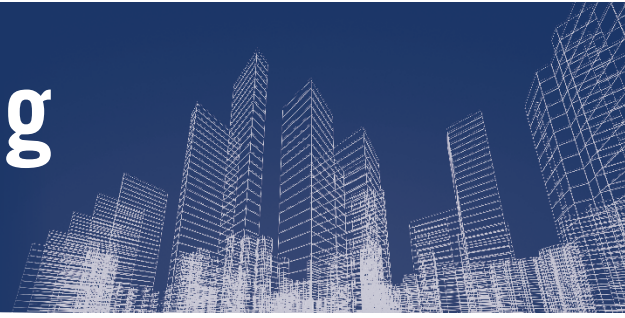


Research Revolutionizing Commercial Real Estate



Industry Trends Poised to Impact CRE

Self-driving cars, co-working facilities, resiliency and — of course — technology are four leading trends influencing CRE. These and other topics were discussed during the Industry Trends Task Force meeting at CRE.Converge 2017 in Chicago, where NAIOP Research Foundation governors and guests were asked to identify emerging topics that might lend themselves to further research.

Autonomous and electric vehicles. This issue was the focus of several discussion groups who questioned how the implementation of autonomous vehicles (AV) and electric vehicles (EV) will impact the built environment in the near term and into the future. How will parking (both surface and garage), be repurposed with the advent of AVs? How will gas stations be redeveloped? Will people live farther from jobs as AVs enable more efficient commutes? EVs are powered by lithium batteries, which are harmful to the environment during their assembly and disposal. How can the environmental impact of these processes be mitigated? Additionally, how will the electric grid adjust to the charging of EVs on a mass scale and a 24-hour basis?

The WeWork Phenomenon. Participants were interested in knowing about the impacts of the rapidly growing company WeWork, as well as other similar companies. They noted tenant improvements are costly with WeWork, and asked if it is worth having co-working operators in a building. What will happen to large co-working operators during an economic downturn? Raymond Torto, lecturer at Harvard University's Graduate School of Design, posited that WeWork would survive a downturn due to

their access to unfettered capital and the ability to offer flexible office leases, which will then be in demand.

Resilient Cities and Buildings. Extreme weather and natural disasters are altering the built environment on a tremendous scale. Are people moving away from the coasts as a result, and could the central U.S. experience population growth? How are developers and cities responding? What types of resilient buildings are being built? How is the insurance industry responding to impacted CRE? On a related note, one participant asked how CRE is responding to terrorism, such as securing buildings with technology and purpose-built precautions and increasing monitoring.



Technology and CRE. How are drones being used in CRE now and in the future? What exactly is blockchain technology and what are its uses and implications for the CRE sector? Participants showed interest in smart cities and how sensors are being deployed to create safer, more enjoyable urban experiences.

The Foundation's research committee will consider these topics and more as it develops the research agenda for the short- and long-term. See a complete list of upcoming research at naiop.org/research. ■



The NAIOP Research Foundation fosters building better communities through practical research and education that advances the quality, and makes evident the benefits, of commercial real estate ownership and development. The Foundation's work empowers developers, owners and investors to make sound decisions informed by cutting-edge data and analysis.



Governors

Governors support the Foundation's program of work through pledging significant financial support and by giving their time and sharing their expertise.

Industry Trends Task Force

NAIOP leaders and Research Foundation Governors meet annually to identify trends that will impact the industry in the intermediate and long term, often leading to future research.

Distinguished Fellows Program

Engages the nation's foremost commercial real estate, economic and public policy experts and serves as a bridge between the practicing commercial real estate sector and the academic community. The program is supported by the Research Foundation, and Fellows conduct and utilize the Foundation's reports.

National Research Directors

Thought-leadership from industry meetings with national research directors from major commercial real estate brokerage and data firms is applied to future research topics. ■

Visionaries Lend Their Voice to the Research Foundation

The inaugural class of the NAIOP Visionaries was introduced at CRE.Converge 2017 in Chicago. Ten individuals were selected based on their career accomplishments, history of involvement with NAIOP, and a demonstrated interest in the Research Foundation's mission.

"The Research Foundation Visionaries are individuals 40 years of age and less who want to connect with the Foundation's mission and share their time and perspectives toward our work," said Research Foundation Chairman Ralph Heins, president of Primera Companies in Dallas. "We believe these fresh viewpoints will bring a new dynamism to the Foundation's research, and on behalf of the governors, it is my honor to recognize the inaugural group of Visionaries to the program."



The Foundation established the program with the goals of:

1. Providing an opportunity for exemplary industry professionals in the early part of their careers to gain industry and career development insight from governors.
2. Recruiting rising industry leaders whose expertise and experience will help inform the Foundation's research development process.
3. Ensuring that the perspectives of NAIOP members under age 40 are represented in Research Foundation activities and discussions.
4. Educating Visionaries on the benefits of becoming a governor by exposing them to thought leadership and mentoring.
5. Cultivating future governors to support the Research Foundation's work.

"The continued growth of the Governors program has made for more robust and insightful discussions at Foundation meetings, as more geographic regions and company types are represented," said Marc Selvitelli, CAE, executive director of the NAIOP Research Foundation. "Engaging these rising industry professionals will bring important new perspectives to the Foundation's work."

Professionals age 40 and under make up an increasing percentage of the commercial real estate profession and NAIOP's membership. Developing Leaders (individuals age

Visionaries Lend Their Voice — continued on page 3

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Visionaries Lend Their Voice — continued from page 2

35 and under) comprise 28 percent of NAIOP's total membership and 53 percent of new members annually.

Meet the Visionaries:

Lewis Agnew

President, Chas. Hawkins Co. Inc./CORFAC International
Nashville, Tennessee

Jordan Angel, CMB

Senior Director, HFF
San Francisco, California

Kate Bryden

Vice President — Development, MRP Industrial
Baltimore, Maryland

Peter Coccoziello, Jr.

Director of Asset Management, Advance Realty Bridgewater, New Jersey

Megan Creecy-Herman

Vice President, Leasing and Development, Liberty Property Trust
Scottsdale, Arizona

Matt Milich

Vice President, Pearlmark
Arcadia, California

Drew Richardson

Director of Leasing, Primera Companies, Inc.
Dallas, Texas

Lex Rickenbaker

Executive Director Investments
USAA Real Estate Company
Atlanta, Georgia

Colleen Wevodau

Senior Manager, Baker Tilly Virchow Krause, LLP
Vienna, Virginia

Chris Zarek

Partner, Form Development
Salt Lake City, Utah

The next application period will open July 2018. To learn more about the Visionaries program, visit naiop.org/visionaries. ■

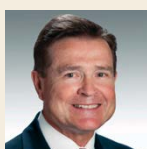
Viewpoint

How do you cultivate leadership skills in your organization?



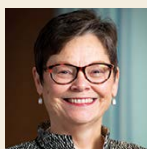
“At Langan, I would describe it as twofold. On the formal side, we offer several off-site leadership training courses to our rising executives over the course of two years. On the informal side, we identify those with the strongest leadership skills and promote them upward through the organization, allowing them to have a positive impact on our growth, our people and our company culture.”

David Gockel | President and CEO, Langan



“Cultivating leadership skills in my experience requires three main elements: 1) Continual training and communication of leadership styles, skills and techniques in line with the organization's mission and vision; 2) Empowering team members with responsibility based upon this training that provides learning opportunities and builds upon their individual leadership style and skill sets; and 3) Providing constant, timely and honest feedback that reinforces the organization's desired leadership traits and results.”

Skip Kalb | President, Skip Kalb Strategies, LLC



“We choose to assess talent and skill gaps and are intentionally mentoring and providing experiences to learn. In 2016, we completed an internal leadership/ talent assessment to understand our leadership depth and potential. We are dedicating the time to do this to ensure that we have solid succession planning in place and are intentional about providing opportunities and visibility to the rising talent within the organization. We specifically focused our assessment on leadership skills including thinking and strategy, driving performance, developing talent and relating to others and leadership characteristics including confidence, emotional intelligence, flexibility, self-development focus and credibility. We utilized a third-party consulting psychologist to facilitate the process which gave credibility to the outcomes of the assessments to our employees. From the assessments each employee identified, in collaboration with their supervisor, one or two development goals. This was followed by outlining specific development plans for each goal. Ultimately I believe this has created a culture of mentorship and re-energized learning inside the organization.”

Eva Stevens | President and COO, United Properties ■



Meet a Governor: Jack Schultz

CEO, Agracel Inc. | Effingham, Illinois

Q. Why does this market cycle seem longer?

A. This cycle has gone longer than nearly anyone expected, and it's a bit like déjà vu, the way we've seemingly been in the sixth or seventh inning for about two years. Low interest rates that are driving capital not only into our industry, but also into our clients' industries, have prolonged it. Agracel's primary clients are manufacturers, and capital plays a larger role in this industry than it does in office product, for example. This continuing influx of capital has given our clients the confidence to expand, and that's good for our business too.

Q. Why are we seeing such robust manufacturing growth in the U.S.?

A. Companies from Europe and Eastern Asia are opening manufacturing facilities in the U.S., in addition to domestic companies expanding. Along with low interest rates, a driving factor for relocation and expansion is low energy costs in the U.S. compared to the rest of the world. The cost of natural gas in Europe is triple what it is in the U.S., and quadruple in China. I recently visited a glassmaking plant in Pennsylvania whose energy and labor costs were \$10 million each. In China, although the labor would be far less expensive, the energy cost would be \$40 million annually. It's a smarter business decision to keep that business in the U.S.

Q. Why did you become a NAIOP Research Foundation Governor?

A. In 1995, I attended my first NAIOP conference, and shortly afterwards joined a National Forum. That decision changed my life and my businesses. I truly learned the development business from the members of the Forums, and over the last two decades, that knowledge has helped me grow my business from 72,000 square feet in two buildings to 15 million square feet across 150 buildings. Joining the Research Foundation Governors was another game changer. It's given me the opportunity to give back to the industry, and also to NAIOP, with all that the association has done to nurture this neophyte and turn him into a developer.

Q. Why is the Foundation's work important?

A. There is so much in our industry that needs to be researched and publicized, and the work of the Foundation is unique. The Foundation's reports, particularly the annual study on CRE's economic impact or the demand forecasts for industrial and office, are advantageous for the industry, helping elevate it and those driving it today to run better businesses.

Jack Schultz joined the Research Foundation Governors in 2011. He has been a member of the NAIOP National Forums for private development and entrepreneurial investment and development. He founded Agracel Inc. in 1986, and the company has developed over 14 million square feet of industrial space in 20 states. ■



Will Office Densification Continue?

Has densification of the office environment reached a tipping point? Yes, say research directors from national real estate brokerage, data and investment firms, whose consensus is that on the whole, office densification is either approaching or has already reached a tipping point, as most of the larger office space users have already downsized and the smaller ones that are left to downsize are not expected to move the market.

These research directors came together in mid-September at an annual gathering hosted by the NAIOP Research Foundation.

Sarah Dryer, director of research, Washington, D.C., region for Savills Studley, stated the trend will vary by industry. Tech firms, for example, might continue to shrink their office footprints but others want to “right size” as different industries use space in different ways. **Elizabeth Norton**, managing research director for Transwestern’s Mid-Atlantic region, noted that many larger firms have already restructured, but when one considers that average lease sizes range between 8,000 and 10,000 square feet, she does not know if it will be possible for the smaller firms to contract further, given that they are starting from such a low basis.

One participant noted, however, that there may be possibilities for contraction among public sector tenants. “Current federal government offices are still relatively large but new leases are smaller by 15 to 20 percent,” said **Revathi Greenwood**, Americas Head of Research at Cushman & Wakefield. “There is still room for densification within the federal sector and with some of the Washington, D.C., law firms as they move their libraries online.”

Jim Costello, senior vice president at Real Capital Analytics, and **John Chang**, first vice president of research at Marcus & Millichap, believe that going forward, it is unlikely there will be continued contraction among office space users. They noted that for some employers building out new space, individual workstations are smaller, but collaborative spaces are larger, resulting in no loss or gain of square footage upon execution of new leases.

The participants noted that resizing and open plans are not always optimal, as densification can lead to decreased productivity among workers and stretch the limits of building systems (e.g., HVAC and bathrooms), a challenge faced by numerous owners. “Some companies have crunched so small that they actually have to renegotiate space,” said **Ray Wong**, vice president at Altus Group in Toronto. He countered by saying, “I think there’s still some room in the marketplace to densify, but at what cost? Productivity and densification need to balance. Densification for densification doesn’t make sense.” ■

Meet Our 2018 Officers



William Hunt

Chairman, NAIOP Research Foundation
President, The Elmhurst Group
Pittsburgh, Pennsylvania



Eva Stevens

Chair-elect, NAIOP Research Foundation
President and COO, United Properties
Bloomington, Minnesota



Jack Schultz

Secretary/Treasurer, NAIOP Research
Foundation
Founder and CEO, Agracel, Inc.
Effingham, Illinois

In Memoriam

The Research Foundation lost two longtime governors in the second half of 2017.



George Livingston passed in July at the age of 81. Known throughout the industry and the Research Foundation as a visionary thinker, trusted advisor and friend, he played an instrumental role in building the Foundation's capacity to produce excellent, actionable research. Always curious about issues affecting the industry, he had an innate ability

to notice and explain emerging trends that could influence the CRE industry. Since joining the governors in 2005, he worked closely with the Foundation's Research Committee to identify specific topics that needed exploration and help to advance the Foundation's work.

George was founder and chairman of NAI Realvest. He was an icon in the Central Florida real estate community and was involved in the development of about 2 million square feet of warehouse and flex properties. A NAIOP member for more than 30 years, he served in leadership roles at NAIOP Central Florida and was a 20-year member of the Industrial Development I National Forum.



Terry Stiles died in September at age 70 after a battle with esophageal cancer. He was an inaugural member of the Foundation, joining in 2001, and was instrumental in the development of the Foundation and identifying its research focus as the Foundation set forth its mission. He was a 35-year NAIOP member and a member of NAIOP South Florida. Prior

to joining the Research Foundation governors, Terry served as NAIOP chairman in 1998, helping members to stay market-smart during the ever-evolving economic cycles and bolstering NAIOP's legislative efforts with his strong support.

Stiles and his company, Stiles Corporation, were the driving forces behind the Class A office tower boom in Fort Lauderdale, eventually building more than 43 million square feet of commercial and multifamily real estate in South Florida. ■

The NAIOP Research Foundation newsletter compiles strategic resources and analysis selected from the Foundation's work and features its governors. It is published by the NAIOP Research Foundation. ■