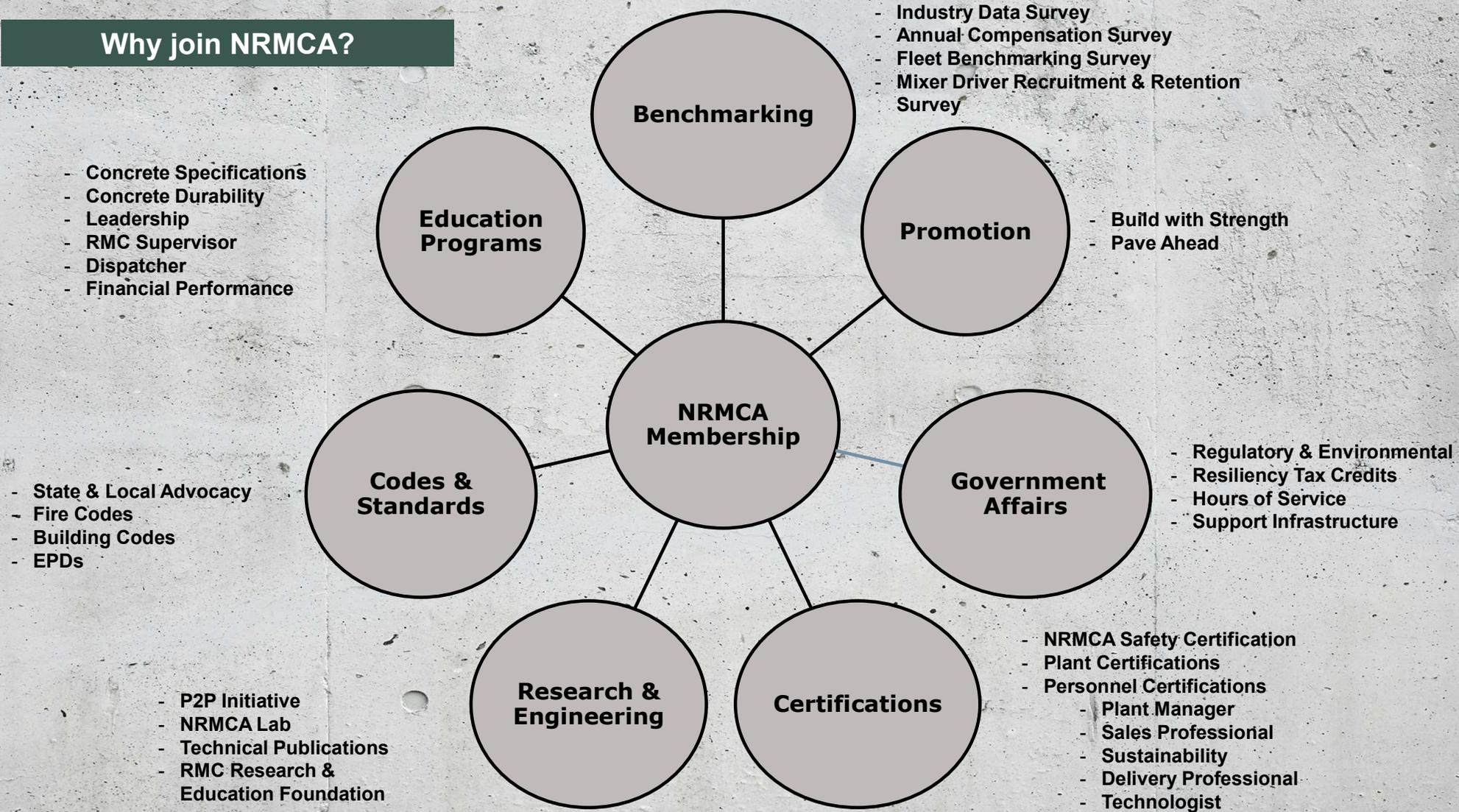
New 2030 Goal

130,000

2022 Progress

72,782

Why join NRMCA?



How can the NRMCA help your organization?



BUILD WITH STRENGTH

Thank You