

# Housing and the Potomac Yard Entertainment District: An Assessment of Impacts and Benefits

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**January 2024**



## Executive Summary

It is well recognized across the Greater Washington region that housing availability and costs have become a critical challenge to the region's economic competitiveness. Decades of underdevelopment in all types of housing have driven up prices and made it very hard for many families across the economic spectrum to find appropriate housing options. In the following, we provide an overview of area housing needs and the potential for the housing components of the Potomac Yard Entertainment District (PYED) in supporting local and regional housing goals.

Based on our review of the data and relevant recent literature, the housing development component of PYED contributes to housing needs in the City of Alexandria, which will also have broader benefits for the region.

- Alexandria is currently far behind in its goal to produce 2,250 Workforce Affordable housing units by 2030. The proposed development will dramatically support that goal in Phase 1 and will help the city exceed longer terms goals for workforce housing.
  - Comparing potential rent levels and occupational wages suggests that a majority of PYED units will accommodate working family households who hold jobs in Alexandria earning 80% to 90% of area median income, on average.
  - Based on the demographics of workers in the occupations that could afford living in the proposed housing, these units will contribute to housing equity in Alexandria.
- Developers of the PYED project will make multiple contributions supporting Alexandria's affordable housing goals:
  - Donate on-site land for affordable housing units, in conjunction with a new school.
  - Contribute \$25 million to the city's affordable housing fund.
- Having the Virginia Tech Technology Campus in Alexandria will have lasting impacts on the city's ability to attract businesses, investment, and talent – the economic development trifecta. But the campus plan does not include housing for students, post-graduate fellows, and young professors and staff researchers. The proposed housing units will be an important contribution to the success of the technology campus.
- By adding more than 5,400 new housing units to the Alexandria market, the city will be contributing to solving the region's housing supply crisis and will be putting in place the units needed to ease pressure on local and regional housing prices.

By addressing critical housing needs in the City, and at the same time creating a vibrant new activity center attracting business growth and opportunity, Alexandria will be positioned as perhaps the best place to live, work, and play in the DC region. These kinds of opportunities do not come along often.

## Introduction

It is well recognized across the Greater Washington region that housing availability and costs have become a critical challenge to the region's economic competitiveness. Decades of underdevelopment in all types of housing have driven up prices and made it very hard for many families across the economic spectrum to find appropriate housing options. Despite the challenge of housing availability and affordability being recognized by business and elected leaders, there has not been enough accomplished in the development of new housing in the region. In the following, we provide an overview of housing needs in the DC region, and especially in Alexandria, the city's progress on meeting existing and future housing needs, and the potential contributions of the proposed development of new housing that is part of proposed Potomac Yard Entertainment District (PYED) in supporting local and regional housing goals, while creating a center of activity that will promote critical talent attraction and retention.

Our review starts with a brief overview of regional and local housing needs in Alexandria that will focus on how this locality is progressing in meeting its existing goals for housing development. This will include a description of the housing development that has emerged in the PYED planning area and what current plans identify for future housing development. We will then turn to an overview of the housing development components of PYED and assess how this re-imagining of Potomac Yard into a vibrant, entertainment focused activity center will help Alexandria meet its current and future goals for housing that supports quality of life, economic growth, and community development.

## Housing Needs in the Washington, DC Region, and City of Alexandria

### *DC Region*

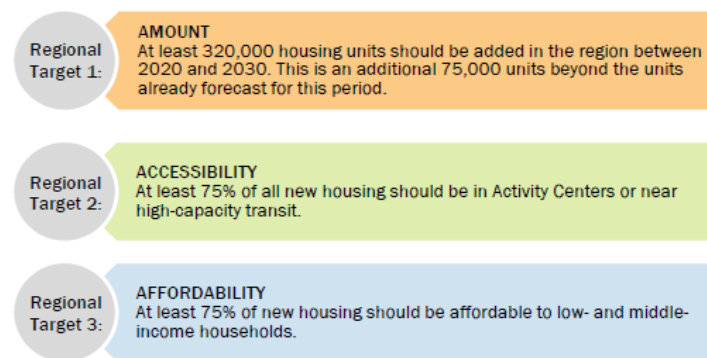
The Washington Regional Council of Governments (MWCOC), along with a coalition of housing policy advocates, developers, and others, worked to assess regional housing needs and to build consensus of actions to meet regional housing supply challenges. The resulting 2019 report, *The Future of Housing in Greater Washington*, identified goals for the 2020-2030 period along three critical dimensions: housing supply, housing accessibility, and housing affordability. The magnitude of the housing supply problem is clear and undeniable. To meet housing supply needs over a ten year period that began in 2020, the region needs 75,000 *additional* units beyond those included in the current comprehensive development plans of localities in the region (see Figure 1).

The lack of housing supply has exacerbated the long run trends in housing costs for the DC region. Housing costs in the DC region over the past several years have started to have a significant impact on the region's ability to attract and retain workers. Reporting on Census data, a recent study by CRA found that in the most recent reporting period, net domestic migration for this region was a **66,000 population loss**. A key reason for more people leaving the area is the cost of housing. This challenge is increasingly recognized by local leaders, but the policy options for lowering housing costs, or at least slowing the rise in housing prices seems elusive. However, basic economic relations still work, even in the National Capital Region. If you increase the number of housing units available, housing price increases will slow and may even decline in some sub-markets. But does this assumption hold empirically?

The MWCOC report also provides an explicit recognition of the need for modernizing the region’s built environment to meet shifting social and sustainability needs the development of housing-work-amenity clusters in activity centers that are adjacent or near to multi-modal public transportation services.

The third vital element of the regional housing development plan is to create housing that is affordable to low- and middle-income households.

Figure 1: Greater Washington 2030 Housing Goals



Source: MWCOC

Importantly, the goals include affordable housing units for low-income households, as well as units that are described as work-force housing, which is meant to accommodate household earnings for workers in skilled trades, public administration and protective services, and early career highly skilled occupations.<sup>1</sup>

The MWCOC plan included challenging local jurisdictions to contribute to regional housing goals by accepting an allocated share of needed housing development within their community—which has proven controversial as opponents to change seek to block zoning and land use changes needed to build new housing.

### *City of Alexandria*

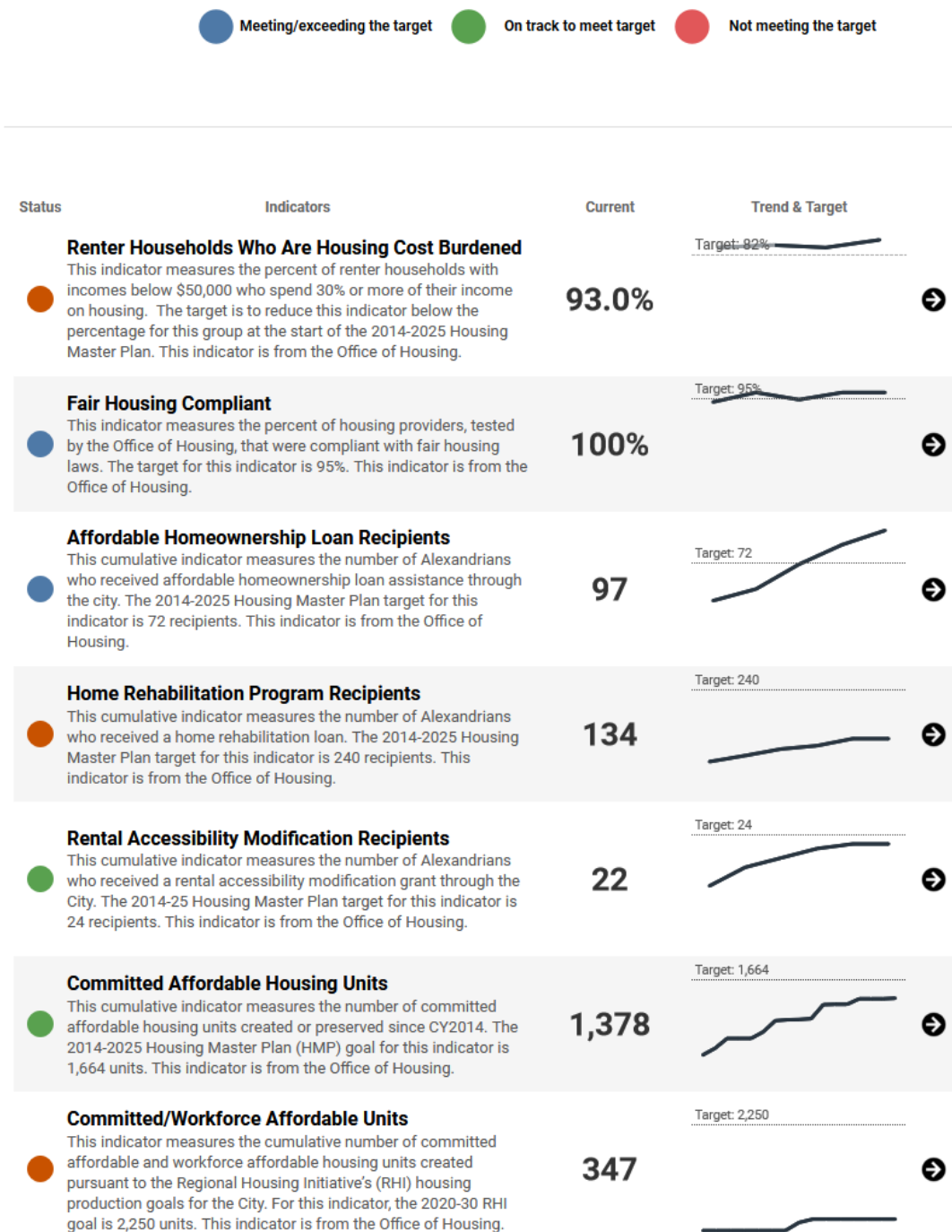
The City of Alexandria is one of the most committed jurisdictions in the metropolitan area in finding innovative ways to address their part in meeting regional housing challenges and goals. In March of 2020, the Alexandria city council formerly adopted a resolution to accept the challenge laid out in the MWCOC plan. The city’s share of the housing count goal is 3,000 housing units by 2030 above the plans in place in 2020.

Alexandria placed additional details into their housing planning goals and set up interim goals for 2025 with a publicly accessible performance dashboard that regularly updates progress towards

<sup>1</sup> An accepted definition of low-income housing includes units that are affordable for households earning less than 60% of area median income (AMI) or about \$66,000 in annual household income in the DC metropolitan area. Workforce housing is thought of as being affordable for households earning between \$66,000 and \$154,000 in annual household income based on 2021 Census data. For a region to be competitive in attracting and retaining skilled workers, the effective definition for workforce housing should include housing options for middle managers and even executives.

established housing goals. Figure 2 is a screenshot image of Alexandria's most recent (June 2023) status of the city's housing development plan.

**Figure 2: City of Alexandria Housing Opportunities Dashboard (June 2023)**



Source: City of Alexandria

The City of Alexandria has received well-earned praise for its progress in meeting its housing goals, though no one at the city and few residents think the job is done. Program performance has exceeded goals for two of the identified housing needs (compliance with fair housing requirements and the distribution of loans for down payment assistance for modest-income homebuyers). Programs that are on track to meet 2025 housing goals include commitments for the development of affordable housing units and grants for modifying rental units to meet occupants' physical challenges. Of the programs graded as behind on progress, overall rental unit affordability is not far off goal. Alexandria, with its history, amenities, spectacular proximity to employment centers, and sense of place will always be expensive due to its high desirability. The outcomes of the home rehabilitation loan program, which is similar to the renter grant program, have not met interim goals but that program faced external market challenges during the pandemic. The final goal included in the dashboard is the number of committed workforce affordable units to be added to the city's housing market, which by count has only achieved about 15 percent of its stated goal.

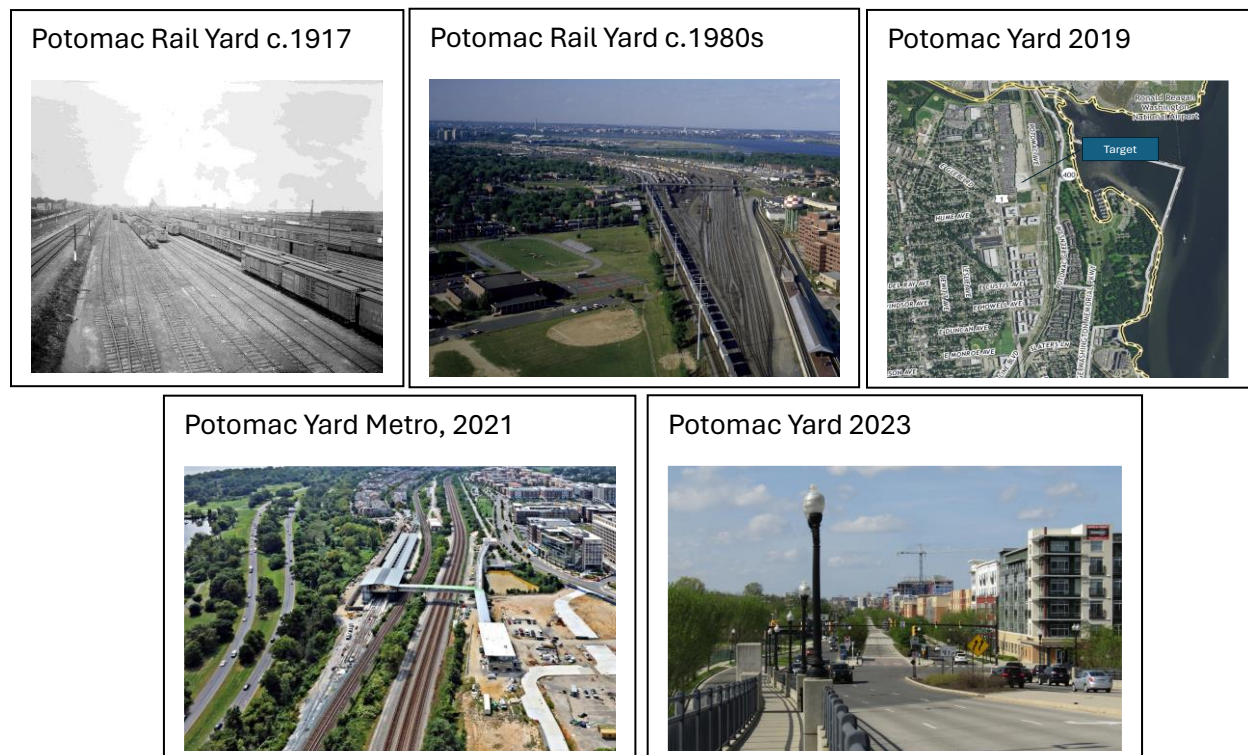
***Alexandria is clearly in need of additional market rate housing that is affordable for middle income workers.***

### **Potomac Yard Overview**

The history of Potomac Yard is well-covered by a variety of sources. While this report will not delve into details or nuance of that history, the redevelopment of a contaminated industrial (railroad yard) site into the most desirable greenfield space inside the Capital Beltway needs to be continually celebrated. In the series of photographs below, the Potomac Yard area has transformed supporting a changing regional economy and city needs. Railyard to contaminated brownfield to commercial neighborhood retail and urban housing (townhomes and multifamily, and now to transit focused, urban community.

The announcement of the arrival of Amazon HQ2 in Arlington and the related development of a \$1 billion technology and innovation campus for Virginia Tech in Alexandria, which will include classrooms, technology labs, co-working, and adjacent commercial development, created the opportunity to re-imagine what is possible for the Potomac Yard area. However, in the aftermath of the pandemic, which accelerated a nascent pre-pandemic trend for hybrid work and remote work, especially among younger workers, the anticipated pace of development for the North Potomac Yard planning area has slowed dramatically. Virginia Tech is proceeding with the development of academic spaces and has already started teaching classes in temporary space. Though not included in the North Potomac Yard planning area, Amazon has announced a delay in the planning and construction of its second headquarters building. Arlington has record office vacancies and there are no reasonable market forecasts that suggest demand for office development at the scale envisioned in current planning.

Developing the northern portion of the Potomac Yard area to fulfill the promises built over the last twenty years is now projected to require a much longer timeline—perhaps decades longer—until the announcement of a new plan to reshape North Potomac Yard into a sports-entertainment-residential-retail activity center. Anchored by Virginia Tech to the north and the massively successful southern portion of Potomac Yard, the proposed development represents a path forward that diversifies Alexandria’s economic mix and creates a world class community activity center that will boost local and regional economic activity and provide near term housing solutions that are not likely to be supported in the near future without the proposed mix of land uses and innovative financing.



### Potomac Yard Entertainment District and Housing

In December of last year, Governor Glenn Youngkin and Monumental Sports announced a multi-phase planned development to re-imagine Potomac Yard North as a mixed-use, entertainment, and technology activity center that will stand with any modern urban development in the world. The project includes an arena that will host the Washington Wizards (NBA) and Washington Capitals (NHL) teams, with an e-sports component to facilitate the fastest growing spectator sport across the globe. Adjacent to the arena will be a performing arts center scaled to accommodate touring concerts, plays, and performances, as well as local artists. In addition, there will be mixed-use, transit-oriented development with housing, offices scaled to post pandemic markets, retail, restaurants, convention space, and top rate lodging. The focus in this review is on the proposed housing components and the impact this development will have on Alexandria’s housing goals and the local housing market.



### *Proposed Housing*

Table 1 provides an overview of planned residential units by development phase in PYED. The specific timing of the phases has not been determined, except that Phase 1 is expected to be built in conjunction with the arena and Virginia Tech campus projects. A key feature of the development plan is to emphasize smaller units, within bedroom count categories, and across categories. The impact of this choice is to hold down costs given the region's high construction cost on a per-square foot of developed space. The units will all be rented. Importantly, the units shown in Table 1 do not include any affordable housing units that may be created through developer contributions related to this project.

**Table 1: Potomac Yard Entertainment District Residential Plan**

Phase	Studio	1-Bedroom	2-Bedroom	3-Bedroom	Total
Phase 1	278	757	448	62	1,545
Phase 2	292	796	471	65	1,624
Phase 3	402	1,096	648	89	2,236
Total	973	2,648	1,567	216	5,405
Share	18%	49%	29%	4%	
Beds/Unit	1.0	1.0	2.0	3.0	1.4 avg
Bedrooms	973	2,648	3,135	649	7,405

Source: HR&A

### *Meeting Alexandria's Housing Needs*

The proposed housing in PYED contributes to Alexandria's and the regions housing needs in multiple ways: meeting local and regional goals for units developed and placing downward pressure on local and regional housing costs.

Through design and construction characteristics, the average rental cost will be held to levels that will be workforce affordable, including for many of the jobs to be held by people working in the proposed entertainment district. As an example, HR&A, who provided the economic and fiscal consulting services for this project, estimate that average rental rates for the proposed residential units to be about \$3.70/square foot. At that rate, we can estimate the implied household income needed to comfortably afford to live in the new development. Table 2 shows rental costs based on some assumed unit sizes. Final unit designs have not been made. We have assumed a standard cost of housing not exceeding 30% of household income to assess affordability. Our estimates do not include utility costs but given advanced energy efficient designs that can be used for unit construction, this analysis is sufficient for a preliminary assessment. Comparing potential rent levels and occupational wages suggests that a majority of PYED units will accommodate working family households who hold jobs in Alexandria earning 80% to 90% of area median income, on average.

As for any analysis of housing costs in Northern Virginia, someone who does not live here could be shocked at the level of housing prices. However, Alexandria is a high wage area. In Table 3, we offer selected examples of average annual wages by occupation for workers in Alexandria. Of course, these are average wages across all workers regardless of experience. The range of earnings by experience can vary, but this does offer a sense of who could reasonably afford to live in the proposed housing.

**Table 2: Housing Costs for Proposed Units with Income Requirements**

Unit Type	Unit Size (s/f)	Monthly Rent	Implied Household Income to Avoid Housing Stress*	Implied Income per Person in Multi-Worker Households**
Studio	430	\$1,591	\$63,640	
1-BR	600	\$2,220	\$88,800	\$44,400
2-BR	750	\$2,775	\$111,000	\$55,500
3-BR	1,000	\$3,700	\$148,000	\$74,000

\* Housing stress here is defined as housing costs being higher than 30% of gross income. \*\* Assume two wage earners per household. Rent costs are in \$2023.

**Table 3: Annual Wages by Selected Occupation Groups, City of Alexandria, 2023(2q)**

Occupation	Avg Annual Wages
Legal Support Workers	\$98,300
Supervisors of Protective Service Workers	\$97,300
Law Enforcement Workers	\$89,800
Supervisors of Installation, Maintenance, and Repair Workers	\$89,800
Sales Representatives, Services	\$88,300
Supervisors of Construction Workers	\$86,400
Art and Design Workers	\$84,300
Preschool, Elementary, Middle, Secondary, & Special Education Teachers	\$81,500
Librarians, Curators, and Archivists	\$79,800
Drafters, Engineering Technicians, and Mapping Technicians	\$79,500
Supervisors of Sales Workers	\$78,400
Supervisors of Office and Administrative Support Workers	\$77,500
Entertainers and Performers, Sports, and Related Workers	\$75,500
Media and Communication Equipment Workers	\$75,500
Religious Workers	\$72,900
Electrical and Electronic Equipment Mechanics, Installers, and Repairers	\$72,300
Supervisors of Transportation and Material Moving Workers	\$70,100
Firefighting and Prevention Workers	\$67,700
Counselors, Social Workers, Other Social Service Specialists	\$66,900
Life, Physical, and Social Science Technicians	\$66,500
Occupational Therapy and Physical Therapist Assistants and Aides	\$66,500
Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	\$65,700
Health Technologists and Technicians	\$62,200
Construction Trades Workers	\$59,900
Secretaries and Administrative Assistants	\$58,900
Supervisors of Building and Grounds Cleaning and Maintenance Workers	\$58,200
Supervisors of Personal Care and Service Workers	\$56,800



Table 3 continued Occupation	Avg Annual Wages
Financial Clerks	\$55,100
Supervisors of Food Preparation and Serving Workers	\$52,500
Information and Record Clerks	\$47,800
Communications Equipment Operators	\$46,700
Helpers, Construction Trades	\$45,200

Source: JobsEQ

A comparison of the data presented in Tables 2 and 3 clearly indicates that a large majority of housing units in the proposed development will be affordable to a wide range of occupations employed in the City of Alexandria, many of whom may find job opportunities at their doorstep. Moreover, as a racially diverse community, with a majority-minority population, having housing units that are affordable for working families with jobs located in the city, will enhance Alexandria's progress toward providing equitable housing opportunities.

The other element of Alexandria housing needs is shaped by the Virginia Tech campus. Plans for that campus do not include any housing for graduate students, post graduate researchers, young faculty members, staff, or visiting researchers and scholars. While hardly qualifying as traditional dormitories, the studio units may well serve student housing, and the largest 3-bedroom units could become shared student living space. Just as importantly, young faculty who will teach at the new Virginia Tech campus will potentially look to these rental units as highly attractive in the early stages of their career due to job proximity and the presence of hospitality and entertainment options. Given the potential of the Virginia Tech campus to bring business and investment to the city, while generating critically needed tech talent, filling this housing gap may well be as important as any other element in contributing to the success of the new campus.

In addition to the market rate workforce affordable units described above, the developer in PYED will be making multiple contributions to Alexandria's affordable housing program. The first contribution is a parcel of land that will house a school and based on design characteristics, could hold 100 to 150 affordable housing units to be developed by the city. In addition, the developer expects to contribute \$25 million to Alexandria's affordable housing fund. These contributions will increase the city's capacity to meet its affordable housing goals.

#### *Contributing to Housing Equity Goals*

Alexandria has a diverse population suggesting that housing opportunities should be structured to be affordable across racial and ethnic groups. To assess if the proposed housing can contribute to Alexandria's goal of achieving housing equity, we examined data on the demographic makeup of Alexandria workers in the occupations we found to be sufficiently high paying to be able to live in the proposed housing units without being financially stressed, as defined in the previous section.

Table 4 shows the percentage of minority workers by Occupation in Alexandria for our selected occupations. On average, minority workers make up 41% of all job holders in these occupations, which suggests that the proposed housing units will contribute to workforce housing goals and the city's efforts to achieve equitable access for housing opportunities.

**Table 4: Minority Job Holders by Selected Occupation Groups, City of Alexandria, 2023**

<b>Occupation</b>	<b>% Minority Workers</b>
Legal Support Workers	43%
Supervisors of Protective Service Workers	37%
Law Enforcement Workers	40%
Supervisors of Installation, Maintenance, and Repair Workers	37%
Sales Representatives, Services	35%
Supervisors of Construction Workers	32%
Art and Design Workers	26%
Preschool, K-12, & Special Education Teachers	30%
Librarians, Curators, and Archivists	24%
Drafters, Engineering Technicians, and Mapping Technicians	30%
Supervisors of Sales Workers	39%
Supervisors of Office and Administrative Support Workers	44%
Entertainers and Performers, Sports, and Related Workers	28%
Media and Communication Equipment Workers	31%
Religious Workers	28%
Electrical & Electronic Equipment Mechanics, Installers, & Repairers	46%
Supervisors of Transportation and Material Moving Workers	55%
Firefighting and Prevention Workers	27%
Counselors, Social Workers, Other Social Service Specialists	29%
Life, Physical, and Social Science Technicians	34%
Occupational Therapy and Physical Therapist Assistants and Aides	43%
Vehicle and Mobile Equipment Mechanics, Installers, and Repairers	52%
Health Technologists and Technicians	54%
Construction Trades Workers	48%
Secretaries and Administrative Assistants	37%
Supervisors of Building and Grounds Cleaning and Maintenance Workers	56%
Supervisors of Personal Care and Service Workers	43%
Financial Clerks	42%
Supervisors of Food Preparation and Serving Workers	55%
Information and Record Clerks	53%
Communications Equipment Operators	50%
Helpers, Construction Trades	62%

Source: Lightcast

Based on Alexandria's population demographics and the demographics of Alexandria workers holding jobs in the occupations that have the income to afford the proposed housing units, the proposed housing will contribute to housing equity goals in the city

## *Meeting the Shared Housing Needs for Alexandria and the Region*

A final consideration explored in this assessment is the broader market impacts of adding over 1,500 housing units in the earliest development stages that will eventually grow to 5400 units by the end of development Phase 3. We examined a sampling of the professional and academic literature for studies that were either peer reviewed, published in respected journals and trade magazines, or exhibited academic quality research and data analysis. In a paper reviewed by the National Low Income Housing Coalition, researchers at the University of Minnesota<sup>2</sup> found that after a year and for at least two years, the construction of new market rate rental housing units in Minneapolis coincided with a decrease in nearby rents for comparable quality units. The rate of rent decline in competitor units ranged from 1.7% to 1% over time. Researchers at the Upjohn Institute<sup>3</sup> found that adding a large new multifamily rental unit complex can cause nearby unit rental rates to drop by about 6%, but this analysis focused on areas where low income housing is present, which may not be directly applicable to Alexandria. UCLA's Lewis Center reviewed multiple studies on the impacts of building new market rate housing on overall rent levels. Of the six studies reviewed, five found that adding market rate rental units makes nearby housing more affordable.<sup>4</sup> The sixth found mixed results that may have been due to market peculiarities. Most relevant is a recent report published by the District of Columbia Office of the Chief Financial Officer. This analysis modeled the impact of DC having added an average of 1,534 per year to the rental housing market from 2012 through 2018. Their analysis shows that rental costs in the District are 5.8% lower (about \$177/month) than would have been without the new units.<sup>5</sup>

While this review does not cover the entirety of the literature on local rental housing markets, recent research has shown that boosting the supply of rental units does have the anticipated effect of lowering effective rent levels in the market.

## **Conclusions**

Based on our review of the data and relevant recent literature, the housing development component of the Potomac Yard Entertainment District checks four important boxes in the list of housing needs in the City of Alexandria, which will also have broader benefits for the region.

- Alexandria is currently far behind in its goal to produce 2,250 Workforce Affordable housing units by 2030. The proposed development will dramatically support that goal in Phase 1 and will help the city exceed longer terms goals for workforce housing.
  - Our analysis of rent levels and occupational wages suggests that a large majority of PYED units will help support working middle income households who hold jobs in Alexandria earning 80% to 90% of area median income, on average.

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<sup>2</sup> The paper can be found at <https://bit.ly/2JW78uV>

<sup>3</sup> Asquith, B., Mast, E. and Reed, D. (2023). Local effects of large new apartment buildings in low income areas. *The Review of Economics*, 105(2), 359-375.

<sup>4</sup> Phillips, S., Manville, M., and Lens, M. (2021). Research Roundup: The Effect of Market Rate Development on Neighborhood Rents. UCLA Lewis Center for Regional Policy Studies. <https://escholarship.org/uc/item/5d00z61m>

<sup>5</sup> Cole-Smith, B. and Muhammad, D. (2020). The Impacts of an Increasing Housing Supply on Housing Prices: The Case of the District of Columbia, 2000-2018. Office of the Chief Financial Officer, District of Columbia

- Based on overall demographics of Alexandria, which is quite diverse, and the demographics of job holders for the occupations we find to be able to afford the proposed housing units (41% minority), housing in PYED will support housing equity in the city of Alexandria.
- Developers of the PYED project will make multiple contributions supporting Alexandria's affordable housing goals:
  - Donate on-site land for affordable housing units, in conjunction with a new school.
  - Contribute \$25 million to the city's affordable housing fund.
- Having the Virginia Tech Technology Campus in Alexandria will have lasting impacts on the city's ability to attract businesses, investment, and talent – the economic development trifecta. But a significant weakness in the campus plan is the lack of housing for students, post-graduate fellows, and young professors and staff researchers. The proximity and potential price structure of the proposed housing units will be an important contribution to the success of the technology campus.
- By adding more than 5,400 new housing units to the Alexandria market, the city will be contributing to solving the region's housing supply crisis and will be putting in place the units needed to ease pressure on local and regional housing prices.

By addressing critical housing needs in the City, and at the same time creating a vibrant new activity center attracting business growth and opportunity, Alexandria will be positioned as perhaps the best place to live, work, and play in the DC region. These kinds of opportunities do not come along often.