

Cutting-edge Research That Has an Impact

2020 ANNUAL REPORT

Celebrating the 20th Anniversary of the NAIOP Research Foundation



Ronald Rayevich,
President
Raymar Associates, Inc.

Twenty years ago, NAIOP saw a shift as small local development companies began transforming into regional powerhouses. These firms required an established source of professional, vetted knowledge to continue to thrive and meet the evolving challenges of the industry.

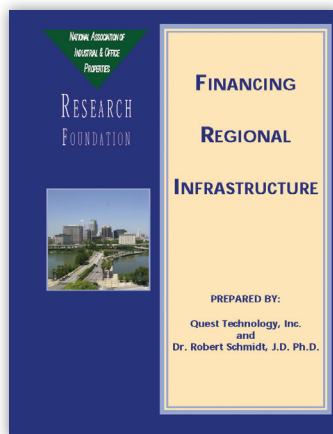
To answer this need, NAIOP established the NAIOP Research Foundation in 2000 under the guidance of 1997 NAIOP Chairman Ronald Rayevich.

From its first report published in 2002, “Financing Regional Infrastructure,” to its most forthcoming (at the time of publication), “A New Look at Market Tier and Ranking Systems,” the Foundation has delivered insights into a broad scope of trends and topics shaping the industry for the past two decades. Today, through the generosity and support of the 60+ Foundation Governors, NAIOP’s annual research budget is \$100,000, with numerous reports commissioned and published annually.

“We established the Foundation to respond to multiple groups within NAIOP — the National Forums, the education committee, the board of directors — who were all voicing the same need for practical, thorough industry research,” said Rayevich. “In 2000, the board of directors formed a team to develop a solution, and our recommendation was to establish a foundation funded by individuals, now called Governors, who were willing to make a significant investment to create



an endowment that would generate income to be used for research. Our original objective was to have 10 Governors — today we have 66 and have established a sizeable endowment that will generate income in perpetuity.”



Through the development and dissemination of cutting-edge research and outreach activities, the NAIOP Research Foundation will continue to play a vital role in helping the industry stay competitive by identifying best development practices, future opportunities and strategies.

This annual report highlights some of the Foundation’s activities in 2019, with an eye to the exciting research, activities and deep dives to come in 2020 and beyond.

To learn more, visit naiop.org/research.

The Latest in Innovative Research



Economic Impacts of Commercial Real Estate, 2020 U.S. Edition

Development and construction of commercial real estate across the United States — office, industrial, warehouse and retail — generate significant economic growth at the city, state and national levels. This study measures the contribution to GDP, salaries and wages generated, jobs supported, and more from the development and operations of commercial real estate in the United States.

In 2019, combined commercial, residential, institutional and infrastructure development and operations yielded the following economic benefits:

- Contributed \$3.9 trillion – 18.1% of U.S. GDP
- Supported 26.2 million American jobs (a measure of both new and existing jobs)
- Generated significant personal earnings and state revenues, adding inventory to attract new businesses and jobs

This annual report also includes data by state.

naiop.org/contributions20



Creating a Private Equity Fund: A Guide for Real Estate Professionals

The NAIOP Research Foundation commissioned this white paper to help demystify private equity fund formation and operation. It is geared toward those who have limited familiarity with the process and want to learn the basics. The authors provide step-by-step guidance, along with an example of a fund waterfall and a case study of how one company successfully used a series of private equity funds to seek out opportunities during the financial crisis when other sources of funds were limited.

naiop.org/privateequityfund

It is this sense of purpose, ownership, trust and giving back that drives the Foundation's work.

Coming in 2020

Recognize Sustainers Fund donors who supported the Foundation with an annual gift

Industrial Space Demand Forecast Q1

JAN

Economic Impacts of Commercial Real Estate, 2019 Edition (U.S.)

FEB



Addressing the Workforce Skills Gap in Construction and CRE-related Trades

A shortage of construction and logistics workers has increased the cost of construction for developers; it has also hampered the expansion and profitability of warehouse and distribution centers. This report explores some of the contributing factors to the workforce shortage and how the construction and logistics industries can improve worker recruitment, training, productivity and retention. The author interviewed several national and regional workforce development program leaders to learn about their partnerships with industry to recruit and train the next generation of construction and logistics workers.

naiop.org/workforceskillsgap



Profiles in the Evolution of Suburban Office Parks

Many suburban office parks in North America are now functionally obsolete due to their location, layout or limited amenities. The NAIOP Research Foundation commissioned this report to identify ways that firms are revitalizing suburban office parks through redevelopment, rehabilitation and adaptive reuse. The author interviewed five developers who have recently updated suburban office parks in the United States and Canada to learn how they made these properties relevant for today's market.

naiop.org/suburbanofficeparks



Preparing for Autonomous Vehicles: A Survey of Local Governments

Municipal governments, through their abilities to set and enforce regulations, will play an important role in determining how transportation and land use evolves in response to autonomous vehicles (AV) adoption. This report describes how local governments are preparing for fully autonomous vehicles and explores how future AV-related policies could affect the commercial real estate industry. The author interviewed eight community leaders from local governments in the United States, Canada and Australia and reviewed recent secondary sources to identify significant trends in AV development and related municipal policies.

naiop.org/autonomousvehicles

MAR

A New Look at Market Tier and Ranking Systems

Dividing and grouping the major metropolitan regions of the United States into ranked groups or "tiers" is a frequently-used method to evaluate, prioritize and rank markets for investment. This project will provide an understanding of the origins, methodologies and uses of market tier models. The project will also assess the implications and risks of using these models and will explore how they may evolve in the future.





Repurposing Retail Centers: Profiles in Adaptation, Repositioning and Redevelopment

The growth of e-commerce and shifting consumer tastes have led to the decline and closure of hundreds of malls across North America. Although these closures bring economic disruption, the properties they leave behind are often strong candidates for redevelopment into new uses. The NAIOP Research Foundation commissioned this report to examine how developers are bringing new life to former malls by transforming them with uses, services and amenities that align with local market conditions and serve community needs. The author interviewed five developers who have recently redeveloped malls in the United States and Canada about how they have transformed and revitalized these properties.

naiop.org/repurposingretail

Foundation Research in the News

Research by the Foundation has been cited in leading news publications:



E-Commerce Made Warehouses Hot. Trade War Could Cool Them Down.

Wall Street Journal
September 17, 2019

“In a new report, trade group NAIOP forecasts that less new industrial space will be occupied over the next two years, compared to the past two years. The group says the difference between new space being occupied and old space being vacated will drop to 37 million square feet per quarter over the next two years, down from 60 million over the past two years.”



The Home Depot Foundation Goes Back To School

Forbes
September 30, 2019

“Commercial real estate is similarly influenced by shortages of construction and logistics workers. In July 2019, the NAIOP Research Foundation published a commissioned report which, among several of its conclusions, magnified a pressing need for the construction and logistics industries to invest in training and recruiting high school students.”



The Suburban Office Park, an Aging Relic, Seeks a Comeback

New York Times
November 19, 2019

“The millennial work force is getting older and finding suburbs more appealing than they did 10 years ago,” said Dustin C. Read, a professor at Virginia Tech and the author of a recent NAIOP report on the evolution of suburban office parks.”

Governors, Trustees and Industry Trends Task Force meet at National Forums Symposium 2020

Members-only webinar on Industrial Space Demand Forecast

Summer Research Foundation E-newsletter

APR

MAY

JUN

New Governors and Visionaries inducted

Office Space Demand Forecast Q2

The Latest in Innovative Research continued

Industrial and Office Space Demand Forecasts

These forecasts provide an efficient, accurate outlook on current and future conditions in the U.S. commercial real estate market. The reports help to define linkages between economic and specific sector activity and the demand for office and industrial real estate.

The most recent Industrial Space Demand Forecast (Q3 2019) predicted decreased net industrial space demand amid slower growth in the U.S. economy. Absorption is now expected to average 37 million square feet per quarter for the next two years, a

significant slowdown from the average 60 million square feet of quarterly net absorption experienced during 2017 and 2018. (See Table 1, left)

naiop.org/industrialdemand

The most recent Office Space Demand Forecast (Q4 2019) predicted the U.S. office market will continue to perform as expected, with an average of 14.7 million square feet absorbed per quarter in 2019, and will remain strong at an average of 13.2 million square feet absorbed per quarter in 2020 and 12.7 million square feet per quarter in 2021. (See Table 1, right)

naiop.org/officedemand

TABLE 1
The NAIOP Industrial Space Demand Forecast with 70% Confidence Intervals
U.S. Markets, Quarterly Net Absorption

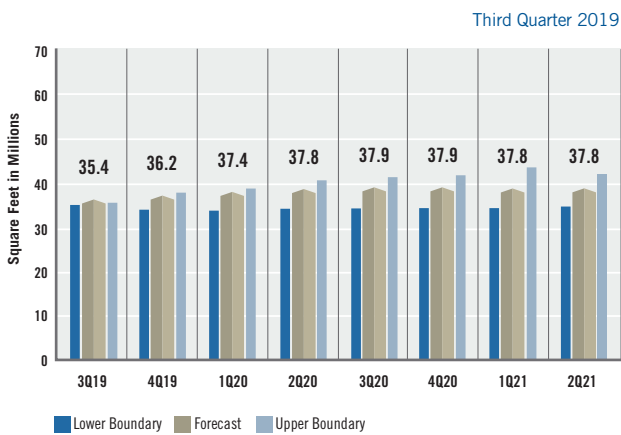
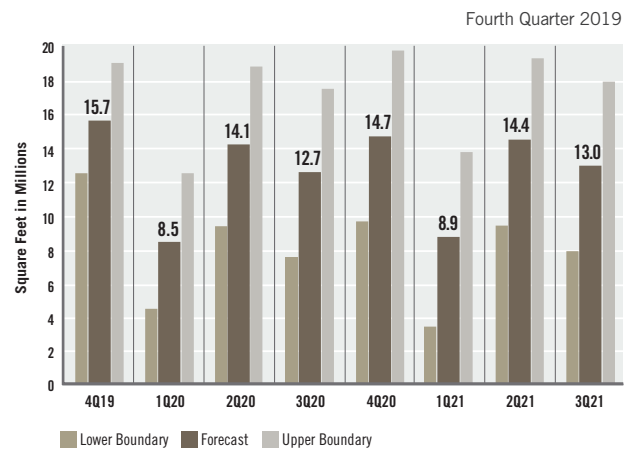


TABLE 1
NAIOP Office Space Demand Forecast with 70% Confidence Intervals
U.S. Markets, Quarterly Net Absorption



JUL

Development Approvals Index

In most jurisdictions, the approval process for commercial real estate development is lengthy, inefficient and can introduce considerable project risk. This project will develop a model development approvals index to rank jurisdictions across several performance metrics and allow them to be quickly compared. The resulting index will allow developers to become more fully informed about the development approvals processes in new markets and can be used by jurisdictions as a benchmark to improve their processes.



The Research Foundation's Distinguished Fellows Program engages the nation's foremost commercial real estate, economic and public policy experts.

Meet Our Distinguished Fellows

The Research Foundation's Distinguished Fellows Program engages the nation's foremost commercial real estate, economic and public policy experts. Distinguished Fellows are active participants in NAIOP and contribute articles to NAIOP's Development magazine, present to the association's leadership via the Board of Directors or National Forums, participate on corporate committees and provide advice, feedback and information regarding research being conducted in commercial real estate.



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University of California, San Diego



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Dustin Jones
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★ **Zhou Yang, Ph.D.**
Associate Professor of Economics
Robert Morris University

Read more about this elite group at naiop.org/distinguishedfellows.

★ Denotes New Distinguished Fellow



Ways to Support the NAIOP Research Foundation

There are a number of ways that your financial support can help to underwrite the important work of the Research Foundation, including: special occasion giving; donations in memory of a loved one or colleague; planned gifts; and annual donations.



Sustainers Fund

Income raised through the Sustainers Fund helps the Research Foundation continue to fulfill its mission by providing a sustainable and flexible source of unrestricted income to be allocated where it is needed most. Funds raised allow the Foundation to be more responsive to industry-related issues that arise throughout the year.



Honor a Loved One or Colleague

Tribute gifts support the mission of the Research Foundation and allow individuals, groups, and organizations to make memorial gifts to remember someone who has passed away, honor a living person, or mark a significant life event. Notification of a gift received (with any special message), along with the donor's name, is sent to the person or persons being honored or memorialized. Those being honored or memorialized are recognized in Foundation materials and on its website.



Planned Gifts

Planned gifts are designed to help you meet your financial and charitable goals while supporting the Research Foundation in the long term. By making a planned gift, you can make a lasting impact by expanding the Research Foundation's capacity to address the industry's most pressing issues through its cutting-edge research, education and outreach activities. You can provide significant support through a gift that costs nothing in your lifetime through a charitable bequest in your will.

The *Legacy Society* recognizes those individuals who have made estate plans to benefit the Research Foundation.

Thank you to our founding Legacy Society members, **Ron Rayevich** and **Joan Woodard**, for their commitment to the Foundation's future.

Please contact Bennett Gray at the Research Foundation for more information or to discuss giving options.

Sustainers Fund – 2019 Donors

We are grateful to the donors who made generous contributions to the Sustainers Fund in 2019. With their help, we exceeded our goal for the year.

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NOV

Tech Reinvents the Warehouse Report

Technology is bringing fundamental change to commercial real estate, enabling new business models, empowering better decision making, and forcing the industry to adapt and innovate. This research project will explore — through case studies and interviews with industry leaders and technology experts — new products, processes and perspectives that are reinventing warehouse and industrial real estate.



A New Look at Market Tier and Ranking Systems

The practice of dividing U.S. cities and markets into ranked tiers to identify metropolitan regions with the best investment opportunities is popular among commercial real estate professionals. However, there is no uniform approach to creating these tiers, which may contain different labels and categorize individual cities differently from model to model. In addition, different models may be designed for users who have different goals and definitions of the “best” opportunities, creating the potential for even more confusion. This inconsistency raises the question: is there a better way to track, differentiate between or select markets for due diligence and possible investment?

An upcoming report sponsored by the NAIOP Research Foundation, “A New Look at Market Tier and Ranking Systems,” seeks to answer this question through interviews with industry and academic experts, and a simplified analysis of metropolitan markets using the most recent data available. Interviewees provided information on the histories, methodologies, uses and risks of their existing tier models, as well as their measurable performance over time (when available).

Existing models tend to divide over whether to emphasize more consistent qualities of markets (such as size, historical growth rates, valuation and diversity of investors active in the market) or more cyclical patterns (such as rapid growth in prices and number of transactions). Differences between industry models and disagreements about which markets belong in which tier appear to result from specialization (for specific product types and investment strategies) and adaptation to new sources of information, not methodological weaknesses or incentives to deliver predetermined results.

While practitioners can be confident in the usefulness of market tiering and ranking as an analytical tool, proper usage still requires an understanding of how each model is constructed and whether it meets a user’s specific needs. In addition, there is still room for improvement as industry investments in big data and analytics enhance modeling capabilities.

There may never be one “magic bullet” solution among the specialized ways in which markets are grouped and ranked, but the next step forward may be away from one-dimensional ranking and toward a two-dimensional comparison of a market’s size and depth to its dynamism and cyclicity.

Authors Maria Sicola and Charles Warren, Ph.D., state that market tiers, groupings and rankings do not arrive at the same result consistently because each is designed for a specific audience. Identifying which markets are in a “top tier” for specific criteria is different than identifying which markets are in an absolute “top tier.”

The authors suggest an alternative to ranking markets that evaluates individual markets across two dimensions to more precisely describe their characteristics. One dimension would measure market size, which has historically been the core variable of the market tier method. The other

dimension would represent a continuum of risk versus reward, from markets that have held up through multiple recessions to markets that have the potential for strong growth but also major contractions.

The report will be released in March 2020 and will be available at naiop.org/markettier.



Office Space Demand Forecast Q4

NOV

DEC

Members-only webinar on Office Space Demand Forecast

Winter Research Foundation E-newsletter

For the last two decades, Research Foundation Governors have enjoyed meeting throughout the year for exclusive networking and high-level discussions on the latest trends and opportunities in commercial real estate.



Governors, Visionaries and Leadership

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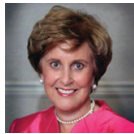
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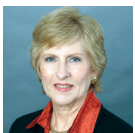
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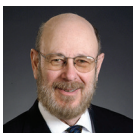
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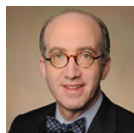
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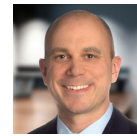
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