2023

Economic Contributions of the Housing Industry in Northern Virginia

Prepared by:
Center for Regional Analysis
Schar School of Policy and Government
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In Collaboration with:
Northern Virginia Association of REALTORS®

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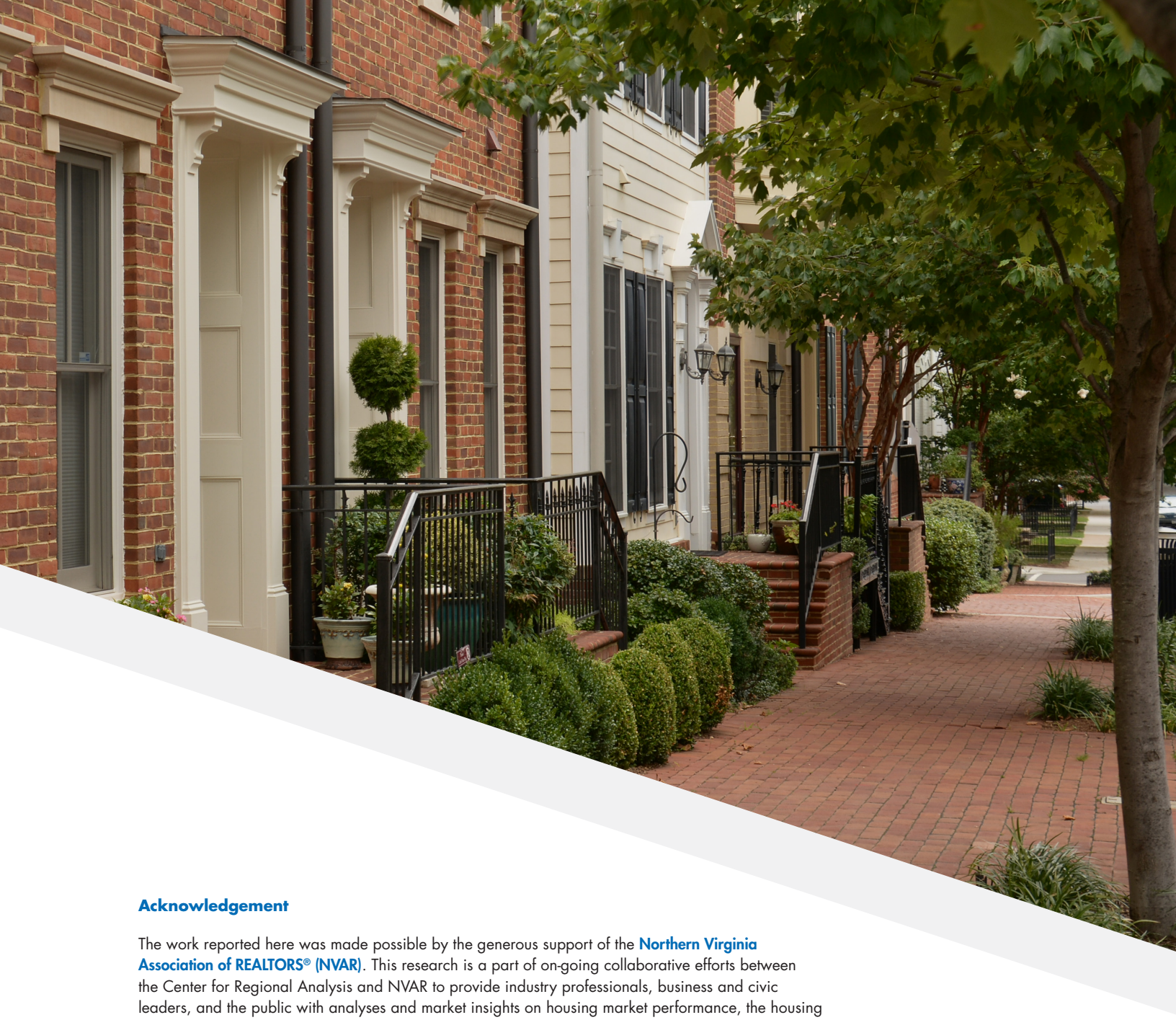


Acknowledgement

The work reported here was made possible by the generous support of the **Northern Virginia Association of REALTORS® (NVAR)**. This research is a part of on-going collaborative efforts between the Center for Regional Analysis and NVAR to provide industry professionals, business and civic leaders, and the public with analyses and market insights on housing market performance, the housing industry, and the role of housing in supporting regional economic growth and competitiveness.

The Northern Virginia Association of REALTORS® serves as **The Voice for Real Estate in Northern Virginia**, enhancing the ability and opportunity of its members to conduct their business successfully, promoting professional competency, upholding the principles of fair housing for all, and preserving the right to own, transfer and use real property. NVAR has grown to more than 13,000 Realtor® and real estate service provider members who carry out a real estate industry in a community of more than two million residents. Visit NVAR online at **www.nvar.com**.

The **Center for Regional Analysis (CRA) at George Mason University (GMU)** was formed in 1993 to provide economic and public policy research to project sponsors in the public, private, and non-profit sectors. Center staff has extensive experience in economic development planning, workforce development strategies, regional economic analysis, and research that focuses on transportation infrastructure, the economic and fiscal impacts of public and private investment, and housing markets. Interdisciplinary by design, the Center draws upon a wide range of faculty and staff resources across the University as well as external partners. Through a recent strategic merger, CRA hosts the Stephen S. Fuller Institute, which focuses its research and outreach efforts on the DC Metropolitan region.

The Center is housed within the Schar School of Policy and Government with primary offices at GMU's Arlington, Virginia campus.

HIGHLIGHTS

$38.7 Billion

in economic activity contributed by residential real estate

For all **Northern Virginia in 2023**, the residential real estate industry contributed **$38.7 billion** in economic activity, which boosted area gross regional product by $22.4 billion, increased labor income by $12.8 billion, and supported over **187,000 jobs** in the region.

$17 Billion

in local economic activity

In 2023, the residential real estate industry **located in the NVAR service area** sparked **$17 billion** in local economic activity and supported over 88,400 jobs paying almost **$6.5 billion in labor earnings.**

$387 Billion

in revenue associated with business activities

The local jurisdictions served by NVAR enjoyed **$387 million** in **revenue associated with business activities** in residential real estate.

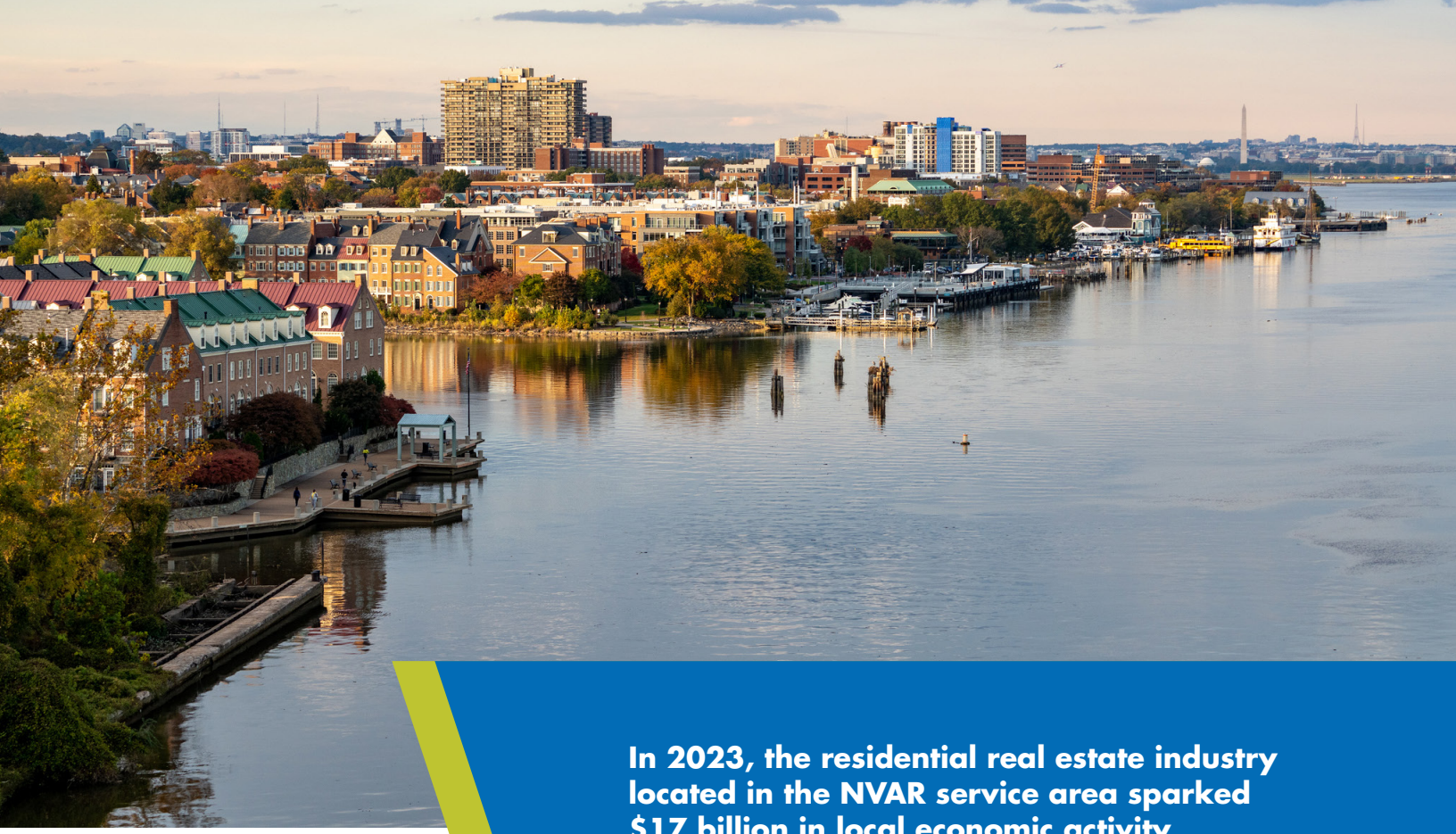
Northern Virginia's housing industry continues to grow in magnitude and importance as a contributor to **regional jobs and economic activity** in the post-pandemic market.

EXECUTIVE SUMMARY

Northern Virginia continues to adapt to post-pandemic market drivers that are reshaping government and businesses across the region. The one constant is the critical role that housing, and especially home ownership, has in shaping future economic success for the region. The COVID-19 pandemic accelerated a multi-decade trend in regional economic development where migration has shifted from workers moving to where employers are located to companies locating where workers want to live. Quality of life, pleasant climate, and recreational amenities all play a part in attracting and retaining working households, but the crucial factor is housing market dynamic—the availability, quality, type, and cost of housing, especially for young family households. As was shown in our groundbreaking 2021 analysis, housing is not only important as an attractant for talented workers, but the residential real estate industry is also itself a major driver of economic activity on a scale that is comparable to some of the region's largest economic sectors. The analysis reported here updates the previous research collaboration between the Center for Regional Analysis at George Mason University and the Northern Virginia Association of REALTORS® to examine the economic contributions of the residential real estate sector for Northern Virginia.

Key study parameters and findings include:

- The analysis again covers two geographic areas within Northern Virginia:
  - » The core market area served by the Northern Virginia Association of REALTORS®, which includes Alexandria, Arlington, Falls Church, Fairfax County, and the City of Fairfax.
  - » Recognizing shifts in housing market dynamics and the persistence of hybrid work-from-home, the previous analysis included Loudoun County, Prince William County, and the cities of Manassas and Manassas Park. The geographic distribution of the Northern Virginia labor force continues to spread, so in this analysis we have added Stafford County. Our broader analysis now covers the service area for NVAR and parts of the service areas for the Dulles Association of REALTORS®, the REALTOR® Association of Prince William and the Fredericksburg Area Association of REALTORS®.
- The analyses are based on industry employment data from the Lightcast database, MarketStats by ShowingTime, IBIS World, and IMPLAN. The economic contributions of housing industry activity are estimated using the IMPLAN economic input-output model.
- The housing industry represents broad, highly diversified sectors of the economy including new construction, repair and renovation of housing units, property management, retail, household services, and businesses that support housing market transactions from lenders to inspectors and REALTORS®. The Technical Appendix to this report provides detailed descriptions of our methodology used in these analyses.
- In 2023, the residential real estate industry located in the NVAR service area sparked $17 billion in local economic activity and supported over 88,400 jobs paying almost $6.5



In 2023, the residential real estate industry located in the NVAR service area sparked $17 billion in local economic activity and supported over 88,400 jobs paying almost $6.5 billion in labor earnings.

billion in labor earnings. Local government entities realized about $313 million in revenue associated with this economic activity. This does not include the full value of property taxes paid on residential units. It does include sales and use taxes, property taxes, fees, and other sources of government revenue associated with household spending and activities.

- In 2021, we noted that the outer suburban markets see higher economic contributions due to housing construction. This trend continues and is notable even when we acknowledge that the current analysis added Stafford County. For all Northern Virginia in 2023, the residential real estate industry contributed $38.7 billion in economic activity, which boosted area gross regional product by $22.4 billion, increased labor income by $12.8 billion, and supported over 187,000 jobs in the region. Local jurisdictions in the region received $791 million in revenues related to this economic activity.
- The economic contributions of the regional housing industry place this sector among the largest for our region. In order of magnitude, residential real estate is in the same league as federal contracting and government employment. The housing industry underpins regional economic performance and the expansion of this industry, including the provision of owner-occupied housing units for working families, is a necessary condition for regional economic competitiveness as we move towards the middle of the 21st century.

Table ES1

2023 Economic Impacts of Northern Virginia's Residential Real Estate Industry

Description	Impact	
	NVAR Area*	NOVA**
Output (transactions)	$ 17,043,963,000	$ 38,719,442,000
Value Added (gross regional product)	$ 10,679,016,000	$ 22,415,330,000
Labor Income (salaries, wages, benefits)	$ 6,471,916,000	$ 12,832,316,000
Jobs	88,423	187,198
Local Taxes	$ 387,078,000	$ 916,955,000
State Taxes	$ 313,193,000	$ 791,490,000

** City of Alexandria, Arlington County, Fairfax County, City of Fairfax, City of Falls Church*
*** NVAR area plus Loudoun County, Prince William County, City of Manassas, City of Manassas Park, Stafford County*
Sources: GMU Center for Regional Analysis, Lightcast, IBIS World, industry sources, IMPLAN

INTRODUCTION

In one respect, and maybe the only one, housing remains at the forefront of economic issues before, during, and after the COVID-19 pandemic. Northern Virginia's housing market remains characterized by low inventories, high prices, and challenging regulatory and cost conditions for development. Even with these challenges, the residential real estate industry, including professional activities related to the buying and selling of owner-occupied properties, remains one of the region's largest economic sectors and is an increasing determinant of regional economic competitiveness. In this study, we update the groundbreaking 2021 study performed by a collaborative team from the Northern Virginia Association of REALTORS® (NVAR) and the Center for Regional Analysis (CRA) at George Mason University. The previous study showed that residential real estate powered through the disruptions caused by the COVID-19 pandemic and served as an underpinning for the regional economy. Importantly, as will be shown below, even with the rapid increase in interest rates, especially mortgage rates, the residential real estate sector continued to grow in magnitude and importance as a contributor to regional jobs and economic activity.

The research presented here is once again made possible by financial and informational support from the Northern Virginia Association of REALTORS®. The Center for Regional Analysis regularly partners with NVAR on a variety of market analyses and forecasts providing key regional information to NVAR's members, regional businesses, and civic leaders. These reports can be found at www.NVAR.com/MarketStats.

Northern Virginia's housing industry continues to grow in magnitude and importance as a contributor to regional jobs and economic activity in the post-pandemic market.

HOUSING MARKET DYNAMICS DRIVE ECONOMIC ACTIVITY

In the 2021 report we quoted Harvard economist Ed Glaeser's admonition about regional housing policy: "no homes, no people, no jobs."[1] The evidence for the role that housing availability and cost are playing in the battle for talented workers among states, regions, and localities continues to grow. The evidence shows that companies are becoming even more footloose when they need to follow workers to jurisdictions with the right mix of housing type at entry prices achievable by young workers, especially young families. These shifts can be seen across states and even within Northern Virginia, with hybrid work schemes allowing homebuyers to effectively be able to choose more distant suburbs in achieving their housing goals and dreams. Beyond these business site location factors, our previous analysis demonstrated that the economics of supporting residential housing is highly robust and can grow even in times of economic and social upheaval. Economic activity remained strong despite pandemic-related disruptions. In the analysis below, we find that the Northern Virginia residential real estate sector remained robust, and even grew, despite an interest rate environment that challenged all industry actors. Residential real estate expanded in total economic activity, income, and jobs in 2023—and this does not even include the underpinning benefits of homeownership in building long-term household wealth.

The analysis presented here is termed an economic contributions analysis since it examines an industry that is present in the economy.[2] An economic contribution analysis estimates how dollars spent in a subject sector of the economy flows through the study area. For purposes of this analysis, the housing industry is defined as including:

- Services associated with the buying, selling, leasing, and management of residential properties;
- Residential property construction, repair, and remodeling;
- Services to these structures, such as property maintenance and improvements;
- Retail trade focused on household fixtures and furnishings.

Our analysis does not examine economic activities related to industrial, commercial, or institutional properties in this analysis, even if they are integrated into residential properties, such as mixed-use developments combining housing and retail properties. This analysis also does not include the economic value of public sector housing providers, except where construction, remodeling, or repair activities occur. Finally, this analysis does not quantify the value of the existing housing stock.

There were some changes in the data we employed for this analysis resulting from changes in how certain businesses are classified in government documents. In addition, our approach recognizes shifts in the companies and entities who provide financial services to homebuyers and how there have been some market shifts in specific industry subsectors related to the proportion of activity allocated to residential properties versus commercial properties.

1 Glaeser, E. (2006, page 2). The economic impact of restricting housing supply. Rappaport Institute for Greater Boston Policy Briefs, PB-2006-3. Kennedy School of Government, Harvard University.

2 The common term "economic impact" is used when a *new* industry moves to an area.

The most important change in the current analysis is expanding the number of jurisdictions included in our study geography. The NVAR core market area remains the cities of Alexandria, Fairfax, and Falls Church plus Arlington County and Fairfax County. In the 2021 analysis, we defined the broader Northern Virginia market as these core jurisdictions plus Loudon County, Prince William County, and the cities of Manassas and Manassas Park. This analysis adds Stafford County to the Northern Virginia market area reflecting that county's increasing importance for residential development. The analysis presented here covers the service area for NVAR and parts of the service areas for the Dulles Association of REALTORS®, the Prince William Area Association of REALTORS®, and the Fredericksburg Area Association of REALTORS®.

FINDINGS

In 2023, Northern Virginia's housing industry contributed $38.7 billion in economic activity to the regional economy (see Table 1). The Technical Appendix at the end of this report provides details of the data and methods used in the analysis. This level of economic activity increased gross regional product by $22.4 billion, supported over 187,000 jobs, and increased labor income by $12.8 billion. Even though the geography expanded, the residential real estate sector grew substantially between 2021 and 2023. Residential real estate is among the region's largest and most important economic sectors. Total revenues to local jurisdictions associated with business activities in the real estate industry reached an estimated $791 million in 2023. These jurisdictional revenues do not include the direct property taxes paid by residential real estate owners.

Focusing on NVAR's service area, the residential real estate market boosted total regional activity by $17 billion, which increased gross area product by $10.7 billion and supported over 88,400 jobs that paid $6.47 billion in salaries, wages, and benefits. The local jurisdictions served by NVAR enjoyed $313 million in revenue associated with business activities in residential real estate, a much-needed cushion considering the impacts of depressed commercial property values on local tax revenues.

Table 1
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Sources: GMU Center for Regional Analysis, Lightcast, IBIS World, industry sources, IMPLAN

In the previous analysis we found that "outer" jurisdictions saw higher levels of economic activity on a per-capita basis, which we attributed to the impacts of new housing construction. The shifting of the residential real estate industry to the outer suburbs seems to have accelerated based on our current research.

Northern Virginia's housing industry is important economically, culturally, and strategically. Many of the region's most historically important economic sectors are showing signs of struggling. Professional Business Services, the region's largest private sector industry, which includes some residential real estate components, has seen recent slowdowns in growth and is not keeping up with national trends. Even federal government employment is growing more rapidly in other areas of the nation compared to DC and Northern Virginia. The data point to one of the important reasons the region is not growing as quickly as in previous decades—the long-term trend of not building enough housing—has become a constraint on attracting the workers we need to grow. Still, residential real estate is one of the region's most important contributors to jobs and regional economic activity. Just imagine how much this sector would contribute if we built enough housing to meet 21st century demand.

The local jurisdictions served by NVAR enjoyed $387 million in revenue associated with business activities in residential real estate.

TECHNICAL APPENDIX

Data and Methods

To assess the economic contributions of the residential real estate industry in Northern Virginia, we use an input-output analysis reflecting interindustry transaction trends, jobs supported by those transactions, and then local spending associated with employee earnings for 2023. This is a comprehensive approach that incorporates a wide range of economic sectors that are impacted by the housing industry. Some elements, such as construction of single- or multifamily homes, are obvious. Other sectors include services that are less visible but are critical to the residential real estate industry, such as attorneys who work in residential real estate transactions, loan officers who review mortgage applications, maintenance services for apartment buildings, and a range of other industries.[3] We are also including the development and management of rental properties.

Figure TA1
Industries Included in the Contribution Analysis

Construction	Single-family housing, multifamily housing, manufactured and mobile homes, as well as home renovation and repair.
Finance	Lending institutions (real estate), mortgage brokers.
Insurance	Property insurance carriers and brokers, title insurance.
Transport	Household moving services.
Agencies	Non-profit housing agencies and related groups, including REALTOR® associations.
Real Estate	Brokers, property managers, inspectors, appraisers, lawyers, and title companies.
Retail Trade	Household furnishings, building materials, home centers (DIY only), appliances.
Services	Household services including design services, security systems, pest control, janitorial services, landscaping, waste collection, furniture and appliance repair, homeowners' associations, household domestic staff.

Sources of data used in this analysis include the Bureau of Labor Statistics, Bureau of Economic Analysis, IBIS World industry market database, and Lightcast. Contribution analyses estimate the direct, indirect, and induced effects of the subject industry.

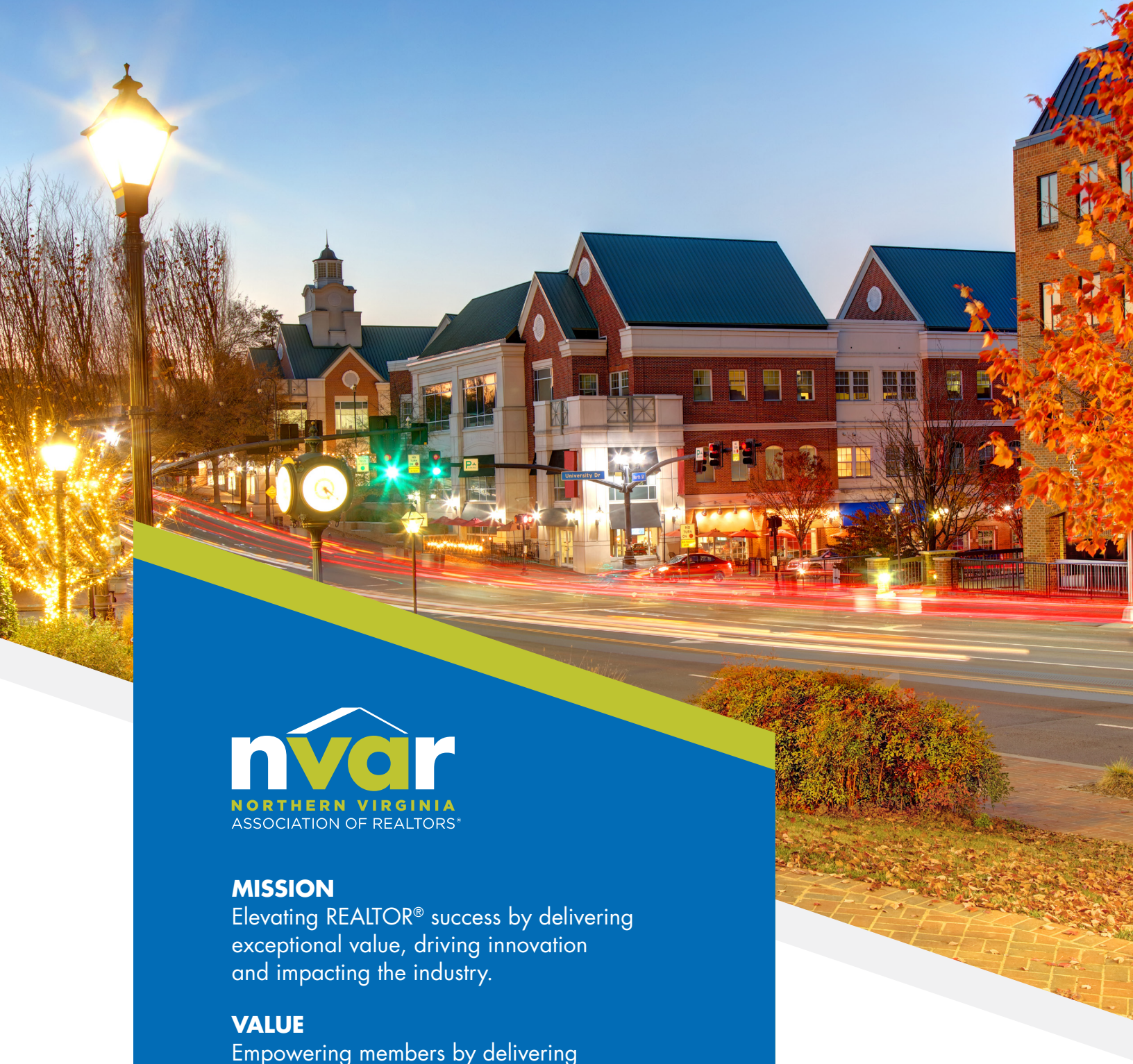
3 There are two important economic elements that are not included in this analysis. In national product tables, which show estimates of all U.S. economic activity, there is an accounting entry for the "Imputed Value of Homeownership." If a household owns a home outright, there is a recurring economic value to their home that is not captured by business transactions. The Imputed Value of Homeownership estimates the cost to the household if they were paying rent to themselves and this value is included in Gross Domestic Product. Since there is no actual transaction, this value is not included in this analysis. Also excluded is the economic value of Freddie Mac, even though that government enterprise is headquartered in Northern Virginia it was not possible to show how many employees at Freddie Mac are dedicated to serving loans for homes in the study area.

- **Direct effects** are the economic consequences resulting from the spending by the housing industry itself. For example, a housing developer hires professional services providers (architects, engineers, others) and trades contractors to build residential units.
- **Indirect effects** capture the business-to-business purchases representing the residential construction supply chain including the purchase of materials and leasing heavy equipment such as backhoes and earthmovers. The firm that leaves out heavy equipment buys the equipment, hires employees, purchases parts to keep the equipment operating, and hires professional services providers to support their business operations. These professional services providers, like accountants, temporary employment agencies and such, rent office space, hire employees purchase office supplies, and hire their own services providers, and so on. At each stage of spending, the economic input-output model adjusts the spending to only count business activities within the study area. For example, purchased fuel to run construction equipment is not refined in Northern Virginia, so little of that spending supports local economic activity—except for delivery and sellers.
- **Induced effects** capture the economic value of the spending of labor earnings by employees of all the direct and indirect businesses for goods and services in Northern Virginia. Even when adjusting for spending that leaves the study area, the sum of the direct, indirect, and induced effects is typically greater than the direct spending, which is the "multiplier effect."

The analysis presented here is based on the IMPLAN economic input-output model, which is widely used in professional and academic research. The IMPLAN model provides estimates of total output (value of transactions), value added (gross regional product), labor income (salaries, wages, and benefits), and jobs (headcount). The model also estimates revenue to local taxing jurisdictions including sales and use taxes, fees for licenses and permits, and other sources of government revenue resulting from increased economic activity. Local taxes, for this purpose, do not fully include property taxes based on the market value of the existing housing stock, except that supported by industry transactions.

The analysis presented in this report includes an important adjustment. When examining the simultaneous impacts of multiple industries, input-output modeling is susceptible to double counting. The employees and owners of a home builder are themselves consumers of housing and the many services that support residential real estate that is captured as Induced Effects. Therefore, we adjust the Induced Effects to avoid double counting industry employee spending. The approach taken in making these adjustments is conservative, meaning that our estimates of the total economic contributions of the housing industry in Northern Virginia are likely understated.

The primary service area of the Northern Virginia Association of REALTORS® includes the City of Alexandria, Arlington County, Fairfax County, City of Fairfax, and the City of Falls Church. However, in understanding how the housing industry contributes to regional economic activity, it is important to consider the wider market of Northern Virginia, including NVAR's area plus Loudoun County, Prince William County, Stafford County, and the cities of Manassas and Manassas Park. The analysis includes analyses at both levels of geography.



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