Commercial Real Estate Impact of Driverless Cars

Driverless cars will set in motion a number of trends that will affect the commercial real estate world. A potential reduction in accidents of 90 percent with full adoption of driverless cars would result in roughly 30,000 less accident fatalities annually and over $800 billion in savings annually. Amazing gains in fuel efficiency could spark a consumer spending boom that may set forth an explosion of job creation. The same also may result in a fuel exporting benefit that could be America’s “get out of jail free” card when it comes to paying off the national debt or funding entitlements.

Driverless trucks could radically transform the trucking industry; lowering costs, resulting in seismic shifts speeding the supply chain. America’s industrial marketplace is already undergoing a radical transformation, fueled currently by the rise of e-commerce. Amazon, in pursuing its goal of a national same-day delivery infrastructure, already has roughly 60 million square feet of distribution center space in the United States. They’ll be taking that number to 90 million square feet by 2016. And virtually every major national retailer is trying to keep pace; opening e-commerce fulfillment and distribution centers closer to consumers than ever before and driving record levels of industrial demand that could surpass 150 million square feet of occupancy growth in 2014 alone.

Having trouble getting your mind around that abstract number? It’s the equivalent of 2,604 football fields being occupied in one year’s time. Not all of this is from e-commerce or distribution users, but the overwhelming majority is. Driverless trucks would mean faster delivery to these centers from U.S. ports of entry and could allow for users to go with more distribution centers (at a smaller footprint) but be even closer to consumers.

But the real change may prove to be about lifestyle. The creation of the interstate system in the 1950s helped to drive a massive demographic shift in the United States as affluent and middle-class Americans increasingly migrated out of America’s great cities and out to the suburbs. And that is largely where they remained for roughly the next 40 years.

But starting about 20 years ago we began to see more and more Americans moving back into the city. Cities with once-blighted urban cores suddenly were reborn as in-migration fed both by young and old revitalized downtowns across the nation. That trend has only accelerated with the coming of age of millennials, even while we continue to see in-migration to urban areas by baby boomers. But driverless

Upcoming Research

Take a closer look at some of the issues the Research Foundation is currently studying. Official findings will be published in 2015.

- **The New Sharing Economy and Implications for CRE**
  John Madden, Light House Sustainable Building Centre
  The new sharing economy will yield significant economic implications for the industry. This piece examines its financial impact and other effects, including spatial impacts on business and community design. January 2015

- **Value Determinants for E-Commerce Fulfillment Centers**
  Jonathan A. Wiley, Ph.D., Georgia State University
  Measures the baseline valuation difference between e-commerce fulfillment centers and non-fulfillment industrial property, aiding investors, owners and developers in making informed decisions on site selection, design and investment strategies. June 2015.
Dear Industry Leader,

The NAIOP Research Foundation is a strategic partner to the commercial real estate industry, providing cutting-edge analysis and insights that lead to sound decision making now and in the future.

Since 2000, the NAIOP Research Foundation has commissioned and published in-depth studies exploring some of the most complex issues facing the industry. The development of reliable data in such areas as space demand, global market dynamics, demographics, workforce composition, sustainability and transportation are just a few examples of how the Foundation serves the industry through its work.

Our role is critical—keeping developers, owners and investors ahead of the curve with groundbreaking and thought-provoking research.

I want to thank all those involved with the Research Foundation for their commitment and passion for its mission to build better communities, with special acknowledgement of the Foundation’s 42 Governors—an elite group of industry leaders who, united in their commitment, have created an endowment to provide an assured source of funding for core research activities.

Together, we are shaping the future of the industry. I invite you to enjoy this inaugural issue of the NAIOP Research Foundation’s newsletter and, through our reports, learn about innovations and opportunities driving the industry. Join us in supporting the Foundation and engaging in strategic dialogue that paves the way for business, partnerships and growth.

Sincerely,

Lawrence A. Pobuda
Senior Vice President and General Manager
The Opus Group | Phoenix, Arizona
2014 Chairman, NAIOP Research Foundation

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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.

**Governors:** Individuals who demonstrate considerable dedication to guiding the future of the commercial real estate industry by pledging significant financial support of the work of the Research Foundation are invited to accept the lifetime distinction of Governor. Governors support the Foundation’s program of work through their contributions and by giving their time and sharing their expertise.

**National Research Directors:** National research directors from major commercial real estate brokerage and data firms convene annually with NAIOP Research Foundation staff to discuss current and future market conditions for office, industrial, retail and multi-family. Their thought-leadership informs future research topics.

**Industry Trends Task Force:** The Industry Trends Task Force, comprising NAIOP leaders and Research Foundation Governors, identifies trends that will impact the industry in the intermediate and long-term, and serves as an early warning system by recognizing challenges and opportunities. The group meets annually and its combination of macro-level thinking and practical application often leads to future research.

**Distinguished Fellows:** The Research Foundation’s Distinguished Fellows Program engages commercial real estate, economic and public policy experts. Its members are active throughout NAIOP and serve as a bridge between the practicing commercial real estate sector and the academic community. It is supported by the Research Foundation and Fellows conduct and utilize the Foundation’s reports.
Without even introducing the element of driverless cars into the equation, we see an increased interest in suburban living on the horizon for many in this demographic. And we suspect that office users will follow some of their more senior employees to the suburban office marketplace—a sector of the market so far largely neglected in this recovery period. This is likely to happen not in any great overnight shift, but gradually, in a lily-ponding effect of suburban campuses tied to urban headquarters. Rising costs for commercial real estate in core markets will help drive this trend as well. But throw in the impact of driverless cars and now we have a real game changer.

Driverless cars will be wired. Occupants will be able to watch television, surf the web or work… on the way to work. Car connectivity via both wireless and satellite providers will become a booming industry. That is not even to mention all of the smartphone apps that will be created to connect with your car.

Business has always followed resources and the tech industry is no different. The difference now, however, is that those resources are human resources and it has been in pursuit of young, tech talent where we have seen employers focus their growth. The result has been that markets like San Francisco, Boston, Austin and other “cool cities” have emerged as some of the hottest local economies, with booming office markets.

Consider this: the average age of a worker at Google, Facebook, LinkedIn, Apple and dozens of the unicorn tech players we work with ranges between 29 and 32. The drive for urban living makes perfect sense at that age. Will it as these millennials begin to marry and have children over the next five years? Meanwhile, the cost of living in these top growth cities is skyrocketing with real estate costs (to lease and buy) leading the way. Real estate prices will continue to be elevated in places like New York and San Francisco simply because of the sheer convenience, but a $120,000 per year wage earner in San Francisco could trade a mortgage payment on a 600-square-foot condo in the City in exchange for a 3,000-square-foot home with good public schools in Sacramento—so long as they could handle four hours a day in a car where they could work or otherwise entertain themselves. But those are just the extreme examples. Would this also play out in places like Austin or Nashville or Denver—where the commute between expensive and cheap residential real estate is much shorter? Absolutely, if not more so.

None of this will change the fact that millennials prefer “urban lifestyles,” but the smart players in the commercial real estate industry will strive to create suburban communities that have an urban feel. What will be hot? Town center environments with mixed-use development where retail, office, multifamily and hospitality elements work together to give an urban center feel. Yet, these will be situated within communities where neighborhoods with affordable single-family homes are plentiful. We see this as a likely trend, regardless of driverless cars. But throw in the impact of driverless cars and the resurgence of the suburbs may simply be a given.

Could high costs in the city and more livable commutes in driverless cars potentially lead to the type of urban flight that we saw from the 1950s through the 1970s? Probably not. A two-hour commute is still a burden even if you can watch YouTube videos the entire way. But make no mistake, it will have a major impact on the American lifestyle and that will play out in the commercial real estate market.

Garrick Brown, explores the potential impact of what promises to be the most influential new technology introduced since the smartphone. Brown is a member of a group of national research directors from major commercial real estate brokerage firms whose thought leadership is applied to NAIOP Research Foundation topics.
Upcoming Research
– continued from page 1

• The Promise of E-commerce
  Steve Schellenberg, IMS Worldwide
  Examines how delivery expectations are dictating the location and design of real estate facilities, including case studies of companies currently developing their e-commerce strategies for marketing, processing, packaging, inventory tracking, deliveries and returns. March 2015.

• Creation of a Model to Forecast Demand for Office Space
  Hany Guirguis, Ph.D., Manhattan College, and Joshua A. Harris, Ph.D., CAIA, University of Central Florida
  The creation of a model that will predict demand of office space two years out, using data on employment, GDP growth, interest rates, and consumer and business confidence. November 2015.

Meet a Governor

Frank Wuest
President, Forest City Enterprises | Boston
Forest City Science + Technology Group
Cambridge, Massachusetts

Q: Why did you become a NAIOP Research Foundation Governor?
A. The Governors are a remarkable group of industry leaders from varying backgrounds and markets that come together with the goal of producing worthwhile, forward-thinking studies, and I wanted to be a part of it. I’d known some of the founding Governors and had immense respect for them and their work, and by becoming a Governor myself, I was joining in their commitment and mission of giving back to the industry in this tangible way.

Q: How does the work of the NAIOP Research Foundation benefit the industry?
A. In order for the industry to continue to develop real properties and build communities, we need sources of expertise and knowledgeable analyses for demand, innovation and where opportunities for growth can be found. As a Governor, I’m proud that the research we deliver provides those insights on a very deep level. Our research is making a positive and long-lasting difference.

Q: What specific reports have been valuable to you?
A. I’m always looking at demand – Where’s the growth? What are the opportunities? The Foundation’s demand forecasts and reports on market performance and growth opportunities are helpful to my business. I’m always interested in intelligence related to the new economy, and so I’m looking forward to next year’s report on the impact of the shared economy on commercial real estate.

Q: What’s been the most significant advantage in being a Research Foundation Governor?
A. The professional and personal connections I’ve made with my fellow Governors are invaluable, as Governors tend to be more senior and thoughtful industry leaders who can provide guidance on how to survive in tough times and thrive in bustling ones. I joke when I call the Governors my “kitchen cabinet,” but they’ve truly become a circle of advisors. Certainly being a Governor has allowed me to establish firmer, collegial relationships on a deeper level, and I look forward to getting together throughout the year.

Q: What’s next for our industry?
A. We’re headed into a period of immense and rapid change, given how changing demographics are swiftly impacting the nation as a whole. I’ve always said that the most successful people in our industry are the ones who are constantly looking ahead, and that’s true of the Research Foundation. I’m proud to be part of an organization that’s helping our industry envision what the future looks like instead of looking over our shoulders at the past. It’s an exciting time.

Frank Wuest is a NAIOP Research Foundation Trustee and serves as a member of the Foundation’s Research Committee. Responsible for the management of Forest City’s national life science portfolio, as well as all new investment activity initiated in the Boston region, Wuest has been a NAIOP member since 1982, is a current member of the Capital Markets I National Forum, and served as a member of the NAIOP Board of Directors and as past president of NAIOP Massachusetts.
A Foundation Report

Research into Changing Workspaces Prepares Industry for Opportunities

A suite without doors or offices but full of employees from different companies—that’s the office of tomorrow. Advances in technology, telecommuting options and decreased spatial needs are fostering a new type of workplace layout: the co-working center. While already present in some metropolitan areas of the country, coworking centers are expected to grow in popularity in the coming years, sprouting new possibilities and challenges for commercial real estate.

To prepare owners, investors, developers and others in commercial real estate development for what has the potential of wide-sweeping change, the NAIOP Research Foundation published “Workplace Innovation Today: The Coworking Center.”

What began in 1959 with the advent of an incubator, or simply the renting of empty space by grouping together small businesses, during the next 40 years evolved into innovation centers—where companies like AT&T, Johnson & Johnson and Microsoft, to name a few, found a way to stay relevant in an age of open sourcing.

Then came accelerators, otherwise known as “finishing schools for entrepreneurs,” in that they provide technical and educational assistance, mentoring, networking resources and physical workspace.

Technological and social forces—the Internet, social media and Wi-Fi—are to thank for the latest trend of coworking centers. Today’s young workers prefer to share information in an open-sourced, nonhierarchical way. They expect a workplace with no doors or even walls, no set hours and few professional boundaries, and freelancers and entrepreneurs working outside traditional companies view it as an opportunity to save on overhead costs.

Key Findings

Aside from looking through the historical lens of office layouts, the report reveals some surprising data:

- U.S. coworking centers have grown from just one in 2005 to 781 in 2013.
- In just one year (2012-2013), the number of coworking spaces increased by 83 percent.
- New York led the country with 73 coworking spaces, and San Francisco ranked sixth worldwide with 38 (as of October 2012).

The study found that the more coworking spaces located in a geographic area, the more profitable the spaces. Beyond location, tenants respond positively to flexible lease terms, bike storage, nearby coffee shops and Wi-Fi.

The Impact and Future of CRE

While coworking centers may not start appearing on every street corner like Starbucks, this growing trend will undoubtedly influence the way commercial real estate does business.

Coworking centers can be assets to commercial property owners, both as tenants and generators of spinoff companies that may become future tenants. Though no particular building location, base building type or building features are required, things like slowly-increasing rent structures, short initial lease terms with extension options and creative tenant improvement arrangements can go a long way toward attracting a coworking center as a tenant.

“Workplace Innovation Today: The Coworking Center” was authored by Andrea Foertsch, Founder, Disruptive Space; Principal, Melrose Real Estate Strategies and Visiting Lecturer, Baker Program in Real Estate, Cornell University. The report chronicles the evolution of innovative workplaces, explains how coworking centers are formed, financed and structured, and showcases five case profiles of distinct coworking centers. It was published by the NAIOP Research Foundation in January 2014.

www.naiop.org/workplaceinnovation
Research Foundation Governors

Guided by their vision and experiences, the NAIOP Research Foundation’s 42 Governors support the Foundation’s work by contributing their time, talent and expertise. Their varied perspectives enable the Foundation to objectively measure and evaluate issues of critical importance to industry growth and prosperity.

Governors help shape the Foundation’s research agenda by serving on committees and giving direction to research projects undertaken. Throughout the year, they enjoy exclusive networking and invitations to special events.

To join the Governors, contact Bennett Gray at gray@naiop.org or 703-904-7100.