

DEC 2020 Vol.1 No.7

WEARABLE TECHNOLOGY

6 Wearables Enhancing Construction Worker Safety

BUSINESS STRATEGY

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The Economic Recovery Outlook for Where You Live: Four Things to Know

Links in

RESEARCH & TECHNOLOGY Committee Update

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7 Coronavirus - Related Construction Challenges that will Continue in 2021



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Table of Contents



20-22

6 Wearables Enhancing Construction Worker Safety

Construction wearable technology is becoming trendy on job sites all over due to its ability to enhance safety as well as comfort for workers. Once a novelty in the industry, wearable construction technology has become a part of everyday life for construction professionals. Hard hats, shoes and other construction gears have become multi-faceted thanks to their merging with technology.

32-34

The Economic Recovery Outlook for Where You Live: Four Things to Know

The shape of the recovery in your business is first and foremost a function of the decisions that you make. Ultimately, it is not up to the federal government, state/ municipal governments, or COVID-19. However, these three influences must be considered to varying degrees based on the nature of your business.





DECEMBER 2020 Volume 1 Number 7



7 Coronavirus-Related Construction Challenges that will Continue in 2021 As 2020 comes to a close, economists and industry experts predict many of

10-12

and industry experts predict many of these issues will continue to challenge contractors. Here are the top seven factors to watch.

- 6-7 Letter from the Editor
- 8 NFBA President's Message
- 14-17 Technical & Research Committee Update
- 24-25 Inside the Frame: Chrystal Burris
- 28-29 December Foreman of the Month
- 30-31 Calendar of Events



ON THE COVER

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Hello & Welcome



ell...we made it through the first year of the official magazine of the National Frame Building Association...NATIONAL FRAME BUILDER MAGAZINE.

I hope you all have enjoyed reading it as much as the NFBA Board of Directors, our member-owners, cooperative staff, and industry experts have had putting it together. This magazine is chock-full of content designed to inform, engage, and entertain, and our format strives to expand your horizon locally and beyond. From educational opportunities to tools to enhance your business and educate prospective customers, we've got you covered.

Building on over 50 years of brand legacy is something we all take very seriously at NFBA. We remain committed to our members and welcome the opportunity to continue as your trusted adviser on frame building, workplace safety, business, insurance and financial topics.

This is Your Frame Builder. Consider this an open invitation to share content ideas, portfolio photos, feedback and more. The NFBA is nothing without community, and we are ecstatic to be part of yours.

Rachel Pinkus, Editor National Frame Builder Magazine





A MESSAGE FROM MATT GREINER PRESIDENT, NFBA BOARD OF DIRECTORS

s 2020 nears its end, many of us will be evaluating this unique year on a number of levels. It's certainly a year like no other; undoubtedly one for the record books. I came across a quote that I really liked: "2020 is not the year to be disappointed for what we did not get, but rather the year to be thankful for what we already have." Maybe that is true for every year, but it certainly seems to resonate now more than ever.

Many of us in the post frame industry experienced things we have never dealt with, both positive and negative. This includes record revenues, unparalleled pressures, quickly soaring lumber prices, unfamiliar disease prevention measures, new OSHA rules rapidly being imposed, developing HR policies on the fly, adjusting to employees or ourselves working from home, and so on.

On the personal side, our vacations have been cancelled, daycares and schools at times were closed, unexpected loss of friends and family due to a new virus, and the list goes on. We have had to dig deeper than ever to find optimism, strength, and courage to persevere.

As these new challenges have emerged, NFBA has collaborated often, taken notes, and worked to respond to the rapidly evolving conditions. The industry is quickly changing, and our Association is working hard to stay in front of the change in tide, giving members the leading edge and advantage.



However life for all of us begins to normalize, like you, I am hopeful that it is soon. In the meantime, please continue to support NFBA and participate any way you can. Be sure to keep a close eye on developments and do what is needed to keep your company ahead of the curve, whether that means adjusting to new OSHA requirements or keeping up with changing market conditions. Certainly 2020 has taught us to expect the unexpected and vigilance is of utmost importance.

Thank you for taking time to read this edition. I hope you have a wonderful holiday season and I hope to see you all soon. Continue to be thankful for what you have and find optimism and strength wherever you are able. Enjoy!

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7 CORONAVIRUS-RELATED CONSTRUCTION CHALLENGES THAT WILL CONTINUE IN 2021

The industry will start next year facing significant headwinds, economists and other experts predict. More than 10 months since the first coronavirus cases were reported in Wuhan, China, COVID-19's global spread continues to plague commercial construction. Since the pandemic hit the U.S., contractors across the country have faced a range of obstacles including layoffs, project shutdowns and increased construction costs.

A s 2020 comes to a close, economists and industry experts predict many of these issues will continue to challenge contractors. Here are the top seven factors to watch:

Labor shortage Pre-pandemic, the industry faced a historic shortage of skilled labor and the issue isn't going away just because COVID-19 has shut down projects and slowed others. Although firms have been calling back workers who were laid off in the spring, some have refused to return to work, citing a preference for unemployment benefits, virus concerns or family responsibilities.

Looking ahead to once a recovery begins, labor gaps might get even larger, especially in states like California, Texas and New York, according to Daniel Pomfrett, vice president of Los Angelesbased project management and cost consulting firm Cumming Corp. Lack of worker migration — especially to expensive markets with greater job opportunities like California and New York also aggravates the labor shortage, Pomfrett said.

Shrinking backlog Associated Builders and Contractors' Construction Backlog Indicator fell to 7.5 months in September, a decline of 0.5 months from August's reading and 1.5 months lower than last year at this time. In addition, the association's Construction Confidence Index readings for sales and profit margins also

Shelley D. Hutchins LEED-AP

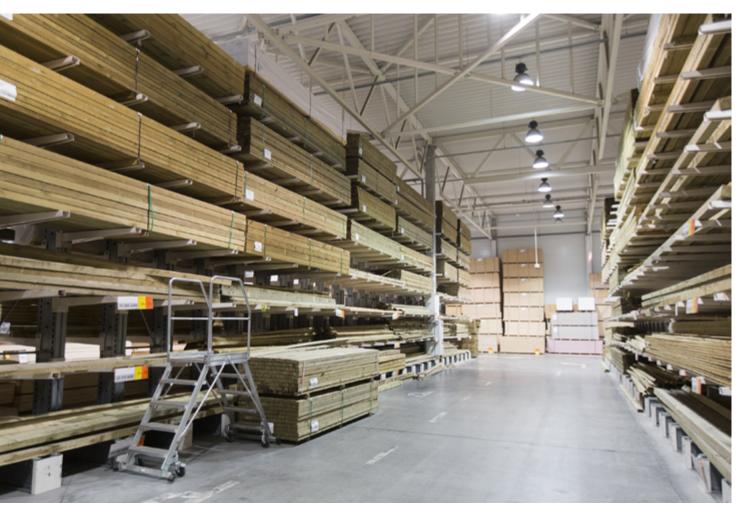
decreased. The months ahead don't look hopeful for contractors looking to add to their backlog of work, said ABC Chief Economist

Anirban Basu in a release about the indicator. "ABC's survey data indicate that we are in the early stages of a nonresidential construction spending downturn," he said. "With few exceptions, declines in backlog have begun to accelerate across all markets and regions."

Falling construction costs A variety of pandemicrelated forces have caused construction costs to decline slightly for the first time in a decade, which could lead contractors to feel a pinch in profits.

The Turner Building Cost Index, which measures costs in the U.S. nonresidential building construction market, fell to a value of 1171 in the third quarter of 2020, a 1.5% quarterly reduction from the beginning of the year. This year marked the first time the index from Turner Construction has reduced in value since 2010. "Trade contractor competition has increased in many areas as they work to secure backlog due to uncertainty they have about future opportunities," said Attilio Rivetti, the Turner vice president responsible for compiling the Cost Index in a press statement.

Less work Various sectors of commercial construction will continue to experience a



Some contractors are taking proactive steps to expand their supplier network as well as buying hedges on some materials to protect from upward price swings

decline even after the rest of the economy begins to recover from COVID-19, economists say. For instance, experts predict people will continue to work from home more often then they go into a central office, so construction of office buildings remains a gray area in terms of future growth.

The construction of new healthcare facilities also could drop significantly because of changes in lifestyles post-COVID-19, according to Ken Simonson, chief economist for the Associated General Contractors of America. "Hospital use dropped off drastically in the spring and it's not certain if visits for elective surgery and other non-essential procedures will come back," Simonson said. "Or will we see growth of alternative medical care through urgent care or surgery centers?" He also questioned if nursing home construction would fall because people might be more hesitant to check themselves or family members into the facilities.

Travel and hospitality sectors, along with sports or performance venues, also look grim according to Simonson. That's primarily because their revenue sources — sales taxes, convention income and tolls — are taking a big hit and aren't expected to get replenished anytime soon as the pandemic begins a third wave of intensity.

Price increases This year has seen fluctuations in the prices of construction materials, most recently with the skyrocketing cost of lumber. Prices have been rising on most materials since May, according to ABC. Its September look at prices found that among 11 subcategories, eight experienced monthly increases. As construction comes back online around the world, increasing demand for products could keep prices on the rise, Basu said. "Despite the lingering pandemic, the global economy has been recovering, increasing demand for key commodities," he said. "Rapid viral spread, including in Europe and parts of North America, render materials shortages more likely during the winter months." Some contractors are taking proactive steps to expand their supplier network as well as buying hedges on some materials to protect from upward price swings, according to Joe Natarelli, leader of the national construction industry practice at accounting firm Marcum.

Supply chain issues "Production is getting back to where it was internationally," Pomfrett said, "but the strain on supply chains and how to get materials and equipment delivered remains." Natarelli said his clients are building resiliency into their supply chains so that they're not beholden to a single supplier for any one material. "The days of having one material supplier are gone," he said. "We're seeing clients setting up three separate suppliers, in different geographic locations, where in the past they may have had just one or two. Some are even getting as many as five in place."

Plus, the pandemic caused a decline in shipping as well as air travel, which means less air freight gets moved so even the reduction in moving materials across state lines has caused issues, he said.

Diminished state and local government revenues Basu said this is one of the top challenges facing contractors right now. A report from the Brookings Institution projects that state and local government revenues will decline \$155 billion in 2020, \$167 billion in 2021 and \$145 billion in 2022 — about 5.5%, 5.7% and 4.7%, respectively — excluding the declines in fees to hospitals and higher education.

This means that state agencies such as departments of transportation have less money to fund infrastructure initiatives like roads, bridges and transit projects. Many will look to the federal government for additional revenue.

At the New York Metropolitan Transportation Authority, some upcoming projects are in limbo as the authority awaits word on whether it will receive federal funding in addition to the \$3.8 billion it received in April under the Coronavirus Aid, Relief and Economic Security Act. Industry estimates show that even with the CARE Act funds, the MTA faces at least an \$8.5 billion shortfall for 2020 and 2021. "MTA's financial position has eroded dramatically" since the outbreak began, Janno Lieber, MTA chief development officer said this summer, noting that the authority is losing about \$800 million a month in revenue due to the crisis.

Shelley D. Hutchins, LEED AP, writes about residential construction and design, sustainable building and living, and travel and health-care issues. Construction Dive provides in-depth journalism and insight into the most impactful news and trends shaping the construction and building industry.



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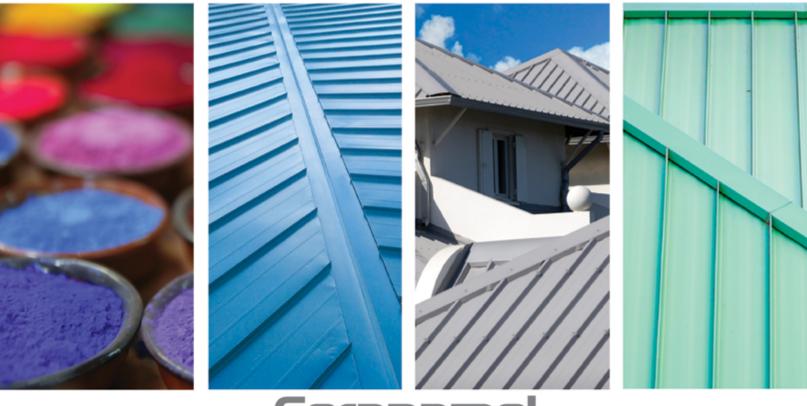
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TECHNICAL & RESEARCH COMMITTEE UPDATE

BY Timothy R. Royer, P.E. T&R Committee Chair



The Technical & Research Committee (T&R) met online on September 30th for our third meeting of the year. The T&R committee is made up of engineers, post-frame builders, material suppliers, and academia who are involved in the design of post-frame buildings or involved in research and education supporting the post-frame building industry. The Committee serves as an advisory committee to the NFBA Board of Directors relative to technical issues facing the Association and Post-Frame Industry. The committee is charged with overseeing and conducting a broad range of technical and research

activities for the benefit of the post-frame industry and members of NFBA. A large portion of this meeting was spent discussing the wind damage that occurred during the Midwest Derecho (inland hurricane) in August of this year and the snow damage that occurred in the the Upper Midwestern states two winters ago. While all construction types experienced damage during these events (steel, masonry, and wood), it is the committee's desire to collect data on postframe building failures

from these two events, and other significant weather events, in

order to identify common areas of failure. For example, we know that much of the damage involved agricultural buildings. Most agricultural buildings are exempt from the building code and as a result a large number of agricultural buildings are built without structural design to ensure that the constructed building will withstand the expected loading. Other factors such as the age of the buildings, maintenance of the structural framing system, and the large loads put on the building structure in an extreme weather event all

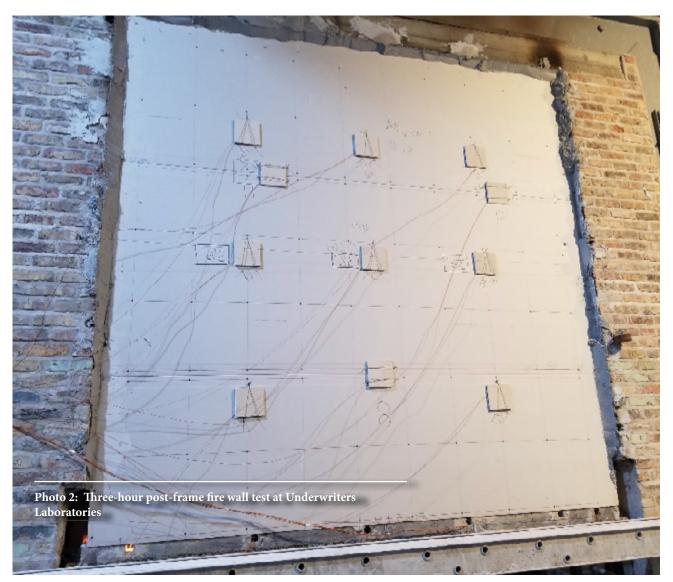


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contributed to the high number of failures. With the T&R committee's input, a survey has been prepared by the University of Wisconsin Extension for the snow-related damage of 2018 and will be utilized to collect data directly from farmers who experienced failure in the past 10 years. In the Derecho area, a survey was sent out to all NFBA builder members to collect preliminary data on observed failures. We found our attempt to collect data in this manner is inadequate and determined that a better method must be developed. For this reason, an **Immediate Response Team** (IRT) is being considered and would be responsible to travel to locations of concern and collect the data that is required to better understand post-frame performance in this area. We are beginning an initial draft for an IRT member guide for use on a building site that has experienced damage by an extreme weather event. The data that we collect will be valuable for determining areas of structural research and design that may be the weak links in our current building systems.

Another project that the T&R committee is currently working on is the recognition of glued laminated columns in the post-frame fire wall listing. Approved by Underwriter's Laboratory two years ago, UL V304 is a 3-hour rated postframe firewall system that currently utilizes 5-ply

continued on page: 16



mechanically laminated columns spaced 8 feet apart. The goal of this project is to provide fire test data to the Underwriters Laboratory to support the use of glulam columns as an acceptable alternative to the mechanically laminated columns that were used in the actual fire test. We are working with professionals in the glulam industry to determine the best method to proceed with this approval.

Another project that we are working on is recognition of the NFBA organization in the three post-frame standards that are referenced in the International Building Code (IBC). Each of these standards are essential for structural engineers who design code conforming postframe buildings, most of which are residential or commercial buildings. These three standards are ASAE-EP484 "Diaphragm Design of Metal Clad Post-Frame Rectangular Buildings", ASAE-EP486 "Shallow-Post foundation Design", ASAE-EP559 "Design Requirements and Bending Properties for Mechanically Laminated Columns" and they are included in the IBC in Section 2306.1 and listed in Chapter 35. These standards refer to the American Society of Agricultural and

Biological Engineers (ASABE) and there has been some confusion regarding the application of these standards to residential and commercial buildings. Our committee is working with ASABE to recognize NFBA in the standard name, such as NFBA/ASAE-EP484. With this change we are also hoping to get the National Frame Building Association listed in IBC as a referenced standard organization in Chapter 35. This could happen as early as the next code cycle.

Lastly, the committee reviewed the new webinar course for the Non-diaphragm Design Guide published by NFBA in 2019. This new design guide is a supplement to the Post-Frame Building Design Manual and specifically highlights the structural design of post-frame buildings without utilizing diaphragm design techniques. Two webinars on the manual have been prepared and presented by Dr. Harvey Manbeck. The committee observed a mock presentation of the two webinars and provided feedback and comments to Dr. Manbeck who then finalized the webinars content and sent them to be finished as an online presentation. Both webinars will

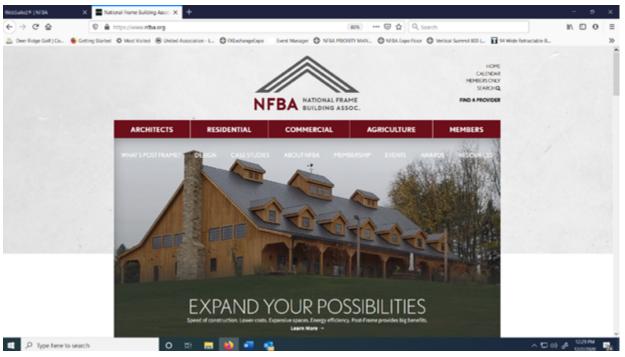


Photo 3: NFBA Website

16 / FRAME BUILDER - DEC2020

be available online starting November 2020.

The T&R Committee also assists in the oversite of the technical resources available on the NFBA website www.nfba.org which offers a variety of technical resources to both the general public and also to its members. Website users have access to tools and information that are helpful to individuals who may be new to the post-frame industry or seasoned experts. On the main webpage select "Technical" from the Resources pull-down menu and non-members can browse through a vast list of articles written by some of the industry's top design professionals. Topics range from structural to building code compliance to energy efficiency. Also available to non-members is the DAFI calculator, a diaphragm design tool. Free access to the NFBA online university can be obtained simply by registering or setting up a user account.



NFBA Members get the added bonus of more in-depth educational webinars, and significant discounts on reference

materials like the Post Frame Design Manual or the Non-Diaphragm Design Guide. There is also a downloadable Construction Bid Document tool available to members only. Members can also send their post frame related questions to NFBA technical experts & receive free technical, legal & safety advice with the Technical Advice member benefit. Easy access to the building codes & standards library is also a convenient resource for members.

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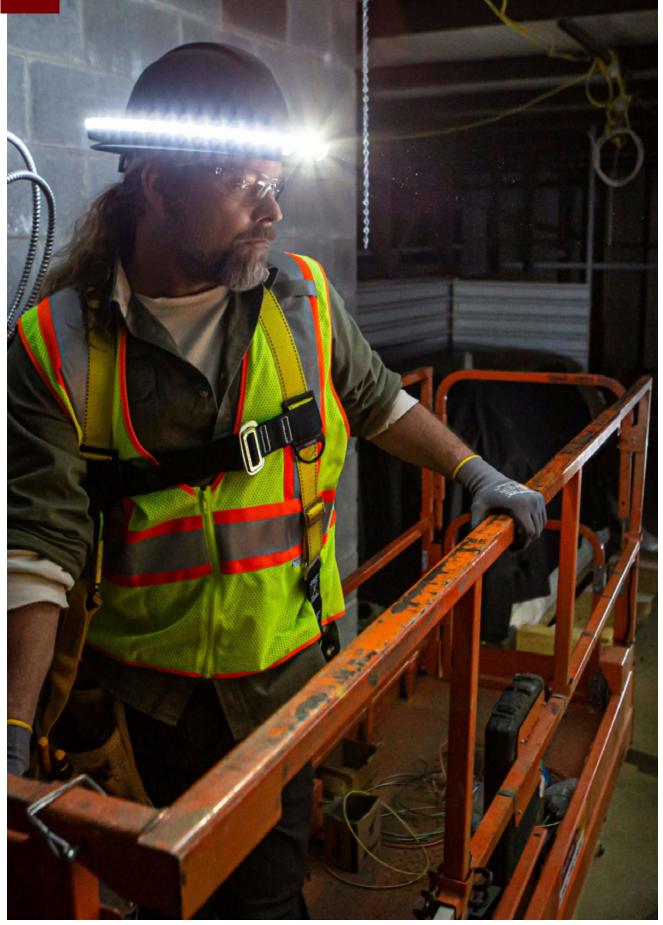
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6 WEARABLES ENHANCING CONSTRUCTION WORKER SAFETY

Construction wearable technology is becoming trendy on job sites all over due to its ability to enhance safety as well as comfort for workers. Once a novelty in the industry, wearable construction technology has become a part of everyday life for construction professionals. Hard hats, shoes and other construction gear have become multi-faceted thanks to their merging with technology. These wearables are making job sites a safer and more productive place to work.





Construction workers can now wear this 360-degree personal safety and task light to make sure that they can see and be seen at all times. The Halo fits on any standard hard hat; install it by pressing down firmly, which allows the spring tension system to secure it onto the surface. It will stay on, regardless of the type of work you're doing. Furthermore, the Halo comes in four modes. There is Halo Mode, which makes it visible from over a quarter-mile away and shown across 360 degrees. You have Hi-Alert Mode, which involves a personal revolving light tailor-made for those high elevation jobs. Also, there's Task Mode, illuminating the work area in front of you, as well as Dim Mode to turn down your light.

MYO and Smart Glasses



Working on a construction site can be hectic. MYO is an armband that works in tandem with Brigit glasses to help you multitask on-site, allowing you to climb or dig while communicating with your team without needing to stop your activity. Hand gestures are used to control these devices, eliminating the burden of holding onto a device. For example, you might be wearing heavy gloves, or have oil on your hands, and now instead of relying on touching a tablet or smartphone, you can control your device touch-free.

continued on page: 22

continued from page: 21

StrongArm

Keeping employees healthy and on the job



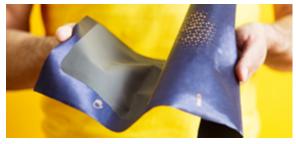
is key to running a successful construction business. Given how prevalent back injuries are in construction, StrongArm's Flex ErgoSkeleton uses a posture pad to alert you if you're bending or lifting things incorrectly or strenuously. There are also adjustment mechanisms tailored to your height and size. StrongArm offers the FUSE sensor, which collects posture information in real-time and provides feedback whenever you twist or move side-to-side.

Blackline Safety – G7



For workers who are out in the field alone, safety is especially important. The G7 provides real-time safety alerts via network connections. Those alerts go to a back-end monitor and are broadcast as needed. It can provide mass notifications of any new workplace hazards, security threats, and weather updates while offering two-way voice and text communication.

Loomia



Construction workers are particularly affected by temperature stress due to their work environments. This start-up company has created feet-friendly construction wearables in the form of soft-heating soles that can be used in shoes and garments. Heating levels can be increased to 200 degrees and help you power through those frigid winter conditions.

MIT - Pressure Sensors



Some dangers on the construction job site may not be easily recognized, and that's where sensors come into play. MIT has created pressure sensors that weigh the level of contact between feet and shoes to ensure an even reading of data. The insoles with their integrated sensors then use the data readings to calculate the entire force applied by the user's body weight and carried load on the shoe, and if what you're picking up is too heavy, it lets you know and you can bring in some backup. There's also an integrated jacket that employs wearable smart sensor construction techniques to increase the human perception of carbon monoxide and hydrogen sulfide. It possesses sensors at the top of its sleeves to detect dangerous gases and a sound volume sensor to handle loud on-site noises.

Wearable technology has come a long way to improving working conditions, comfort, awareness, and safety on construction job sites.

For the latest news on construction technologies, subscribe to <u>www.conexpoconagg</u>. <u>com/subscribe</u>



Become an Accredited Post-Frame Builder

and be publicly recognized for your commitment to professionalism and quality in ethical business practices, safety, and education



The Accredited Post-Frame Builder (APFB) Program recognizes builders who embrace programs and policies that promote quality and customer satisfaction. APFB status sets your company apart from the competition and entitles you to use the APFB logo on your company letterhead, business cards, and other marketing materials. In addition, your company is highlighted in the "Find a Builder" section of the National Frame Building Association (NFBA) website (www.nfba.org), in the membership directory, and at the Frame Building Expo.

As an Accredited Post-Frame Builder, you are authorized to use the following language on all bid documents:

(Your Company Name) has been recognized by the National Frame Building Association as an Accredited Post-Frame Builder for its commitment to ethical business practices, safety, training, and quality service. To renew your accreditation every 2 years, one or more employees of your company must earn 12 continuing education units (CEUs) within that time by attending educational programs at the Frame Building Expo, NFBA webinars or chapter programs, or other preapproved events.

As industry professionals, we want our customers and the general public to know that we care about industry standards, high-quality workmanship, safety, and ethical business practices. Set your company apart from the competition by completing the application and returning it with payment.

Complete the application form at www.nfba.org and become an Accredited Post-Frame Builder today!

Standards of Professional Conduct

Inasmuch as it is my belief that my reputation in the building industry is dependent upon my devotion to the highest ideals of honesty, courtesy, and integrity, as evidenced by my willingness to conduct business in a spirit of fairness and equality for all, and inasmuch as the National Frame Building Association has dedicated itself to the same high ideals of professional responsibility, I hereby agree to abide by and to conduct business in accordance with the following Code of Ethics:

- 1. I shall at all times exercise the utmost integrity in all of my business transactions and in all my relations with customers, employees, suppliers, and competitors.
- 2. I shall **refrain from the use of false or misleading advertising** and will honor the written and approved purchase agreement of my customers.
- 3. I shall make no false statements or circulate harmful rumors about my competitors' product, business, or financial or personal standing.
- **4.** I shall endeavor to **abide by present and future building standards** of the National Frame Building Association.
- 5. I shall make every effort to **preserve my customers' trust and good faith** by providing the service and repair parts that they may need.
- 6. I shall dedicate myself to the promotion of professionalism within my industry, and I shall work diligently to build and perpetuate continuing consumer faith and trust in the National Frame Building Association builders.
- 7. I shall faithfully stand behind the work I perform and the products I sell in accordance with manufacturers' recommendations and warranty.
- I shall, in good faith, furnish to the proper building authorities all certifications regarding professional or structural engineering and loading standards that are required of me.
- I shall encourage my fellow employees, my fellow members of the National Frame Building Association, and my colleagues to adhere to this Code of Ethics.

Help grow your business by joining this distinguished group of post-frame builders.



INSIDE THE FRAME CHRYSTAL BURRIS

Each Issue of Frame Builder Magazine will feature an article by NFBA Membership Director, Morgan Arwood, giving an inside, personal look at the lives of one of the many volunteer members that dedicate their time and treasure to NFBA and the post-frame industry.

> BY Morgan Arwood NFBA Membership Director







hrystal Burris a t t e n d e d Northmont High School in Clayton, Ohio. Growing up Chrystal was the youngest of her siblings, one brother and one sister. Chrystal participated in a cooperative office education program and

NFBA SENIOR ACCOUNT MANAGER

went to work for half a day and then school half a day her junior and senior year. "This was the start of my accounting career. I worked for SJ Meyer & Associates and then they hired me right out of high school."

Chrystal and her husband, Bobby, live in Clayton, Ohio and have three grown children: Jake, Melaney, and Cayla. Jake just bought his first house; Cayla is currently attending Sinclair College in the Surgical Tech program; and Mel is in her first apartment, is attending her second year of nursing school, and just recently got engaged!!

Chrystal and Bobbly also have several fur babies to keep them busy including four cats (Simba, Cleo, Fiona and Gilligan), and a fouryear-old German Shepherd named Sheba. Although Chrystal does not have a lot of "hobbies" per say, she does love to travel when possible. "We enjoy vacations at the beach and Destin, FL has been our favorite spot for the last couple of years."

"I love music, it's a big passion of mine and my faith is an important part of my life." Prior to COVID, Chrystal was very active in her church choir and Chrystal and Bobby would frequently volunteer at their church's community outreach program and serve breakfast on Sundays. "Bobby and I love seeing all the people and trying to brighten their day."

A naturally compassionate person, Chrystal always goes out of her way to find the good and see the positive in people. (Which is good because she is an avid Cleveland Browns fan.)

Chrystal has been working for The Association Office for almost seven years as the Senior Account Manager. "I've met a lot of awesome people through NFBA. Learning the ins-and-outs of managing the accounts for NFBA has been both challenging and rewarding. I'm proud to see the growth of this association and to be a part of it."

YOUR TOOLKIT FOR BUILDING EXCELENCE

















For more than 40 years, the National Frame Building Association (NFBA) has represented the interests of builders, suppliers, distributors, academics, and code and design professionals serving the U.S. post-frame industry. Its mission is to lead and support members in their efforts to promote the growth and expansion of post-frame construction projects.

Join NFBA for access to resources that help you build your post-frame business.

Education

With the right information you can make smarter business decisions. You'll stay ahead of the competition while impressing your customers.

- Technical Resources—Learn best practices and new developments directly relevant to your business.
- Frame Building Expo Seminars—Attend discounted seminars at the Frame Building Expo.
- Industry Trend Data—Benchmark your performance against peers' performance and identify growth opportunities.

Growth

Opportunities abound for you to increase your business's bottom line.

- Business Referrals Lead-generation programs send referrals straight to your inbox.
- Penetration of New Markets—NFBA's market development program advances post frame into new markets.
- Exposure—Be seen in directory listings in the NFBA Directory and on the NFBA website.

Advocacy

NFBA is the voice of the post-frame industry, and members gain instant credibility when they join.

- Legal and Technical Expertise—Obtain guidance from NFBA's experts at no additional charge.
- Safety Programs—Show your commitment to safety and earn goodwill from employers and customers.
- Credibility—Participate in the Accredited Post-Frame Builder program to earn credibility with customers.

NFBA Membership Categories

• BUILDER MEMBERSHIP (\$475-\$3,300)

Any individual proprietorship, corporation, or other legal entity that is engaged in the business of manufacturing, distributing, marketing, or constructing of post-frame buildings or post-frame building packages. Dues are structured incrementally by annual gross volume of business in millions of dollars.

• NATIONAL SUPPLIER PARTNER MEMBERSHIP (\$1,625)

Any individual proprietorship, corporation, or other legal entity that is engaged in the manufacture or supply of post-frame building components but is not selling building packages and assuming design responsibility for the building. *This category applies to supplier companies that provide services or products in seven states or more. Includes a \$500 assessment that will be put toward the* **Post-Frame Advantage Initiative**.

• REGIONAL SUPPLIER PARTNER MEMBERSHIP (\$1,325)

Any individual proprietorship, corporation, or other legal entity that is engaged in the manufacture or supply of post-frame building components but is not selling building packages and assuming design responsibility for the building. *This category applies to supplier companies that provide services or products in six states or fewer. Includes a \$500 assessment that will be put toward the* **Post-Frame Advantage Initiative.**

• BUILDING MATERIAL DEALER PARTNER MEMBERSHIP (\$570) Any individual proprietorship, corporation, or other legal entity that is engaged in the sale or distribution of lumber, trusses, or building kits to the post-frame building industry. *Includes a \$220 assessment that will be put toward the Post-Frame Advantage Initiative*.

• BRANCH/DEALER MEMBERSHIP (\$100) (Dealer 1st Year Only)

Any individual proprietorship, corporation, or other legal entity that operates as a branch office (i.e., is wholly owned by, and operates under the same name as, a regular NFBA member) or as a dealer for another company with a different name that is a regular NFBA member in good standing.

• DESIGN/CODE PROFESSIONAL MEMBERSHIP (\$120)

Any individual who is engaged in the business of building design, is a licensed professional engineer or architect, or is involved in building inspection or code development and enforcement.

• ACADEMIC MEMBERSHIP (\$100)

Any individual who is primarily associated with an academic institution and has a particular interest in the post-frame building industry.

• ASSOCIATE MEMBERSHIP (\$325)

Any company engaged in a business rendering service to the industry but not qualifying for any other membership division.

• STATEWIDE LISTINGS (\$100 each)

Market your business in multiple states in which you provide services by purchasing statewide listings. Listings in all states, excluding Alaska and Hawaii, are available for purchase. Your organization will appear in all selected states in the "Find a Provider" NFBA website search results and in the **NFBA directory**.



National Frame Building Association Membership Application

This application must be completed in its entirety, or your membership cannot be processed.

This application must be cu	mpieteu în îts entire	ty, of your mennership canno	i ne hioresseu.	
Company Name			Additional Company Contacts	
Company Address			Company Owner's Name	
City, State, Zip Code			E-mail	
Phone	Fax		Marketing Contact Name	
Company E-mail (example: info)@)		E-mail	
Primary Contact (will also be b	illing contact)		Technical Contact Name	
Title	-		E-mail	
E-mail				
Referred by			B. Unified Chapter Dues (Mandatory)	
E-mail			Companies located in unified chapter states must pay an addition	onal \$25
A. Membership Leve			for chapter membership. These companies will hold membershi	
Builder Membership			their local chapter and the national organization. If you are loca unified chapter state, please select your local chapter:	ted in a
Select category according to your ann	nual gross business volume (¶1+ to 3 \$700	in millions). ■3+ to 6 \$1,280	Atlantic Northeast (CT, MA, ME, NH, NJ, NY, PA, RI, VT)	□ \$25
■6+ to 10 \$2,000		H OT to 0 \$1,200	Mid Atlantic (DE, MD, NC, SC, VA, WV)	□ \$25
Please indicate below what t	ype of structures you		Heartland (AR, KS, LA, MO, OK, TX)	□ \$25
 Agricultural Buildings Industrial Buildings He 	ommercial Buildings orse Barns/Facilities	Residential Buildings Suburban Garages	Section B Total \$	
 Institutions (churches, schools, µ 	,		C. Statewide Listing (Optional)	
National Supplier Partn (\$1,125 Membership Dues, \$500 PFN	Ter Membership /// Assessment)	□ \$1,625	Please indicate on the line below the additional statewide listin would like to purchase. (Cost for each additional listing is \$100.	
Regional Supplier Partr (\$825 Membership Dues, \$500 PFMI	n er Membership Assessment)	₽ \$1,325		/
Building Material Deal \$350 Membership Dues, \$220 PFMI A		ership 🛛 \$570	additional listing(s) at \$100 each Section C Total \$	
Please indicate below which	products or services y	ou provide or work on:		
Building Accessories	Foundation	Skylights		
Building Posts and	Products	Software		
Columns	Framing	Storm Management		
Business Resources	Products	Products		
Chemicals	Hardware	Structural Components Tools		
Coatings DIY Building Packages	Insulation	Trusses		
	Lumber	U Walls		
Engineered Components		Windows	Total of sections A, B, C \$	
□ Equine	Roofing	🗳 Other	The undersigned hereby certifies that the above information is true	and that
Fasteners	Siding		if accepted for membership by the National Frame Building Associ	
Branch/Dealer Member	rship(Dealer 1st Y	(ear Only) 🖬 \$100	I/we will abide by the bylaws of the association and voluntarily ag adhere to the association's Standards of Professional Conduct.	
Above, write the name and location	on of the parent NFBA me	ember company's head office.	Signature	
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Please indicate below which Academic Enginee Structural Analysis Oth	ering 🧴 🗖 Archit	ecture 📮 Design Consulting	Date Payment Information <i>(select one):</i>	
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Institutions (churches, sch Academic Membership		□ \$100	Expiration Date	
			Billing Zip Code	
Associate Membership		□ \$325	Signature	
	Section A T	otal \$		



DAVID TROYER OF K&M BUILDERS, LTD. OF KIDRON, OH

Congratulations to NFBA "Crew Foreman of the Month" for December, David Troyer of K&M Builders, Ltd. Of Kidron, OH.

Twenty Year NFBA Member, K&M Builders, was established in 1988 by Dan J. Miller and partners and is located in the small tourist town in Kidron, OH. Residential, agricultural, and commercial building Crew Forman, David Troyer, has been with K&M Builders, Ltd. for over 25 of the 32 years K&M Builders has been in business. David was also on the crew that built the RC Farms Calf Facility that came in 1st Place as the NFBA 2019 Building of the Year.

"David is a valuable asset to our company. He takes pride in his work and he works in life as he lives it, with integrity. David is one of our finest employees and he is irreplaceable." Says Loretta Wyss. "He is a dependable and outstanding Amish craftsman who is liked and trusted by all that have worked with him."

David is a married family man with six children who is led in life by his strong faith.

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THE OFFICIAL NFBA MAGAZINE

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NFBA WEBINARS

NFBA WEBINAR

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NFBA WEBINAR

ONLINE

1:00PM - 2:00PM CENTRAL

ARCHITECTURAL ALTERNATIVES FOR POST-FRAME BUILDING SYSTEMS

1:00PM - 2:00PM CENTRAL

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2015 POST-FRAME BUILDING DESIGN MANUAL – 2ND EDITION 1:00PM - 2:00PM CENTRAL ONLINE 800-557-6957 OR MMILLER@NFBA.COM WWW.NFBA.ORG/INDEX.PHP/CALENDAR



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32 / FRAME BUILDER - DEC2020

THE ECONOMIC RECOVERY OUTLOOK FOR WHERE YOU LIVE: FOUR THINGS TO KNOW

The shape of the recovery in your business is first and foremost a function of the decisions that you make. Ultimately, it is not up to the federal government, state/ municipal governments, or COVID-19. However, these three influences must be considered to varying degrees based on the nature of your business.

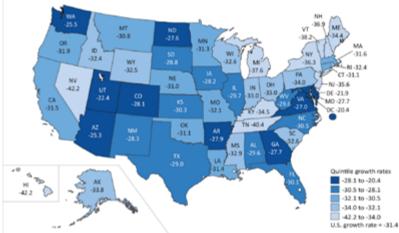
BY Brian Beaulieu CEO of ITR Economics



e are going to take a look at some state influences. Perhaps they won't impact your business directly, but they could have a bearing on your finances and the economic well-being of your community.

1. The GDP hit was not equally felt

Percent Change in Real GDP by State, 2020:Q1–2020:Q2



The lightest blue are the more severely impacted states, based on Bureau of Economic Analysis data. New Jersey is particularly notable as a state in trouble given the drop in GDP and a significant drain of its "rainy day" funds.

Medium- to light-blue-colored areas that are heavily dependent on tourism are not a healthy combination heading through 2023. The states best suited for a rebound are the darker-colored states that are more dependent on manufacturing.

The darkest-colored states (less severely impacted) are (from left to right) some of the better prospects for recovery:

- Washington
- North Dakota
- Utah
- Arkansas
- Colorado
- GeorgiaDelaware
- Arizona
- New Mexico

2. Some states are better positioned to ride through the economic storm

A hit to revenues for the states could also impact credit ratings and impair longer-term prospects in addition to creating pressure on cutting services and raising taxes in the near term based on debt obligations and how well those obligations are funded.

What we are looking at via the list below are states that are the least heavily in debt as a percentage of GDP (in order from least indebted to more indebted):

- WyomingIdaho
- Oklahoma Delaware
- North Carolina

continued on page: 34

3. It is good to have low debt levels, but having well-funded debt also matters.

The next list presents the five states with the most complete funding:

- Wisconsin
- South Dakota
- Tennessee
- Idaho
- North Carolina

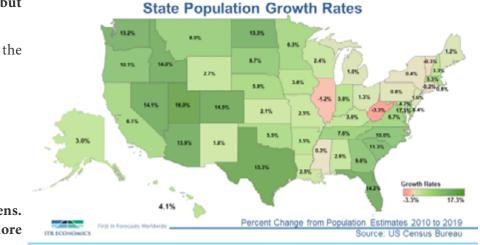
4. The map above is where it all happens. Demographics drive growth because more people equals more economic activity.

Adding up the lists, with a state having to appear on at least two of them, indicates the best prospects for a sooner-rather-than-later recovery from the COVID Recession are:

- North Carolina Utah
 - Arizona
- GeorgiaTennessee
- Idaho
- Colorado

Knowing where the best economic prospects are from 2021–2023 considering COVID, finances and demographics means businesses can take action by allocating resources in geographic areas where it may do the most good. Perhaps you aren't in a position to shift gears in these states, but you likely know which of your customers face the greatest upside exposure from these states. I'd marshal my resources in a manner that ensures I am giving my company the best possible means of maximizing revenue and profits. Pivoting to where the better business will be provides an important leg up on the amount of recovery you will harvest.

About the author: Brian Beaulieu has served as CEO and Chief Economist of ITR Economics[™] since 1987, where he researches the use of business cycle analysis and economic forecasting as tools for improving profitability. Brian has shared his highly valued research results via presentations, workshops, and seminars in numerous countries to hundreds of thousands of business owners and executives for the last 38 years.





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