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**THE 7 THINGS YOU CAN DO  
TO PLACE MORE  
CONCRETE IN BUILDINGS**

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# ANTITRUST POLICY STATEMENT

The National Ready Mixed Concrete Association assigns the highest priority to full compliance with both the letter and the spirit of the antitrust laws. Agreements among competitors that unreasonably limit competition are unlawful under federal and state antitrust laws, and violators are subject to criminal fines and incarceration, civil fines and private treble-damage actions. Even the successful defense of antitrust litigation or an investigation can be very costly and disruptive. It is thus vital that all meetings and activities of the Association be conducted in a manner consistent with the Association's antitrust policy.

Examples of illegal competitor agreements are those that attempt to fix or stabilize prices; to allocate territories or customers, to limit production or sales, or to limit product quality and service competition. Accordingly, it is inherently risky and potentially illegal for competitors to discuss under Association auspices, or elsewhere, the subjects of prices, pricing policies, other terms and conditions of sale, individual company costs (including planned employee compensation), the commercial suitability of individual suppliers or customers, or other factors that might adversely affect competition.

It is important to bear in mind that those in attendance at Association meetings and activities may include competitors, as well as potential competitors. Any discussion of sensitive antitrust subjects with one's competitors should be avoided at all times before, during, and after any Association meeting or other activity. This is particularly important because a future adversary may assert that such discussions were circumstantial evidence of an illegal agreement, when viewed in light of subsequent marketplace developments, even though there was, in fact, no agreement at all.

If at any time during the course of a meeting or other activity, Association staff believes that a sensitive topic under the antitrust laws is being discussed, or is about to be discussed, they will so advise and halt further discussion for the protection of all participants. Member attendees at any meeting or activity should likewise not hesitate to voice any concerns or questions that they may have in this regard.

**Adopted by the NRMCA Board of Directors**

**September 18, 2006.**

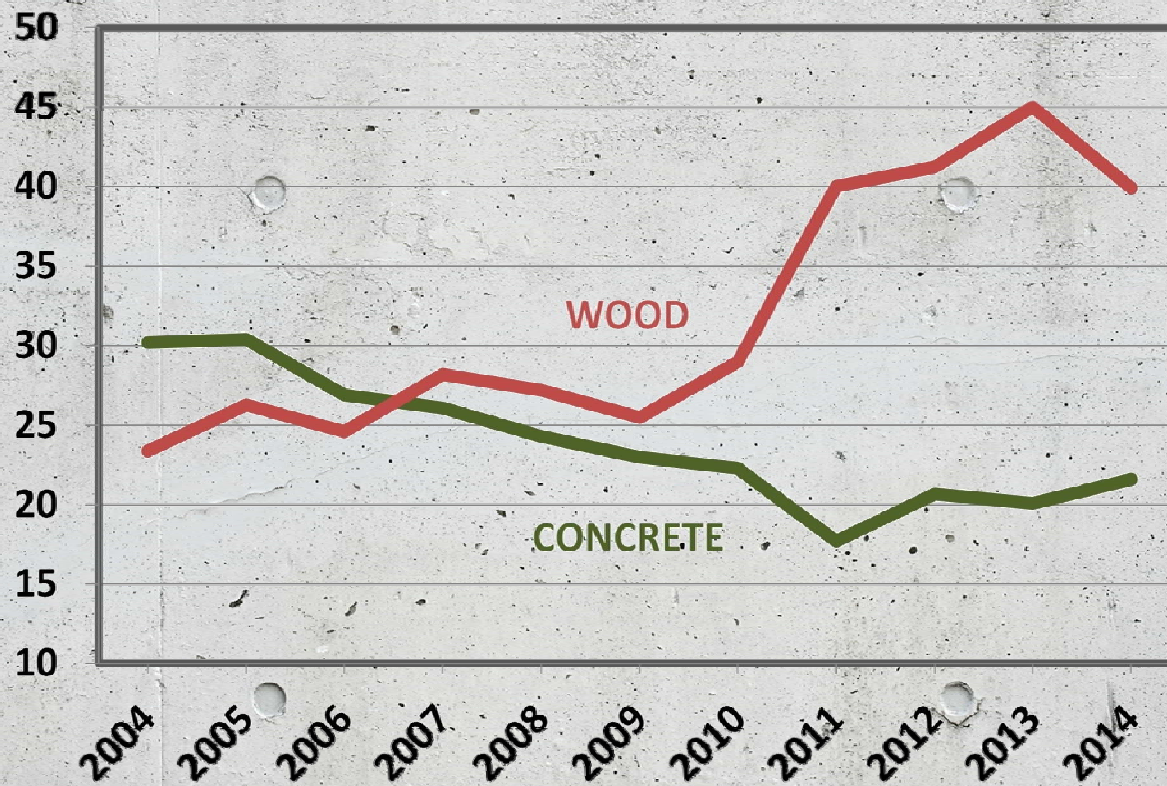


**BUILD WITH STRENGTH**

A COALITION OF THE NATIONAL READY MIXED CONCRETE ASSOCIATION

# THE SITUATION

**% SHARE OF FLOOR AREA MID-RISE 4-7 STORIES  
(Excludes Parking Decks)**



SOURCE: FW DODGE

# THE GOAL

Increase share of  
concrete in buildings



[www.nrmca.org/promotion](http://www.nrmca.org/promotion)

# STRATEGIES



Communication



Direct Project  
Promotion



Advocacy

**COMMUNICATIONS**

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**A SHOW OF  
STRENGTH**

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Contact Us

 ...the National Ready Mix Concrete Association recently launched a \$20 million, five-year effort to win back eroding mid-rise market share from the wood industry.”

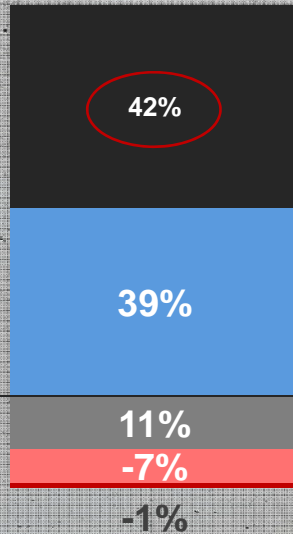


*Mike Case, President & CEO, The Westervelt Company  
Chair, Softwood Lumber Board*

# WHILE EQUAL, WOOD'S IMAGE HAS MORE INTENSITY

## THE WOOD INDUSTRY

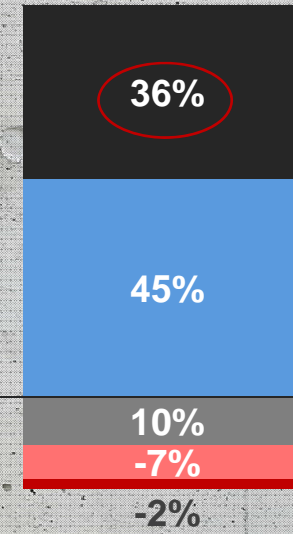
81% Favorable



8% Unfavorable

## THE CONCRETE INDUSTRY

81% Favorable



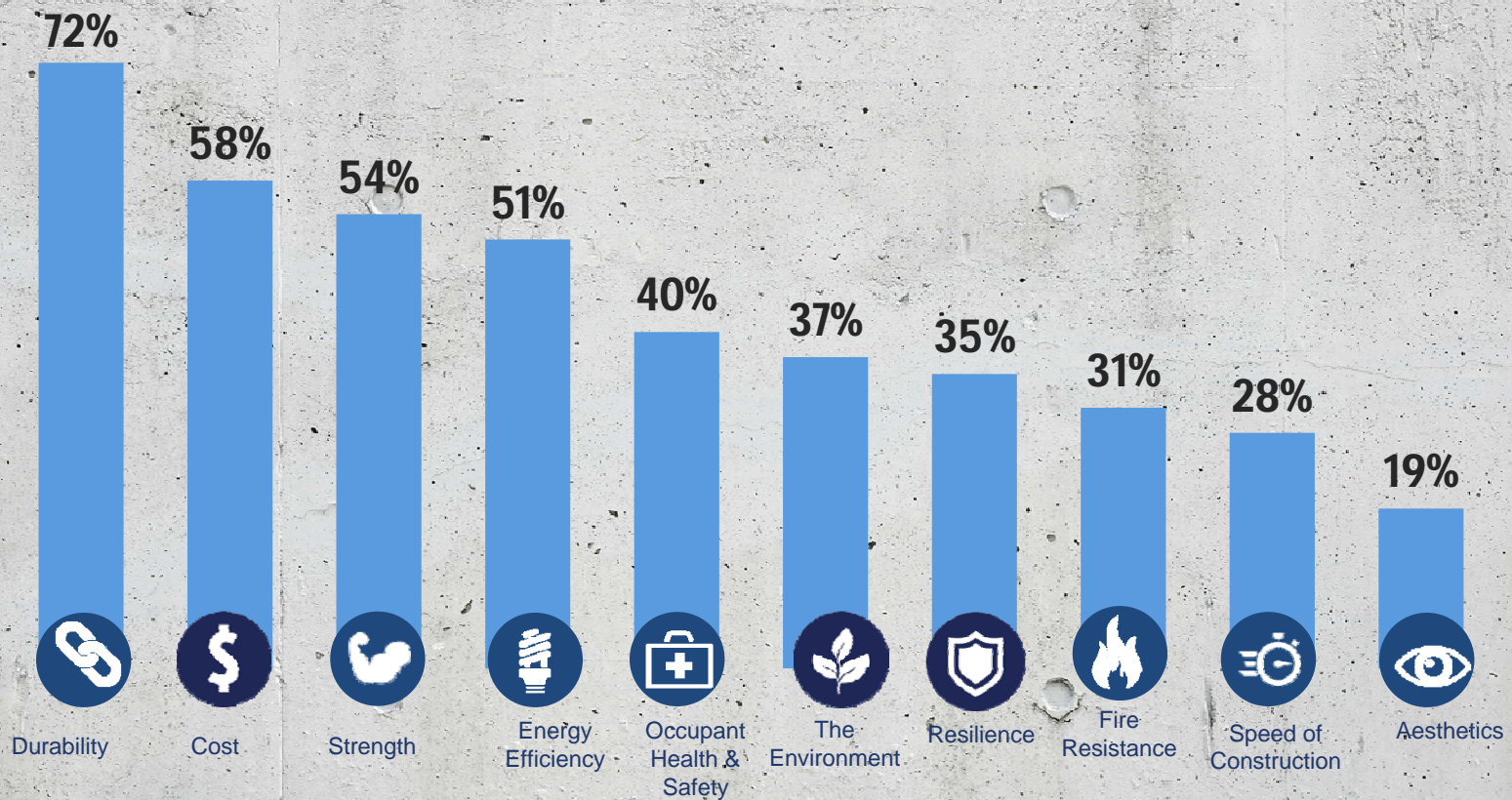
9% Unfavorable

■ Not Aware / No Opinion   ■ Somewhat Unfavorable   ■ Very Unfavorable   ■ Somewhat Favorable   ■ Very Favorable



Research findings by Axis Research.

# MOST IMPORTANT CONSIDERATIONS FOR PROJECTS



Research findings by Axis Research.

# WOOD VS CONCRETE

The three biggest benefits of concrete vs wood.

■ CONCRETE

■ BOTH/NEITHER/DON'T KNOW

■ WOOD

**IS THE MOST FIRE RESISTANT**

5 11

85

**IS THE STRONGEST**

8 15

77

**IS MORE DURABLE**

10 20

70

**CAN BEST RESIST NATURAL DISASTERS**

9 22

69

**CONTROLS NOISE THE BEST**

18 22

60

**IS THE MOST ENERGY EFFICIENT**

25 30

45

UP FOR GRABS

**REDUCES ENVIRONMENTAL IMPACTS**

27 33

85

**IS THE MOST INNOVATIVE**

18 48

34

UP FOR GRABS

**IS MORE COST EFFECTIVE**

43 27

31

**IS THE MOST VERSATILE**

40 32

28

**CAN BE EASILY PROCURED AND USED**

28 45

27

UP FOR GRABS

**CAN IMPROVE THE APPEARANCE OF A BUILDING**

43 32

25

**IS THE MOST RECYCLABLE**

53 27

20



Research findings by Axis Research.

# KEY RESEARCH TAKEAWAYS



We are partnering with  
Axis Research to  
conduct quantitative  
research.

1

In comparison to wood, **concrete has a natural advantage** that we haven't taken advantage of.

2

**Concrete wins on two of the three factors that determine building decisions: durability and strength.**

# BRANDING

## FOCUS GROUP RESULTS

The following coalition name, logo, and mission statement has been focus group tested to ensure that research drives the direction of the coalition.

# OUR MISSION:

**Educate the building and design communities and policymakers on the benefits of ready mixed concrete, and encourage its use as the building material of choice for low- to mid-rise structures. No other material can replicate concrete's advantages in terms of strength, durability, safety, and ease of use.**

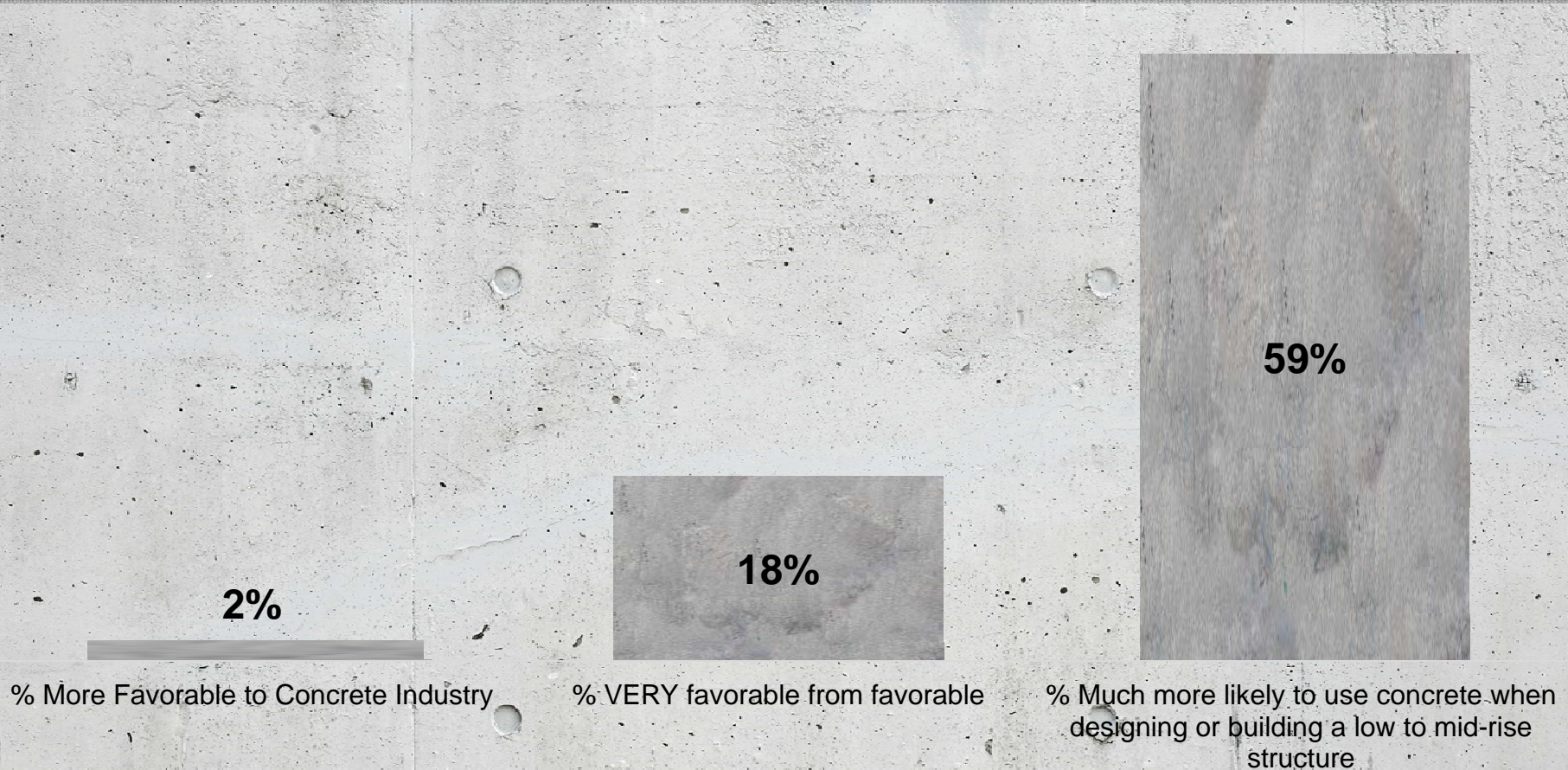
**BUILD WITH STRENGTH**

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# DID PERCEPTION OF CONCRETE CHANGE? YES.

Upon commencement & completion of the focus groups, participants were asked about their impression of the Concrete Industry and how likely they were to use concrete. Below are the changes in perception and intensity from completion of the focus group.



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**BUILD WITH STRENGTH**

[BUILDWITHSTRENGTH.COM](http://BUILDWITHSTRENGTH.COM)

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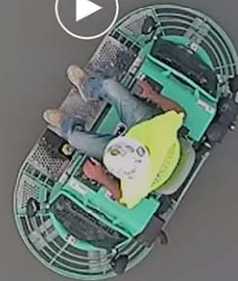
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**BUILD WITH STRENGTH**

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MENU ☰

# GO BOLD. GO STRONG. GO CONCRETE.



iPad 3:14 PM 32%

**01 STAND WITH STRENGTH**  
Nothing's stronger or more durable than ready mixed concrete. Before you build, see how it stacks up against other materials.

**02 WORK WITH CONCRETE**  
Your next concrete project starts right here. Get the resources, information, ideas and more you need to get started.

**03 SHAPE THE FUTURE**  
Take a look at the innovative designs that can be built with concrete—from residential to high-rise and everything in between.

**04 VALUE YOUR INVESTMENT**  
Concrete gives you a lasting return on your investment. It's maintenance-free, safe and resilient. Simply put, it stands up to anything.

ABOUT US | RESOURCES | EVENTS | MEDIA | SIGN UP FOR EMAIL

2016 © BUILD WITH STRENGTH

iPhone CARRIER

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# CAMPAIGN CORE MESSAGES

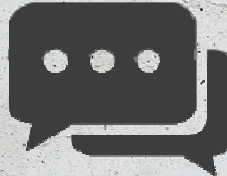
- 1. Strength and durability are what people want in a residential building**
- 2. Safety above all else**
- 3. Flexibility of Use = Creative and Unique Living Spaces**
- 4. Long-term ROI strengthens communities**

# TELLING OUR STORY AND BUILDING A COALITION

## COMMUNICATIONS PROGRAM FOCUSED ON



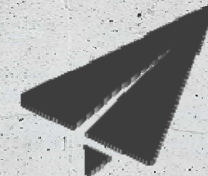
**Media  
relations**



**Stakeholder  
communications**



**Member  
support  
programs**



**Targeted  
legislator and  
policy maker  
communications**

# STATE ROLLOUT

**In-market events  
across the country that  
dig deeper into  
campaign messages,  
themes, and resources  
with target audiences,  
stakeholders and  
the media**



Each unique and tailored specifically to  
the needs and opportunities of each  
particular market:

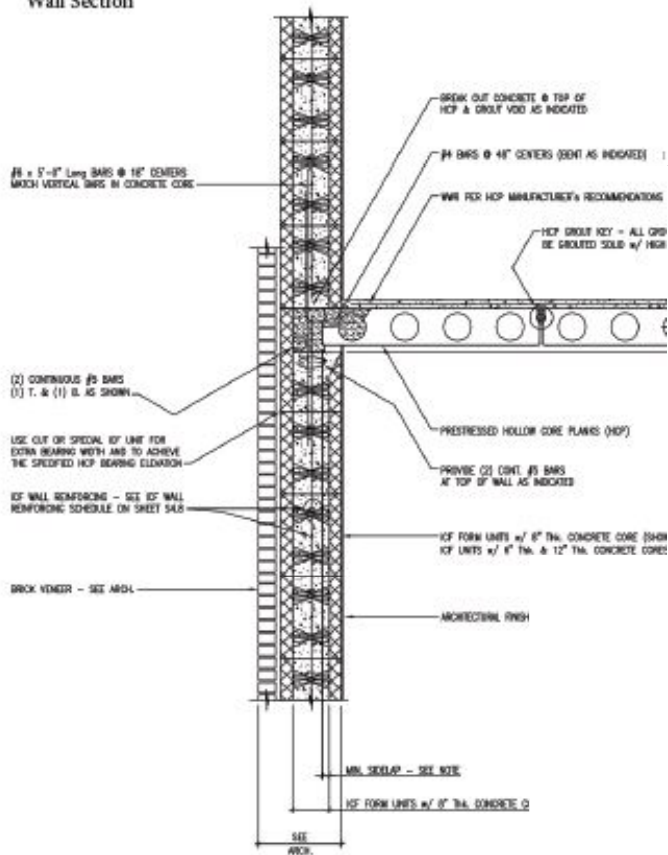
**Morning News Conference  
Afternoon Policy Roundtable  
Evening Social Function**

**DIRECT PROJECT  
PROMOTION**

# CONCRETE DESIGN CENTER

## Recommendations

Recommended  
Wall Section



SECTION  
SCALE: 3/4" = 1'-0"

1  
S5.1



Structural Design  
Cost Estimates  
Energy Analysis  
LEED Optimization  
Whole Building LCA



**ADVOCACY**

# OFFENCE – MD, NJ

## HB1472 Provides Smart, Durable, and Resilient Growth for Maryland

Concrete is a responsible choice for sustainable, durable development. It offers an economically sound path forward for building safe and resilient communities and infrastructure.



Building owners, builders, architects, and designers have come to recognize that durable concrete public buildings, private homes, and businesses **resist damage from natural disasters** and reduce the impact entire communities have on our planet.



Public safety professionals attest to how resilient construction products like concrete **protect the people who live and work in public spaces**, as well as the first responders charged with responding to fire and/or natural disaster.



Durability, safety, and resilience are important for all structures, but especially those that **house at-risk populations such as schools**, assisted living facilities, public housing and commercial multi-family residential homes.



A National Institute of Building Sciences Multi-Hazard Mitigation Council study reported that **every dollar spent on reducing the potential impact of disasters saves society an average of \$4**. With durable construction, the damage from major storms can be less severe, reducing the amount of energy and resources that the local community will have to spend on emergency response, reconstruction, repair, and recovery.



Concrete and other resilient building products **provide a cost savings over the long term** that is comparable to no other product, especially wood or wood products like CLT.



Studies by MIT have shown that homes with concrete walls can **use 8 to 15 percent less energy** than other homes. With heating, cooling, and general operations of buildings and homes in the United States accounting for approximately 70 percent of national energy consumption each year and more than 40 percent of CO2 emissions generated in the U.S., concrete provides a cost savings that goes well beyond initial project cost.



The amount of ready mixed concrete made by producers in Maryland annually is 3.3 million cubic yards. This is enough concrete to either pave a two lane highway 12 inches thick from Baltimore to Savannah, Georgia, build 4 Fort McHenry Tunnels or build 7 Pentagons per year.



The direct annual cement and concrete related contribution to Maryland State Revenues in 2014 was \$1.03 billion. This is enough to pay for tuition, room and meals for nearly 60,000 University of Maryland students. It is also more than the combined player's salaries of the Baltimore Ravens and the Baltimore Orioles for the past 5 years.

### Maryland Developments Affected by HB 1472 (2014-15)

County	Developments	Units	\$ Value (x1000)
Anne Arundel	3	426	69,725
Baltimore	8	984	136,315
Frederick	3	615	65,990
Harford	2	528	59,120
Howard	3	518	55,657
Montgomery	9	1,467	184,141
Prince Georges	4	1,112	132,100
St. Marys	1	158	16,340
Wicomico	1	90	8,400
Total	34	5,898	727,788



# DEFENCE - WA

## The truth behind HB2857 and wood construction.

### CLT as a Job Creator is a Myth

- In 2013, Oregon Governor John Kitzhaber issued Executive Order No. 12-16 calling for an analysis of the economic impact of jobs created by the utilization of wood products (not just CLT) in the construction of all available state buildings in the 2014-2015 biennium.
- Final Report (released on January 24, 2014): A whopping 38.1 jobs; \$2 million in labor income; and an increase in personal income tax revenues to the state of \$64,000.<sup>1</sup>

### CLT is a Fire Risk

- CLT does not have a long enough history to provide firefighters with information on their behavior during situations like fires. CLT fire resistance is based upon the insulating properties of the char layer that develops during the exposure to fire. However, according to "Fire Safety Challenges of Tall Wood Buildings," R. Gerard, et al, Arup North America, Ltd.:



"In a real fire situation, the load-bearing elements in CLT are expected to 'load-share,' or 'redistribute,' in a method that is not easily predicted in simple fire testing."



"Previous CLT fire testing has resulted in delamination and char fall-off when exposed to fire conditions."



"This has the potential to increase the fire temperature and burning rate within the compartment, and could impact the structural fire resistance at later stages in the fire duration."

- See news of the CLT Building in the U.K. that went up in flames. The title tells it all: "Not so carbon neutral now! New eco-friendly £15million university laboratory built out of wood goes up in flames"<sup>1</sup>

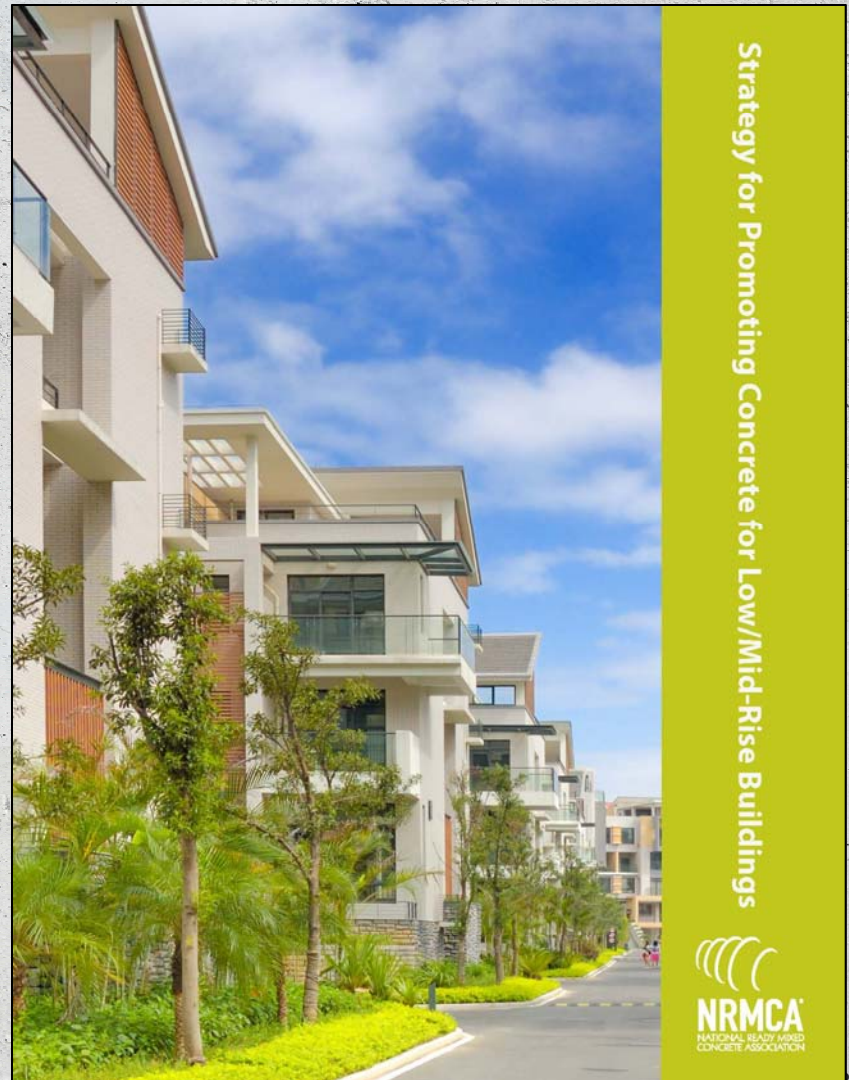
### CLT is a Green Myth

- "A big advantage of the product is that it is more sustainable than traditional building materials, such as concrete and steel, because of wood's capacity to store carbon."
- The most significant impacts of industrial forestry—harm to forest ecosystems, biodiversity, and soil and water quality—are not addressed when advocates of CLT are promoting its green values. The most important impacts underlying forest products—namely, those arising from logging—are simply not considered when focusing on carbon sequestration. This not only hides major impacts but also paints typical logging practices as having an economically rosy environmental profile for the state.

**SEVEN THINGS  
YOU CAN DO**

# 1. PASS BOARD RESOLUTION

- State affiliates: support building promotion
- Building promotion committee
- Identify champions
- Commit resources



Strategy for Promoting Concrete for Low/Mid-Rise Buildings

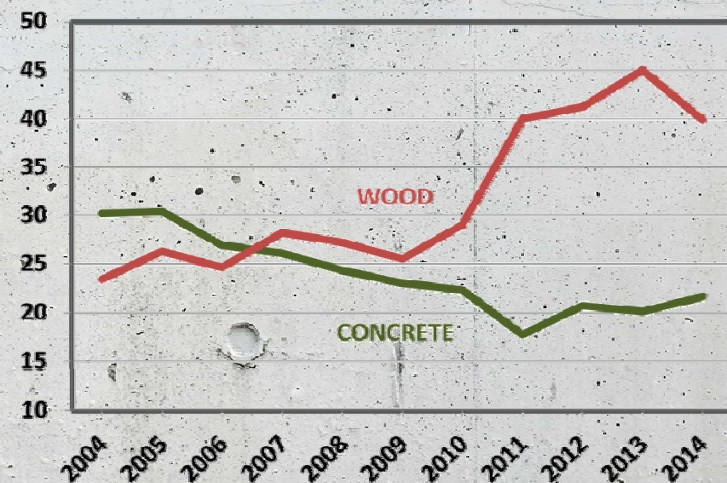


## 2. UNDERSTAND CHANGE

- Developers using more wood for buildings
- Growth in building construction
- Wood industry developing new products



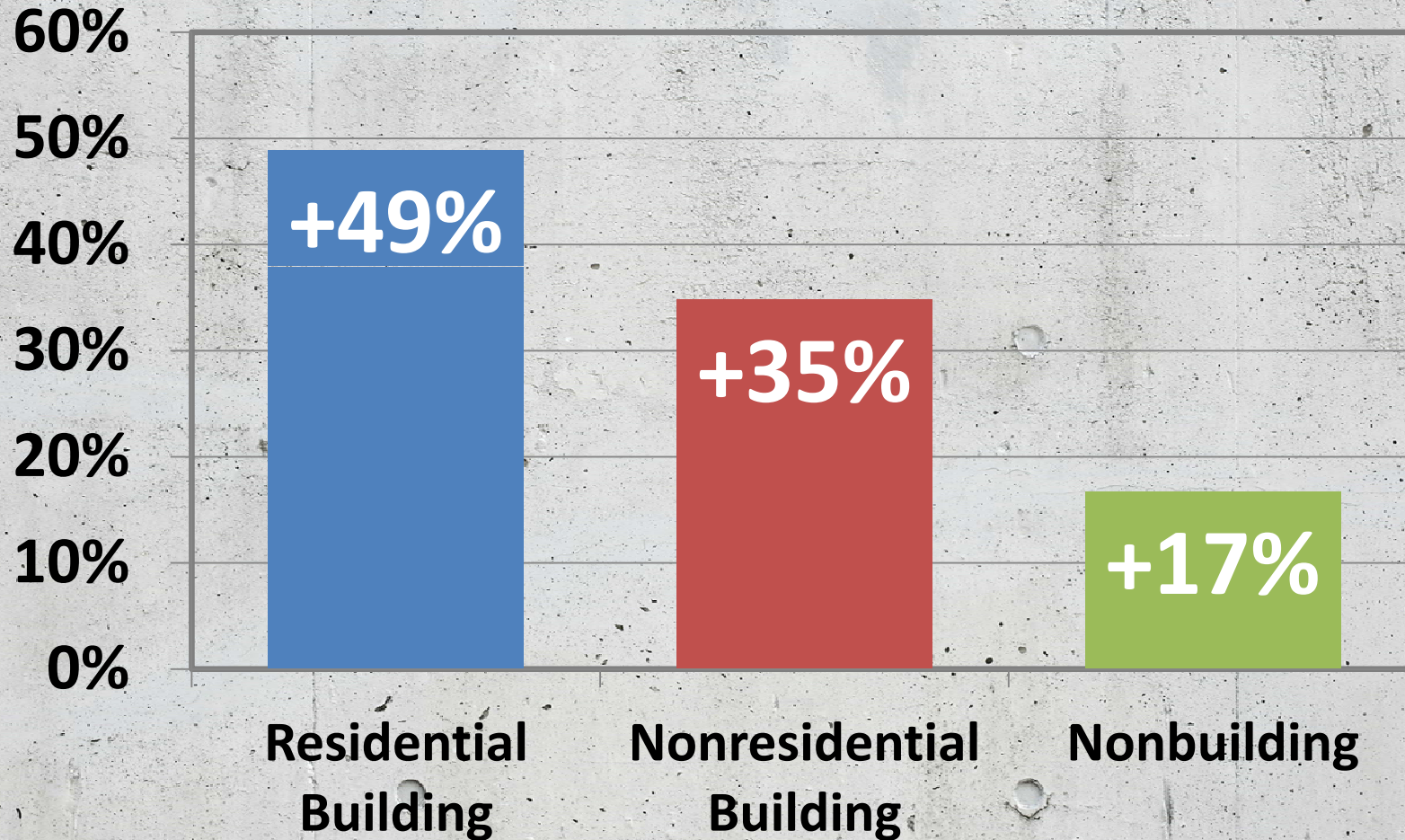
% SHARE OF FLOOR AREA MID-RISE 4-7 STORIES  
(Excludes Parking Decks)



SOURCE: FW DODGE

# Forecast (2014-2019)

% Increase of Construction Put in Place



SOURCE: FMI Construction Outlook



## 3. BE ENTREPRENEURIAL

- Promote concrete as material of choice
- Use concrete design center



**CONCRETE  
DESIGN  
CENTER**

WE CAN HELP YOU BUILD FOR A LIFETIME.

**BUILD WITH STRENGTH**  
A COALITION OF THE NATIONAL READY MIXED CONCRETE ASSOCIATION

[www.BuildWithStrength.com](http://www.BuildWithStrength.com)



# 4. USE INDUSTRY MESSAGING

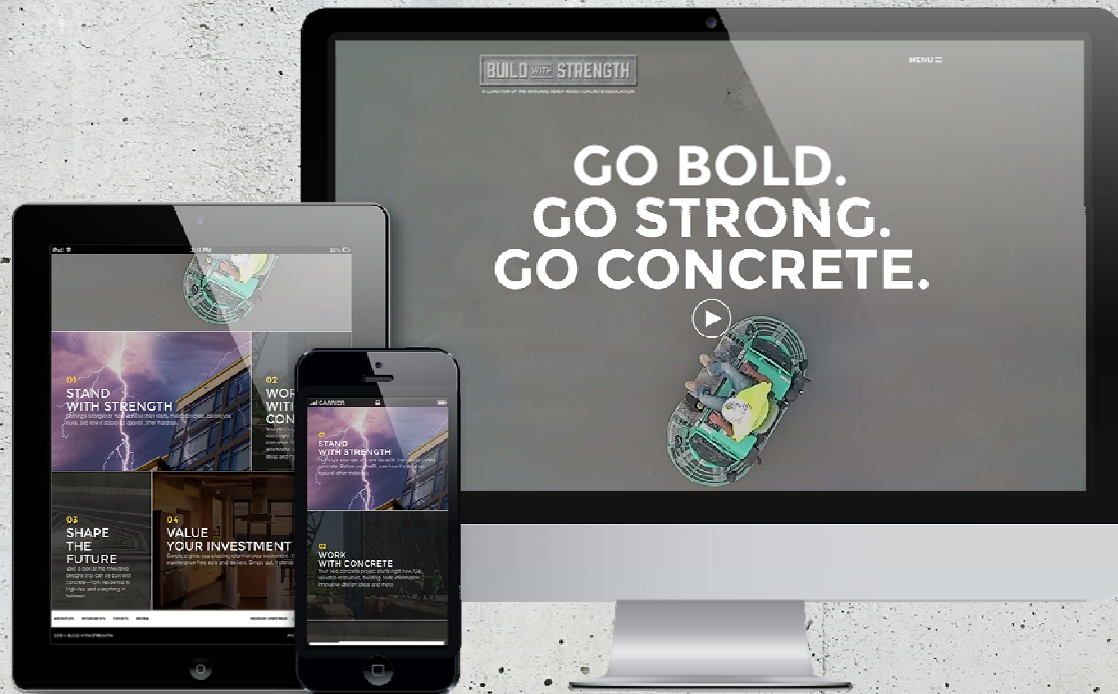


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- **Strength and durability are what people want**
- **Safety above all else**
- **Flexibility of Use = Creative and Unique Spaces**
- **Long-term ROI strengthens communities**

# 5. USE INDUSTRY RESOURCES

- People
- Promotional
- Technical
- Education



[www.BuildWithStrength.com](http://www.BuildWithStrength.com)

# THE TEAM



Lionel Lemay  
Sr VP, Structures and  
Sustainability



John Loyer  
Sr Director, State and  
Local Government Affairs



Gregg Lewis  
Sr Director  
Building Innovations

## Others

Marketing  
DDC Public Affairs  
Government Affairs  
Pavement  
Engineering



Tien Peng  
VP, Sustainability  
Codes and Standards



James Bogdan  
Sr Director,  
Sustainability Initiatives



Michael Wymant  
Sr Director  
Building Innovations

# Promotional Resources

## READY MIXED CONCRETE. READY FOR ANYTHING.

Strength. It's a term that gets used a lot. And while it's one of the most essential components of any building, it's more than the strength itself that's important. It's the benefits of strength that make a difference in what you build.

### 5 Key Elements to Building with Strength:

#### Stands the test of time

Concrete structures are designed to last for centuries. Unlike other materials, concrete only gets stronger over time.

#### Sustainable

Concrete's strength, durability and energy efficiency make it an environmentally friendly material—especially when you consider the entire lifecycle of the building.

#### Simple to use

If a material isn't easy to use, it doesn't matter how strong it is. Good thing concrete can be molded into any shape, size or design you can imagine.

#### Safe and strong

Building with concrete gives you a fire resistant structure. When combined with other



Concrete. Choose it first—to last. Learn more at [BuildWithStrength.com](http://BuildWithStrength.com).

A COALITION OF THE NATIONAL READY

## Library of fact sheets Library of case studies

**BUILD WITH STRENGTH**

CONCRETE CASE STUDY: STRENGTH AND DURABILITY

**RICHARD L. HARRIS BUILDING**  
8 NW 8th Ave, Portland, OR 97209

Completed: 2004  
Height: 152 feet  
Floors: 12

Owner: Central City Concern  
Architects: SERA Architects  
Urban Planning: Stuido jeffreys

**BUILT TO LAST. BUILT WITH CONCRETE.**

To keep their new structure standing tall into the next century, the architects and builders of the Richard L. Harris Building in Portland, Oregon, chose concrete. The 12-story high rise provides transitional housing for low-income and special-needs individuals and incorporates a highly efficient concrete frame with long span, post-tensioned concrete slabs and a resulting minimal column layout.

**01. Minimal column layout.**  
To combat an institutional facility look, the architects used a minimal column layout, which creates a warm and inviting feel.

Concrete's superior strength allows for long spans, thus eliminating the need for large columns and bearing walls.

**02. External walls built for strength and durability.**  
External walls incorporate high-performance "rain screen" construction with in-cavity insulation supported by the concrete floor system.

With the Northwest's rainy weather, it's important to keep rain out. But even if water does get in, the concrete structure is unaffected.

**03. Highly efficient concrete frame.**  
Built in one of the most active earthquake zones in the world, the ductile concrete frame will withstand seismic loading.

**AWARDS**

Donald Turner Prize for Innovation and Leadership in Affordable Housing, 2007

ODDA Downtown Housing Award, 2006

OCAPA Excellence in Concrete Institutional Residential Award, 2007

This project is the result of the collaborative efforts of Central City Concern, Downtown Community Housing, Portland City Council, and the Portland Development Commission. A Coalition of the National Ready Mixed Concrete Association | [BuildWithStrength.com](http://BuildWithStrength.com)

# CONCRETE DESIGN CENTER

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MENU ☰

## DESIGN CENTER

Free concrete project design and technical assistance is available through the National Ready Mixed Concrete Association's Design Center. The Design Center can assist you in choosing the right concrete solution for a wide variety of projects, from multi-family residential/mixed use to industrial and health care facilities. NRMCA's expert team of engineers and architects are available to help you select the most appropriate concrete system, including:

- Concrete frame and post-tension flat plate systems
- Voided slab systems
- Insulating concrete forming (ICF) systems
- Tilt-up concrete wall systems

**Structural**

**Costing**

**LEED**

# EDUCATION



MENU ☰



## PROFESSIONAL ADVANCEMENT

The following educational opportunities are available to industry professionals through NRMCA.

### **Concrete Buildings Education Programs**

NRMCA offers several courses on the design and construction of high performance concrete buildings. Courses can be tailored to different formats—from all-day seminars, half-day seminars, lunch-and-earns to webinars.

**Disaster Resilience**

**Building Green**

**Economical Design**



# 7. SEE OPPORTUNITY

- Introduce us to developers
- Find champions





# MORE "SEVEN THINGS" WEBINARS

- May 26, 11 am eastern
- June 23, 11 am eastern

[www.nrmca.org/promotion](http://www.nrmca.org/promotion)

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**QUESTIONS**

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