

*A joint project by the National Capital Planning Commission &  
the Metropolitan Washington Council of Governments*

# **WORKPLACE SCENARIO PLANNING STUDY**

*Analysis & tool to understand the Implications of federal telework on the region*

**February 2024**



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# Executive Summary

# Executive Summary

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## About the Study

This report was commissioned by the National Capital Planning Commission (NCPC) in partnership with the Metropolitan Washington Council of Governments (COG) to better understand the impacts of federal telework and hybrid workplaces on the National Capital Region (NCR).



NCPC is the federal government's central planning agency for the NCR. Through planning, policymaking, and project review, NCPC protects and advances the federal government's interest in the region's development. The Commission provides overall planning guidance for federal land and buildings in the region by reviewing the design of federal and certain local projects, overseeing long-range planning for future development, and monitoring capital investment by federal agencies.



Metropolitan Washington  
Council of Governments

COG is an independent, nonprofit association that brings area leaders together to address major regional issues in the District of Columbia, suburban Maryland, and Northern Virginia. COG's membership is comprised of 300 elected officials from 24 local governments, the Maryland and Virginia state legislatures, and U.S. Congress.

This report was produced by The Schreifer Group, HR&A Advisors Inc., and Wells + Associates. This project began in March 2023 and has included extensive research and analysis, geospatial evaluation, stakeholder engagement, interviews with federal agency representatives, and case study research (Appendix A).

The  
Schreifer  
Group

The Schreifer Group is an award-winning women-owned, veteran-owned small business passionate about helping achieve the best possible outcomes through collaborative design processes.

HR&A

HR&A Advisors, Inc. (HR&A) is an employee-owned company advising public, private, non-profit, and philanthropic clients on how to increase opportunity and advance quality of life in cities.



Wells + Associates is a leading employee-owned transportation planning and engineering firm that has evaluated, created, and implemented sustainable, cost-effective transportation solutions for commercial, residential, governmental, and institutional clients across the United States for over 30 years.

## Summary

This report was commissioned by the NCPC and COG to better understand the cumulative impacts of federal telework and hybrid workplaces on the NCR and to help inform NCPC's updates to the policies in the Federal Workplace Element of the *Comprehensive Plan for the National Capital* (Comprehensive Plan). The primary focus of this report is on the ramifications of federal telework policy on the federal real estate footprint in the NCR. This report includes an analysis of the impact of federal telework on broader economic implications across the following trends: federal workforce demographics; where federal workers live; and public transportation and commuting patterns. Cross-cutting considerations include environmental sustainability and equity. Our key findings are informed by our extensive research and analysis, geospatial evaluation, stakeholder engagement, including interviews with federal agency representatives, and case study research.

This study builds upon past analysis by a variety of stakeholders and is not meant to be definitive in predicting policymakers' choices. Rather, it differentiates itself by viewing these issues through three scenarios to understand federal teleworking's impact on a range of trends. We also recognize this is an ever-evolving issue, and our scenario planning is meant to provide a basis for discussion, one that could act as a tool for agencies (and counties) to understand the implications of teleworking policies.

## Key Findings

Our analysis found that federal telework policy and hybrid workplaces could have the following implications on the National Capital Region:

### **Accelerating Reduce the Footprint**

Teleworking will likely accelerate the implementation of reducing the federal footprint, but facility usage plays a pivotal role in how this impacts the agency, county, and the region.

### **Retaining and Attracting Talent**

In an age where flexibility is highly valued, ability to telework is a key factor in retaining and attracting talent.

### **Modifying Transportation and Commuting Patterns**

Increased telework provides flexibility in where federal workers reside and alters commuting habits. This shift encourages more non-work-related travel and can lead to a decrease in daily metro ridership, potentially impacting the regional transportation infrastructure.

### **Changing Sustainability Implications**

The net sustainability impact of teleworking remains unclear, as building energy use may decrease, but at home energy costs and non-work-related trips may increase.

### **Varying County Implications**

Each county's unique blend of agencies, the facility's mission and usage, and potential lease expirations will play a role in how counties may be impacted.

## Key Findings | Case Studies & Engagement

The key findings summarized below are based on focus group interviews with federal stakeholders and case studies of representative facilities across the region to understand how agencies are incorporating telework into their operations and how that may influence a variety of factors. This engagement found that department mission, leadership, and broader organizational policies play a pivotal role in determining telework nuances, space allocations, and the approach to managing the changing workspace landscape.

### **Facilities' use contributes to telework ability, and the likelihood of real estate shifts.**

Agencies are focused on reducing their real estate footprint, although space needs vary across agencies. Notably, the presence of and use of real estate for national security, defense and/or research labs limits the facilities' ability to allow for federal employees to telework, indicating that there may not need to be changes to real estate purely based on telework requirements.

### **Agencies have evolving space needs, with federal facilities trying to adjust.**

Some facilities have shown remarkable resilience in adapting to challenges and trying new uses for space - whether they be infrastructural or the demands of a post-pandemic world. An increase in telework shifted demand for more collaborative spaces.

### **Agencies are balancing the need to be in the office with talent seeking flexibility.**

Agencies are grappling with attracting new talent in an age where flexibility and teleworking are highly valued.

### **Agencies are adjusting to changing transportation and commuting dynamics.**

Some agencies have seen a decline in consistent public transit use, instead seeing an uptick in driving and street parking, reflecting an adaptability in commuting habits due to less frequent in-office attendance.

# Background & Context

# Background & Context

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## Introduction

The federal government is the single largest property owner in the region, affecting the region's economy, transportation, real estate, and employment. During the COVID-19 pandemic, a significant percentage of the region's federal workforce worked from home, which impacted many jurisdictions. Three years later, federal agencies are returning to the office, with many transitioning to a hybrid work environment. The future of the federal workplace is creating uncertainties among regional entities in their planning efforts.

In 2021, NCPC made the decision to put on hold the update to the Federal Workplace Element of the Comprehensive Plan due to the unknown implications of the pandemic on the federal workplace. The Comprehensive Plan is comprised of two parts—the Federal Elements (prepared by NCPC) and the District Elements (prepared by the District of Columbia (DC)). The Comprehensive Plan's Federal Elements are a statement of principles, goals, and planning policies that guide the federal long-term planning and development of the national capital during the next 20 years. The Federal Elements address matters related to federal properties and interests in the NCR and are used as the decision-making framework for the Commission's actions on federal plans and projects. The Federal Workplace Element is one out of the eight Federal Elements, and addresses core policy issues and goals that shape the federal work environment, including the planning, location, design, and operation of federal workplaces. To update the Federal Workplace Element, NCPC would examine the potential long-term impacts to the planning, location, and design of federal workplaces post-pandemic. The policies in the Federal Elements serve as the blueprint for the long-term development of the national capital and provide the decision-making framework for Commission actions on federal plans, projects, and programs submitted for its review.

Given the uncertainty of how much telework and remote work agencies will adopt in the long-term, NCPC in partnership with COG explored scenario planning to better understand the cumulative impacts of federal telework and hybrid workplaces on our region. This report analyzes three baseline scenarios: 1) Minimum Telework, 2) Moderate Telework, and 3) Maximum Telework, as well as the impact on the region's federal real estate, federal workforce demographics, where federal workers live, and transportation patterns.

This report will provide a framework for NCPC, COG, General Services Administration (GSA), Department of Defense (DOD), and other federal agencies, and regional Planning Directors to make more effective decisions as they consider potential impacts of the three scenarios and will help inform NCPC's updates to the policies in the Federal Workplace Element.

## Issue

Before the pandemic, the federal government mainly required in-person work. In 2019, fewer than a quarter of all federal employees teleworked, and of those who were eligible, 56% took advantage of the telework option. Agencies struggled to track and report telework participation and eligibility.<sup>12</sup> However, in 2020, with the onset of the pandemic, the federal government instituted work-from-home policies.

This caused major shifts in federal government operations in the NCR as telework has become the mainstay for many federal departments and agencies. On the one hand, with the widespread adoption of telework, many federal agencies have reported increased productivity, improved work-life balance, and reduced overhead costs.<sup>34</sup> However, some question if it resulted in reduced productivity, as well as its effect on the economy and real estate of the NCR. As agencies and employees return to the office after the pandemic, many are transitioning to a hybrid workplace: a workplace that incorporates a mix of employees who are working in the office and those who are working from other locations. The federal government's telework policies in response to the pandemic could reshape the federal real estate portfolio, but to what extent was unclear.



The federal government remains a vital component of metropolitan Washington, employing more than 438,835 federal employees in the NCR total and providing more than \$71.4 billion in procurement spending.<sup>5</sup> The federal government's presence is concentrated in the NCR, with the two inextricably linked. Understanding how the federal government will manage telework in the future has massive implications for the NCR.<sup>6</sup> Federal agencies have long struggled to determine their office space needs. The future of the federal workplace and office policies could entail a fundamental change in the real estate needs of many federal agencies and would impact the region's jurisdictions differently.<sup>7 8</sup>

When we began this project in March 2023, there was no clear direction on the federal government-wide telework policy, with agencies and departments implementing various levels of telework. In addition, unions implemented agreements at several agencies that increased telework from pre-pandemic levels.<sup>9</sup> On August 4, 2023, President Biden called for his Cabinet to "aggressively execute" plans for federal employees to work more in their offices starting in the fall of 2023. However, the Administration also stated that working remotely will not be eliminated.<sup>10</sup> For many agencies, the return to office has been delayed as employees and unions push back against the mandates.<sup>11</sup>

Departments and agencies have started to execute President Biden's directive, but the application of the policies is likely to vary from one federal office to another, ultimately impacting real estate needs of each department differently. In October 2023, the Government Accountability Office (GAO) called for the Office of Management and Budget (OMB) to help craft new metrics to help determine government-wide office space utilization to support agencies in developing future office space planning in an evolving telework environment.<sup>12</sup> This final report considers current information available to support this research and scenario planning, but acknowledges this is an evolving issue; additional and continued coordination and collection of information from agencies and regional jurisdictions may alter these findings.

## Purpose

This report was commissioned by the NCPC and COG to better understand the cumulative impacts of federal telework and hybrid workplaces on the NCR and to help inform NCPC's updates to the policies in the Federal Workplace Element of the Comprehensive Plan. The primary focus of the analysis is federal real estate implications for the region and includes a scenario analysis tool that can be used across government to understand the unique implications of federal teleworking by county or agency. The report also analyzes the impact of telework policies overall on four trends in the region – federal real estate, federal workforce demographics, where federal workers live, and transportation patterns – with consideration for cross-cutting areas including environmental sustainability and equity. Additionally, the report also broadly considers equity and climate resiliency recommendations from NCPC's Comprehensive Plan for the National Capital Federal Elements, which provides new policy guidance and proposed updates to the planning framework guidelines to encourage federal agency applicants to conduct early and meaningful community engagement and to submit information about equity impacts of plans and projects to inform the decision-making process.

*This report focuses on the NCR which includes Washington, DC; Montgomery and Prince George's Counties in Maryland (MD); Arlington, Fairfax, Loudoun, and Prince William Counties in Virginia (VA); and all cities within the boundaries of those counties. Any references to NCR will refer to this boundary, unless otherwise noted, and is the NCPC definition throughout the report.*

# Existing Conditions & Trends

## Existing Conditions & Trends

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### National Capital Region Economy

**The NCR is one of the main engines of economic growth on the east coast of the US – a region with highly-educated and diverse talent, prestigious educational institutions, and a strategic location on the Northeast Corridor. However, the region’s recovery from the pandemic has slowed.** While there is regional job growth with a measured return to pre-pandemic job levels, it lags the nation's.<sup>13</sup> Nationally and regionally, the impact of the pandemic was not felt equitably– with racial disparities experienced especially by Black residents across a variety of health, social, and economic indicators. As the region recovers, gaps remain in access for Black residents compared to White residents in unemployment, educational attainment, and labor force participation – as well as access to affording supports like childcare.<sup>14</sup>

The NCR’s economic performance relies heavily on the federal government, specifically factors such as the size of the federal workforce, federal procurement spending, and federal real estate holdings. Local federal employment initially increased temporary worker hiring due to the pandemic relief dollars. However, since that initial increase, federal employment returned to early 2020 levels.<sup>15</sup> Federal procurement spending saw an increase in 2020 and 2021 due to relief aid packages.<sup>16</sup> However, some projections expect procurement spending in the region will slow. During the pandemic, a significant percentage of the federal workforce worked from home; this dramatically reduced the number of people working and coming into DC, with the highest concentration of federal workers in the region, which caused economic challenges for DC including high office and retail vacancy.

Between 2010 and 2020, the region’s population increased by 13% to 6,371,325, which was stronger than the nation’s average growth rate of 7.4%. This is true for the entire region, including 14.6% growth in DC, 14.4% for Northern Virginia, and 11.1% for suburban Maryland. Nevertheless, the years before the pandemic brought about a troubling trend of net domestic outmigration from the greater DC region. Between 2012-2021, the region saw an annual net outflow of domestic migration that was mainly offset by natural population increases (births) and international migration.<sup>17</sup> However, DC saw population growth from July 2022-July 2023, reversing population declines seen during the pandemic. This resulted in a positive net migration since the start of the pandemic, with 5,460 more people moving into DC than moving out.<sup>18</sup>

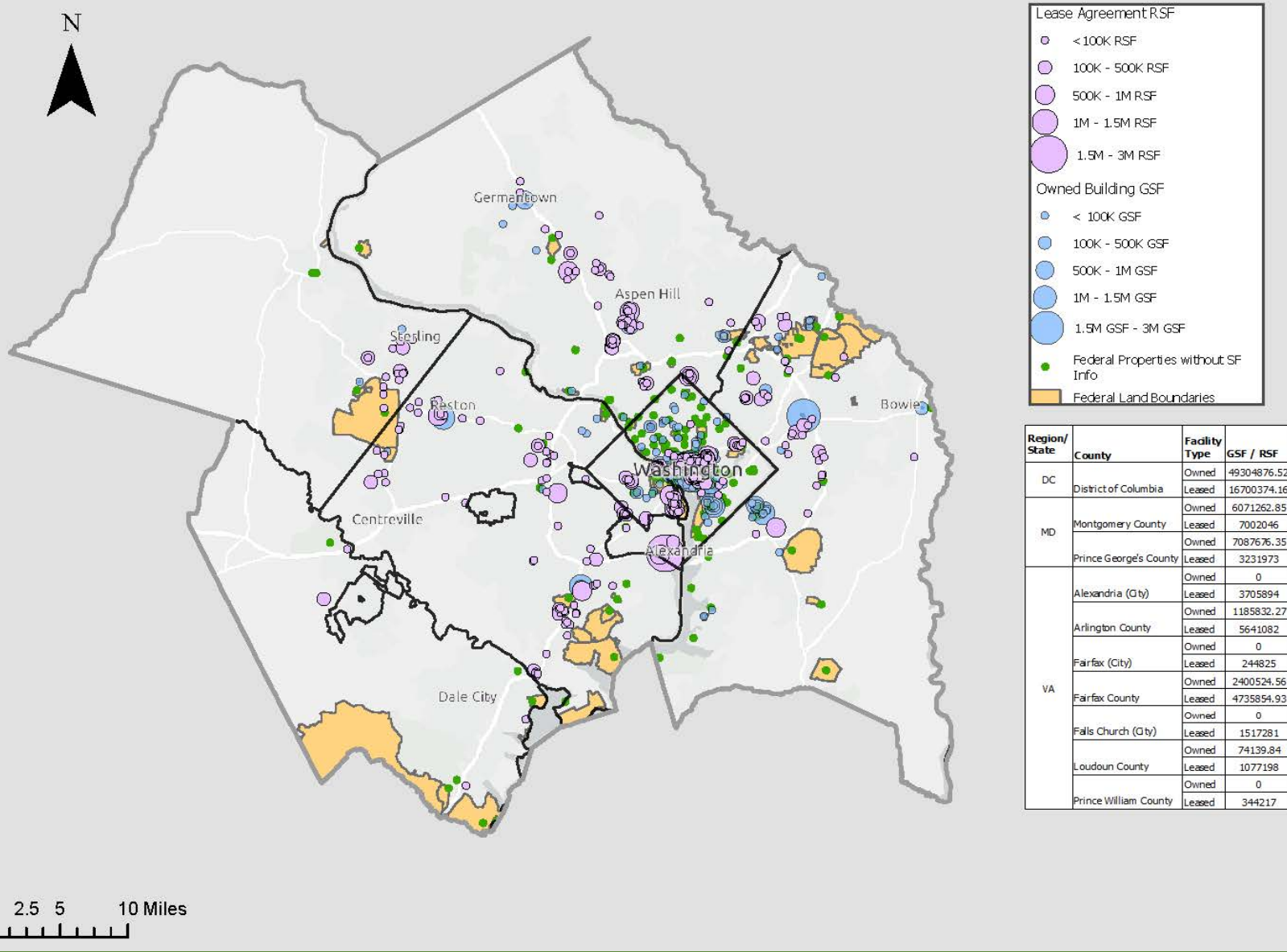
The region's workforce has been slow to recover from the pandemic.<sup>19</sup> The worker shortage in the region is more acute than in the nation and when compared to peer metro areas. While the nationwide labor force contracted by a similar amount at its lowest point in April 2020,<sup>20</sup> it has recovered to above pre-pandemic levels. The lack of available workers is constraining business growth in the region and if left unaddressed, the region could eventually see employers shifting business operations to regions with a more robust supply of workers. The NCR economy and the federal government presence are inextricably linked. It is important to keep this general economic context in mind when considering possible outcomes of federal telework policies.

### Federal Real Estate

The federal government is the single largest owner and occupant of real estate in the region. In the NCR, GSA owns, manages, constructs, and leases a total of approximately 47 million square feet of owned space and 44 million square feet of leased space (190 owned buildings and approximately 500 leased buildings), approximately 17% of the NCR’s office inventory and 36% of DC’s office inventory.<sup>21</sup> In addition to GSA, DOD controls approximately 71 million square feet in more than 5,380 buildings. The federal government’s real estate in the NCR serves a variety of functions (i.e., labs, training facilities, offices, military holdings), and for the purposes of our study we have designated uses across three roles: administrative headquarters and offices; research and labs; and national security and defense-related spaces (see Figure 1).

## Map of Federal Facilities in the NCR, Identified by Building Square Footage (Figure 1)

**Description:** Figure 1 showcases a comprehensive map of the National Capital Region as identified by GSA and NCPC. It highlights federal office locations, utilizing varying point sizes based on their Gross Square Feet (GSF) or Rentable Square Feet (RSF). Additionally, a color-coded system distinguishes whether each location is owned or leased by GSA. The accompanying table on the map provides a summary of GSF/RSF categorized by facility type (owned or leased), county, region, and state. Please note that the actual NCR boundary, as identified by COG, may differ from what's shown here.



In addition to considering federal telework policies implications for its real estate footprint, agencies must also consider government-wide policies, financial and equity considerations (i.e., procurement power, design and delivery of federal technology) and environmental costs.<sup>22</sup> As the region continues to experience climate-related extreme weather events, advancing climate change adaptation and supporting resilience planning is critical to protecting federal assets and investments. Climate change can affect federal property, and the region more broadly, as planners increasingly turn to evaluate building and site design to attempt to mitigate environmental risks for capital improvement projects.<sup>23</sup> In addition to sustainability, planners must also consider the importance of locating federal facilities near existing infrastructure (i.e., housing, transportation) to reduce barriers to the population to employment opportunities.

If agencies consider more long-term telework policies, agencies must then consider a myriad of other concerns including in-office attendance policies, funding issues related to reconfiguring space needs, and work-life culture shifts. This could lead to potential downsizing or repurposing of existing office spaces, favoring more flexible and dispersed workspaces to accommodate remote work arrangements. Given the Biden Administration's recent call for agencies to return to the office, agencies may still have some form of telework, but it may vary across agencies which will impact real estate planning for each facility and agency differently.

**Regardless of teleworking policies, government-wide policy is to reduce the federal government's footprint.** In 2013, the Obama Administration issued the Freeze the Footprint policy, the first federal government-wide policy that established and required federal agencies to identify offsets of existing property to support new property acquisitions that set a timeline for agencies to freeze their real property footprint. Federal agencies sought to freeze or reduce their baseline of space by 2015. In March 2015, the Administration then issued the National Strategy for Real Property and the Reduce the Footprint policy. This policy had three objectives including freeze the growth in the inventory, measure performance to identify opportunities for efficiency improvements; and reduce the size of the inventory by prioritizing actions to consolidate, co-locate, and dispose of property. This remains the policy today. Leased building footage was already declining by the time Congress passed federal property management changes in 2016, which also created the Federal Real Property Council to help develop strategies for better managing federal property. In 2022, agencies were instructed by OMB to submit comprehensive annual five-year capital plans through fiscal year 2028. As part of this process, agencies were instructed to consider "workspace/workplace usage and mobility assessments and opportunities to integrate remote work and sharing of spaces among Federal agencies into mid- and longer-term real estate and property strategies."<sup>24</sup>

The ability to telework has and will likely continue to accelerate the government-wide policy to reduce and consolidate its properties, depending on the agencies' mission and the facilities' use. Notable shifts include the Commodity Futures Trading Commission (CFTC) reducing its space by over 100,000 square feet and the National Transportation Safety Board (NTSB) streamlining from four buildings into a consolidated space, resulting in substantial annual savings. Similarly, the Department of Homeland Security (DHS) is set to centralize its operations from 40 diverse locations to just six, leading to a reduction of more than 1.2 million square feet. This move will enhance inter-departmental collaboration, particularly between the DHS, Cybersecurity and Infrastructure Security Agency (CISA), and Immigration and Customs Enforcement (ICE), with anticipated annual taxpayer savings in the tens of millions of dollars.

In 2023, as the government continues to consider how to reduce its footprint, the GSA's NCR portfolio consisted of 474 total leases consisting of over 44 million rentable square feet, with 58 percent of the leases set to expire in the next five years (see Figure 2). There are 177 leases within DC, 195 leases within VA, and 102 leases within MD. This will likely impact different counties and cities in the region differently, depending on their usage. This will also have real estate market implications for the region. The tables here provide an overview by county of federal government's leased office space expiring over the next five years, as well as an overview of GSA leases nationally.

**Lease Expiring by City and County Across the NCR Estimates (Figure 2)**

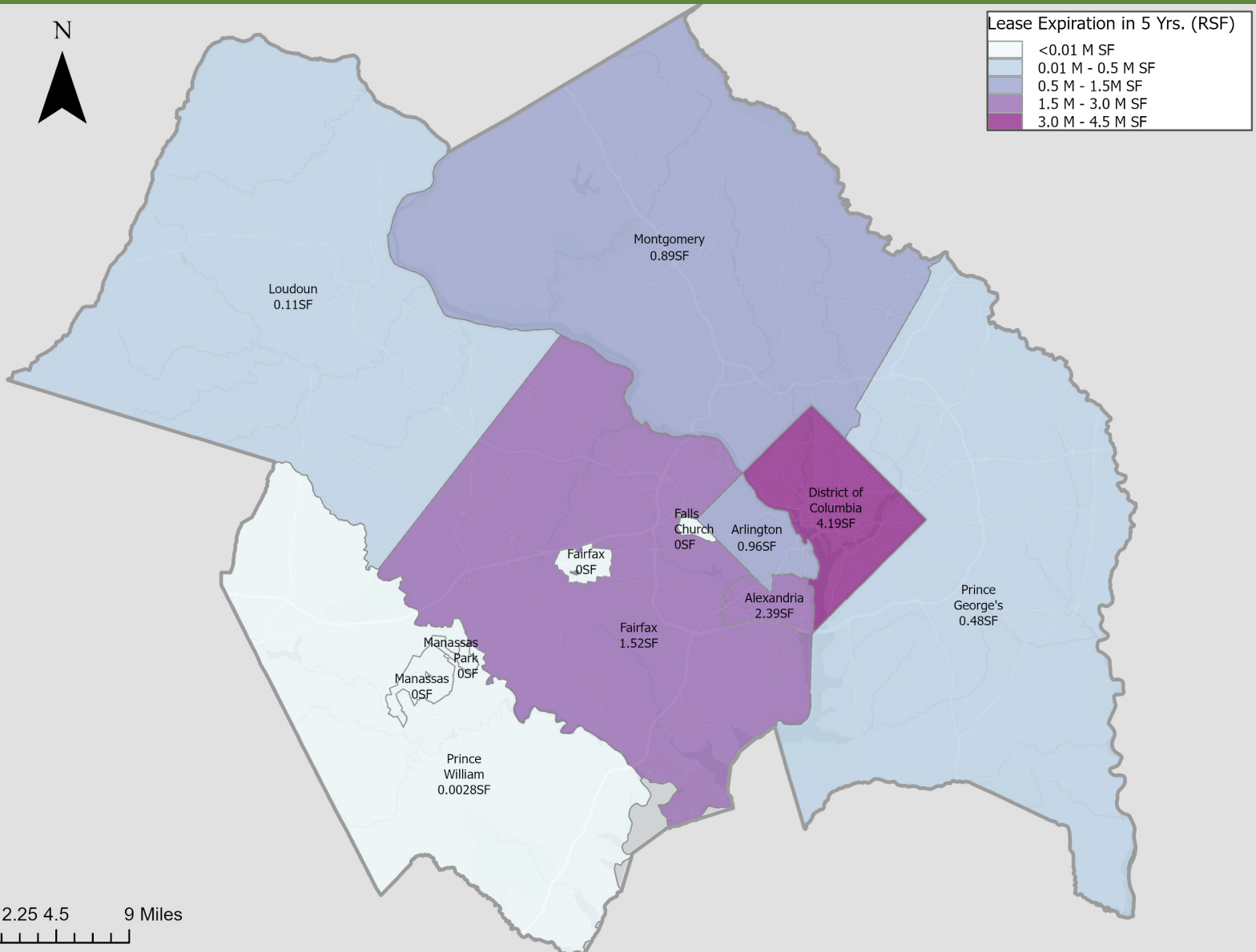
County	Leased Office Space	Leased Office Space Expiring Over the Next 5 Years	% Leased Office Space Expiring Over the Next 5 Years	Spaces with leases expiring within the next 5 years
Montgomery County, MD	6.11 M SF	0.89 M SF	15%	Administrative Offices Research & Lab National Security & Defense
Prince Georges County, MD	1.04 M SF	0.48 M SF	46%	Administrative Offices National Security & Defense
Washington, DC	15.72 M SF	4.19 M SF	27%	Administrative Offices National Security & Defense
City of Alexandria, VA	2.55 M SF	2.39 M SF	94%	Administrative Offices
Arlington County, VA	3.80 M SF	0.96 M SF	25%	Administrative Offices National Security & Defense
Fairfax County, VA	5.69 M SF	1.52 M SF	27%	Administrative Offices National Security & Defense
City of Fairfax, VA	0.07 M SF	0.00 M SF	0%	
Loudoun County, VA	0.86 M SF	0.11 M SF	13%	Administrative Offices
Prince William County, VA	0.28 M SF	0.00 M SF	1%	Administrative Offices
<i>Total</i>	<i>36.10 M SF</i>	<i>10.54 M SF</i>	<i>29%</i>	

*The above table is based on publicly available lease information of federal agencies via Costar of federal agencies and should be used as an estimate of leased space to support the overall implication discussions.*

## Lease Expiration of Federally Leased Properties in the NCR in the Next Five Years (Figure 3)

**Description:** This figure provides a comprehensive view of the NCR, detailing each county's percentage of federal properties with lease expirations within the next five years by total building square footage (SF) by region. The legend employs a color-coded system to indicate the percentage of total square footage in each county that is set to expire. This analysis sheds light on the leasing landscape across the region. Please note that the actual NCR boundary, as identified by COG, may differ from what's shown here.

Federal leases in these counties are across different types of federal agencies. While federal spaces are used for a variety of purposes, we have delineated this across three major categories to help streamline our work: administrative offices, research and labs, and national security and defense as outlined in Figure 2.



## National Trend

The federal government continues to reevaluate the current federal real estate inventory, finding opportunities for efficiency improvements and reducing the size of the inventory through consolidations, co-locations, and disposal of properties.

## National Look

### GSA Lease Inventory FY2015-FY2023<sup>25</sup> (Figure 4)

FY	Lease Count	Year Over Year Change	Square Footage (M/SF)	Year Over Year Change
2015	8,467		195.6	
2016	8,280	-187	192.2	-3.41
2017	8,185	-95	189.8	-2.38
2018	8,115	-70	188.5	-1.31
2019	8,054	-61	187.3	-1.19
2020	8,170	+116	187.1	1.25
2021	7,872	-298	183.2	-3.84
2022	7,760	-112	180.0	-3.22
2023	7,698	-62	179.3	-.74

Nationwide, the federal government owns 511 million square feet of office space, including 1,500 federally owned buildings, and has 7,685 leases.<sup>26</sup> Federal agencies spend about \$2 billion a year to operate and maintain federal office buildings regardless of the buildings' utilization, and \$5 billion annually to lease office buildings. Nationally, since the start of the pandemic, GSA leases are down 5.8% and leased footage is down 4.2%. In figure 4, it demonstrates the GSA lease inventory decreases since FY2015.



## National Trend

*The federal workforce nationwide is composed of an estimated 2.1 million civilian workers, with federal employment returning to 2020 levels. The Biden Administration has announced its intent to add approximately 82,000 employees in fiscal year 2024, with nearly every federal agency increasing its staff. While there has been an overall trend to increase the federal workforce, this may be mitigated by the current workforce demographics.*

## Federal Workforce

There are approximately 438,835 federal workers in the NCR, making up 11% of total regional employment.<sup>27 28</sup> The percentage of the region's federal employment located within DC is 48%, Maryland is 22%, and Virginia is 30%. Of the 438,835 federal employees total, 61,627 are military personnel, with most residing in Virginia.<sup>29</sup> The region's federal workers are highly educated and predominately consist of professional and administrative occupations.<sup>30</sup>

Federal employment in the region began to decline in late 2022 after growing since 2020 and is expected to continue to decrease.<sup>31</sup> The federal government does not provide demographic breakdowns for federal employees by region, however there are demographic breakdowns for all federal employees. In terms of race, the government overrepresents White and Black Americans. However, diversity diminishes at higher ranks, indicating potential barriers to advancement for minority groups.<sup>32</sup> The average age of the federal workforce continues to rise, with every agency experiencing a decline in the number of employees under 30 since 2010. Almost 30% of employees are older than 55, while 8.1% of employees are younger than 30.<sup>33</sup> The availability of paid internships has drastically reduced from over 60,000 in 2010 to approximately 4,000 in 2020, limiting opportunities for young individuals to gain experience in the public sector.<sup>34</sup> This age gap is evident across all fields in the 24 large and mid-sized agencies since 2007, particularly noticeable in the information technology sector. This is further compounded by restrictions placed on federal internships and hiring programs for recent graduates in 2010. The potential impact of large numbers of retirement-eligible employees leaving the workforce in the years ahead, potentially producing a critical skills gap, has been well documented.<sup>35</sup>

While agencies seek to attract younger talent, they must adapt to the changing demands of a younger workforce. Notably, since the onset of the pandemic, teleworking and location flexibility have become essential expectations for much of the labor force, especially for younger workers and mid-career professionals. Many have cited improved work-life balance, and more efficient use of time throughout the day/week as advantages for hybrid workplaces.<sup>36</sup> This is an especially important factor given the aging federal workforce. In the modern workforce landscape, teleworking has emerged as a crucial expectation and often a necessity to keep a competitive edge in talent recruitment for younger workers seeking employment opportunities within the federal sector.<sup>37</sup> However, there are also disadvantages to telework, such as less-experienced and younger workers not being able to benefit from in-person training and mentorship, and employees feeling less connected to an organization's culture.<sup>38</sup> A return to office with limited flexibility will likely make attracting talent more challenging. In terms of impact to the NCR, these issues are intertwined with so many of the larger trends that it is unlikely this will massively shift the federal real estate needs of the government.

## Where Federal Workers Live

In 2022, while over 200,000 federal workers physically work in DC, only 16% reside in DC. Many civilian federal workers in 2022 have chosen to reside in Maryland and Virginia – with the highest residency in Fairfax County, Prince George’s County, and Montgomery County. This dispersion helps support the economy of the NCR, especially as increased telework allows people to live and work close to home.<sup>39</sup>

Since the beginning of the pandemic, average rent in the DC region rose by 12% to \$2,000 while average home prices have grown by 22% to \$533,000, a trend seen throughout the nation.<sup>40</sup> A shortage of affordable rental homes and home prices remaining significantly more expensive than the national median sales price has created an environment where housing affordability is a widespread concern for the region.<sup>41</sup> This is not felt equitably, with a \$156,000 gap in median home value between Black and White residents and Black residents nearly two times as likely to be rent burdened.<sup>42</sup>

## Where Federal Employees Work vs. Where Federal Employees Live in the NCR (Figure 5)

Jurisdiction	Federal Workers (Place of Work)	Federal Workers (Place of Residence)	% of Regional Federal Workers (Place of Residence)
<b>Washington, DC</b>	<b>195,121</b>	<b>63,439</b>	<b>16.1%</b>
<b>Suburban Maryland</b>	<b>86,332</b>	<b>160,889</b>	<b>40.7%</b>
<i>Montgomery County</i>	<i>50,128</i>	<i>67,477</i>	
<i>Prince George’s County</i>	<i>29,720</i>	<i>65,179</i>	
<i>Charles County*</i>	<i>2,685</i>	<i>16,574</i>	
<i>Frederick County*</i>	<i>3,799</i>	<i>11,659</i>	
<b>Northern Virginia</b>	<b>102,239</b>	<b>170,904</b>	<b>43.2%</b>
<i>Arlington County</i>	<i>26,818</i>	<i>26,017</i>	
<i>Fairfax County</i>	<i>48,462</i>	<i>75,470</i>	
<i>Loudoun County</i>	<i>5,348</i>	<i>21,835</i>	
<i>Prince William County</i>	<i>7,521</i>	<i>30,971</i>	
<i>City of Alexandria</i>	<i>14,090</i>	<i>16,611</i>	
<b>Total in Region</b>		<b>395,232</b>	<b>100%</b>

*\*Military residency not currently available; the data above only includes civilian federal employees. While Charles and Frederick County are not within the NCP’s NCR, they are included in this table for additional context on where federal workers live. [U.S. Census Bureau 2022 American Community Survey; U.S. Department of Commerce, Bureau of Economic Analysis]*

Given this housing crisis and the flexibility that telework offers, there is some evidence that residents are moving – a trend seen nationally – as many families chose to move to the suburbs, and prices have changed across the NCR.

One such study analyzed reallocation of population in major cities across the country, including DC, showing a substantial urban exodus since the pandemic outbreak.<sup>43</sup> For example, Richmond saw a huge rise in the number of Northern Virginia residents who relocated during the pandemic: a 36% increase in the average number of Northern Virginia transplants to Richmond during 2020 and 2021 compared to the time between 2012 to 2019. This comes as train ridership between Richmond and DC increased 26% from July 2019 to July 2022 and as the Richmond area’s population grew more quickly than Northern Virginia for two years straight.<sup>44</sup>

## Public Transportation & Commuting

The pandemic resulted in a significant shift in the commuting habits of NCR residents. Public transit usage plummeted to just 27% of pre-pandemic levels during the peak of the crisis and has been slow to recover. The combination of teleworking, ease of parking, safety-related service disruptions, and crime has hindered the return of commuters to public transit.<sup>45</sup>

While there has been a 25% improvement in ridership in 2023 compared to 2022, it remains at only 54% of the levels seen in 2019.<sup>46</sup> Bus ridership and parking usage has recovered more quickly, with bus ridership at 82% of pre-pandemic levels on weekdays and parking usage at 37% of pre-pandemic levels.<sup>47</sup> Federal workers can participate in the transit subsidy program, which is designed to encourage employees to use mass-transit to commute to and from work. With over 50% of metro stations serving federal facilities, it has served as critical transport infrastructure for the region's largest workforce.

These shifts overall included changes in patterns of travel. Before the pandemic, 80% of riders on the metro were commuting to or from work. Today, only 65% of riders on the metro are commuting, with an increase in shorter neighborhood commutes (rail trips of five miles or less).<sup>48</sup> Overall, this persistent decrease in metro ridership poses a significant threat to the region's transport infrastructure. WMATA leadership predicts an operating deficit of \$750 million in FY 2025, potentially leading to massive service reductions starting on July 1, 2024, and creating a dangerous "death spiral" where reduced service leads to further declines in ridership.<sup>49</sup> WMATA management warns that this deficit is systemic, projecting a deficit of around \$900 million, even if ridership fully recovers to pre-pandemic levels, ten years from now.<sup>50</sup> WMATA has stated their efforts to make service improvements, in particular, to focus on opportunity for the non-work trips, and remains prepared for a surge in ridership if employees are asked to return to the office.

In stark contrast to the lack of metro ridership, commuter highways around the region have been bustling. By the end of 2022, roadway traffic volumes in DC, Arlington, and Alexandria were only about 5% below 2019 counts.<sup>51</sup> In Fairfax, Montgomery, and Prince George’s counties, traffic had rebounded to 94% of pre-pandemic levels as of 2022. Overall, weekday rush hours are back, although with shorter morning and evening peaks, indicating a partial return of commuters.

Working from home may be encouraging discretionary trips or non-work-related travel during peak hours, which previously might have been avoided. Additionally, the growing number of single-driver trips could be attributed to free or discounted parking benefits offered by DC employers to entice their employees back to the office.

The shift in commuting habits and persistent decline in metro ridership in the region has significant implications for the real estate needs of the federal government. A long-term increase in the reliance on private vehicles because of workers commuting from farther away and only during a couple of times a week, might necessitate the need to consider new strategies to mitigate traffic or parking congestion.

Additionally, the government may need to adopt hybrid work models to cater to evolving workforce preferences. It remains unclear how any change in current telework policies may impact WMATA ridership and transit patterns in the future, but without a major shift in policy, federal agencies may make new adjustments to their current real estate footprint to accommodate.

# Scenario Planning Analysis

# Scenario Planning Analysis

## Base Telework Study

Below are three base teleworking scenarios to understand the impacts of telework on the federal government’s real estate, federal workforce demographics, where federal employees live, and public transportation and commuting. In the next section, we describe how each trend would be impacted in each of the scenarios based on our analysis, stakeholder discussions, and data available. These have been refined and updated throughout this project.<sup>52</sup>

The first table articulates the base teleworking scenarios across a range of options and our guiding assumptions for each. Given the scope of the federal government, this allows us to consider a range of possible options for various agencies and facilities.

## Base Telework Scenarios

Base Telework Scenarios	Guiding Assumptions
<p><b>Maximum Telework</b> (8-10 days of telework per two-week period)</p>	<ul style="list-style-type: none"> <li>• Pandemic-era of maximum telework policies remain in place, or even expand slightly. OPM’s stance is to maximize telework for all eligible employees.</li> <li>• 50% of all federal employees are eligible for telework under this scenario.</li> <li>• Most federal employees eligible to telework do so 8-10 days per two-week period.</li> </ul>
<p><b>Moderate Telework</b> (4-6 days of telework per two-week period)</p>	<ul style="list-style-type: none"> <li>• Moderate telework policies are in place.</li> <li>• Teleworking eligibility for federal employees remains at 50% but is limited to a specific number of days per two-week period.</li> </ul>
<p><b>Minimum Telework</b> (1-2 days of telework per two-week period)</p>	<ul style="list-style-type: none"> <li>• Pre-pandemic era telework policies are in place.</li> <li>• Telework eligibility for federal employees remains at 50% but is limited to 1-2 days per 2-week period.</li> <li>• Telework is assumed to be the exception rather than the norm.</li> </ul>

## Scenario Planning Methodology

The base teleworking scenarios are then overlaid with office utilization assumptions by agencies, to understand the extent to which agencies might be able to reconsider their real estate needs more efficiently. To determine the upper and lower ends of each scenarios office utilization, we reviewed estimates from GAO’s October 2023 report on agencies’ space utilization as well as external sources such as Kastle Occupancy Barometer which measures office occupancy across offices in the region. To help us understand the potential impacts of each, we provided some extremes in the scenarios. For example, quantile four will likely never see 100% utilization, but is useful to consider alongside other utilization rates for this analysis.

As the Administration calls for agencies to return to the office, this scenario planning tool and analysis could be used by counties and agencies to determine impact across the categories we provide in greater detail in the next section. Based on the latest information, and President Biden’s directive to agencies for increasing in-person work, maximum telework is the most unlikely, but we have used it as an option to show the possibility of the tool for future use. The federal government departments or facilities with national security and defense-related spaces are likely to have the least flexibility for teleworking due to security considerations.

## Base Telework Scenarios Impact on Office Utilization by Department

Telework Scenarios	Quantile 1	Quantile 2	Quantile 3	Quantile 4
<b>Maximum Telework</b> (8-10 days of telework per two-week period)	9% office utilization	14%	15%	19%
<b>Moderate Telework</b> (4-6 days of telework per two-week period)	9%	16%	23%	36%
<b>Minimum Telework</b> (1-2 days of telework per two-week period)	67%	74%	78%	100%
<b>Representative Agencies</b>	Department of Agriculture, Department of Housing and Urban Development, GSA, Office of Personnel Management, Small Business Administration, Social Security Administration	Department of Education, Department of Veterans Affairs, Environmental Protection Agency, NASA, National Science Foundation	Department of Health and Human Services, Department of the Interior, Department of Labor, US Agency for International Development	Department of Defense (Mark Center), Department of Energy, Department of Commerce, Department of Homeland Security, Department of Justice, Department of State, Department of the Treasury, Nuclear Regulatory Commission

*Given that parking demand is a direct function of office utilization, we assume that parking occupancy estimates are the same as the office utilization estimates. This incorporated most recent findings from the GAO, private data sources like the Kastle Occupancy Barometer, and GSA-provided data.*

*Per GAO and GSA, utilization is the ratio of a building’s capacity and the extent to which an agency uses that capacity. Utilization differs from attendance because a building’s capacity is based on the size of the building, not the number of people assigned to it. All assigned staff could go to a building, and it could still be underutilized if the building has more space than it needs. According to GSA, agencies are not required to collect attendance data (if individuals come into the office).*

## Study Area

**Included here is the map showing our statistical area considered for this study.** This report focuses on the NCR which includes DC; Montgomery and Prince George’s Counties in Maryland (MD); Arlington, Fairfax, Loudoun, and Prince William Counties in Virginia (VA); and all cities within the boundaries of those counties. Any references to NCR will refer to this boundary, unless otherwise noted, and is the NCPC definition throughout the report.

### NCPC Study Area Map (Figure 6)



**Description:** Figure 6 shows a map of the NCR including the counties articulated above. COG’s NCR boundary is slightly different, including Frederick County and Charles County.



## Stakeholder Meetings and Case Study Considerations

### Roundtable Discussion

On May 5, 2023, NCPC and COG hosted a roundtable discussion about the future of the federal workplace that featured speakers from NCPC, GSA, WMATA, George Mason University, and Gensler. High-level takeaways from the speakers and resulting discussions included:

- **Telework policy:** There is currently no consistent teleworking application across federal agencies, which results in varied impacts of teleworking across agencies and areas of the NCR.
- **Local impacts:** Federal telework policies have a notable impact on local economies, public transit ridership, and the real estate housing market.
  - Despite overall employment levels returning to pre-pandemic levels, the job market in the building services and building management industries has not recovered.
  - Public transit ridership has slowly recovered, with bus ridership recovering faster than rail ridership. WMATA noted an increase in local trips rather than commuting.
  - The increase in telework has shifted the demand for types of office space, with post-pandemic office design requiring collaborative meeting spaces than individual offices.

Local government representatives at the panel event were eager to learn how their jurisdictions will be affected by federal telework scenarios and there was widespread agreement that further discussion is needed to prepare for the implications of federal telework policies in the NCR.

### Stakeholder Interviews

NCPC held a series of virtual focused group interviews with federal stakeholders to understand how agencies are incorporating telework into their operations how that may influence agencies' real estate and workspace needs, workforce hiring and retention, and public transit and commuting usage. NCPC interviewed federal agencies with a variety of workspaces (e.g., defense with intelligence/office, campuses with research and lab components, defense with training facilities, and administrative headquarters) and within different jurisdictions throughout the NCR. The following key takeaways from the interviews helped inform the scenario planning analysis in this report.

- **Telework and office use types:** The unique agency composition in each NCR county influences their respective telework policy outcomes. The presence of and use of real estate for training, healthcare, research, lab, and storage uses will limit the facilities' ability to allow for employees to telework, indicating that changes to real estate for such facilities may not be warranted.
- **Office use types and scenario outcomes:** In Maryland, there are concentrations of the types of spaces which will see limited availability to telework. Some of these areas are not within walking distance of an existing fixed route transit service. Administrative spaces tend to be concentrated in DC and Northern Virginia. Generally, these spaces are well-served by public transit. Some of these spaces, such as national security and defense-related facilities, will continue to see high utilization due to security requirements.
- **Telework, recruiting, and retention:** The ability to telework impacts employee retention and recruitment for federal agencies. Agencies with large administrative functions anecdotally found telework to be amenable to maintaining their operations.
- **Urban Design Implications:** A change in the number of employees in an office affects how federal buildings use their exterior spaces such as parking lots or plazas which could have physical

implications for the region if compounded with other factors. Furthermore, the design of the buildings themselves can have an impact on employees' desire to come into the office.

### Case Studies of Federal Facilities | Summary

The federal government operates a wide array of spaces in the NCR, all with different footprints, locations, missions, staffing, and space requirements. This report analyzes three case studies of representative facilities across the region to provide insights into how different agencies and types of facilities are adapting to telework. They are representative of each of the functions: administrative headquarters and offices, research and lab, and national security and defense-related spaces.

#### Our case studies include:

- The Department of Defense (DOD) Washington Headquarters Services (WHS) in Arlington, Crystal City and Rosslyn, VA. This case study is the least flexible given its mission and facility type;
- US Food and Drug Administration (FDA) White Oak Campus in Montgomery County, MD. This facility has adopted a flexible level of telework and is now reconsidering its real estate needs; and
- General Services Administration (GSA) 1800F Headquarters in Washington, DC. This facility was selected because of its track record of pushing for creative and new uses of spaces.

#### Key Takeaways:

Department mission leadership and broader organizational policies play a pivotal role in determining telework nuances, space allocations, and the approach to managing the changing workspace landscape.

- ***Evolving space needs:*** Agencies are focused on reducing their real estate footprint, although space needs vary across agencies. Notably, the presence of and use of real estate for national security and defense and/or research labs limits the facilities' ability to allow for federal employees to telework indicating that there may not need to be changes to real estate.
- ***Adapting facilities:*** Some facilities have shown remarkable resilience in adapting to challenges and trying new uses for the space - whether they be infrastructural or the demands of a post-pandemic world.
- ***Recruiting Talent:*** Agencies are grappling with retaining and attracting new talent in an age where flexibility and teleworking are highly valued.
- ***Changing Transportation Dynamics:*** Some agencies have seen firsthand the decline in consistent public transit use, instead seeing an uptick in driving and street parking, reflecting an adaptability in commuting habits due to less frequent in-office attendance.

# **Scenario 1:**

## **Minimum Telework**

## Scenario 1: Minimum Telework

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The minimum telework scenario assumes the federal government will telework one to two days per two-week period. Our guiding assumptions are that pre-pandemic era policies are in place, with telework eligibility for federal employees remaining at 50%, but limited to one to two days per two-week period. Telework is assumed to be the exception, rather than the norm. This scenario is analyzed across the four trends:

### Federal Real Estate

Minimum telework would likely cause the federal government to maintain its federal real estate as it did prior to the pandemic. This would likely be true across many federal agencies and types of spaces, but research and labs and national security and defense-related spaces have the most limited opportunities for employees to telework at any level.

Prior to the pandemic, the government introduced a policy to reduce the federal government's footprint, emphasizing a more efficient and cost-effective approach to property management. The pandemic crisis, with its push for telework, complements these initiatives by highlighting the potential to further reduce the necessity for physical office space. From a sustainability perspective, federal buildings energy use would remain, but energy use at home would potentially decrease.

The federal government would need to balance its longstanding objective to minimize real estate holdings with the needs of a predominantly in-office workforce. A strategic solution could lie in reducing the government's leased space and optimizing the use of its owned facilities. The federal government could minimally shift from leased to owned spaces and potentially could yield financial benefits in the long run, as the recurring costs associated with leasing could be curtailed. Additionally, leveraging owned facilities could foster better integration between federal agencies, promoting increased collaboration and more efficient operations. However, this approach does not come without challenges. The process of transitioning from leased to owned spaces may involve infrastructural and logistical adjustments, ranging from renovating existing government buildings to optimizing transportation connections for employee accessibility. Nonetheless, by pursuing this strategy, the federal government can reconcile the dual goals of accommodating its workforce and staying true to its real estate reduction ambitions. While consolidation could happen in the short term (within the next five years), when it comes to leased spaces, any major shifts would likely take place in the mid-term (10 years).

### Federal Workforce Demographics

Minimum telework policies alone are unlikely to shift federal workforce demographics, but they could accelerate existing trends prior to the pandemic – decreasing the federal workforce in the long-term if there was not a concerted effort to hire additional staff.

Minimum telework could induce some challenges as it relates to recruiting and retaining a younger and mid-career workforce that has demonstrated a strong inclination towards flexible work arrangements. Federal departments have stated that the ability to telework has been a significant factor in attracting this demographic into federal roles. With telework opportunities curtailed, there is a potential risk of alienating these professionals. This would also hinder the government's ability to recruit beyond DC, potentially impacting their ability to diversify their workforce. For retirement age employees who perhaps put off retirement due to economic challenges or due to the increase in teleworking flexibility with the pandemic, it may accelerate their retirement plans.

## Where Federal Workers Live

The shift to minimal telework would invariably influence the residential choices of federal employees. With regular commuting becoming a necessity again, proximity to federal workplaces would likely become a prime consideration. As a result, we could witness a resurgence in demand for housing in the NCR, both in urban and suburban areas. Federal employees that decided to move further away from the region during the pandemic may decide to move closer to the region.

This shift would have cascading effects on the real estate market and local economies. Property values in areas proximate to federal offices might experience an uptick due to sustained competition over a limited amount of housing. The economic implications for local businesses in the NCR, especially those in the retail and service sectors, could be profound. These sectors thrive on the patronage of federal employees. As workers return to offices, businesses located nearby would likely see an increase in foot traffic and sales, leading to consumer spending primarily near the office location. Alternatively, businesses in remote areas, which had adapted to cater to teleworking federal employees, might face economic challenges.

## Public Transportation & Commuting

Transportation infrastructure would be directly impacted by minimum telework policies, likely signaling a return to pre-pandemic levels for metro, bus, and parking, with a mild reduction expected in public transit and vehicular traffic near pre-pandemic levels. The pandemic resulted in a significant shift in the commuting habits of NCR residents. Before the pandemic, public transit played a crucial role for the federal government's workforce, accounting for 30% of all peak-period commuters. With over 50% of metro stations serving federal facilities, it served as critical transport infrastructure for the region's largest workforce. The daily commuting costs to drive to work will be a reason why more participants will use the transit subsidy program and mass-transit to commute to and from the office, with this scenario likely seeing the impact to parking as like pre-pandemic levels.

# **Scenario 2:**

# **Moderate Telework**

## Scenario 2: Moderate Telework

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The moderate telework scenario assumes the federal government will telework four to six days per two-week period. Our guiding assumptions are that teleworking eligibility for federal employees remains at 50%, but it is limited to a specific number of days per two-week period. This scenario is analyzed across our four trends:

### Federal Real Estate

Moderate telework scenario assumes federal government will telework four to six days per two-week period, with medium office utilization, but that assumption is not possible for all federal spaces. For example, federal agencies that have research and lab space concentrated in Maryland and national security and defense-related spaces in Virginia have limited opportunity for their federal employees to telework due to their mission. From a sustainability perspective, net impacts remain unclear depending on how the federal government plans to manage its spaces. It is possible that federal buildings' energy use would remain (or decrease depending on lease space changes), but energy use at home would potentially increase given their time at home. Across all scenarios, the federal government should consider the importance of new federal facilities near existing infrastructure and how that would support access considerations.

While federal agencies will continue to meet the government-wide policy by reducing its footprint, this scenario anticipates that this will be limited to the leased space sector. The greatest reduction in office space may occur in federal leased space in DC, where federal agencies have greater opportunities to reduce federal leases and consolidate federally owned space, maximizing the use of underutilized federal buildings. As DC holds the most leased and owned space in the region, this area is most likely to experience the greatest impact from changes to the federal real estate. However, it is likely that this will not be uniform across all agencies, as some departments or specific facilities may have specialized needs that prevent drastic space reductions. For example, spaces with national security or defense use are less likely to telework at all, so are less impacted by telework policies alone. Given the time needed to obtain capital funds to modernize federally owned buildings (and support consolidation efforts), this scenario anticipates that this movement will not occur during the short-term (within the next five years), but in the long term (15+ years).

### Federal Workforce Demographics

Moderate telework policies alone are unlikely to shift federal workforce demographics more than the existing trends that already exist, with likely some support of talent recruitment and retention. However, there is potential for increased participation from those that prioritize a work-life balance, such as working parents or caregivers. The moderate telework scenario will also help agencies retain and attract new talent in an age where flexibility and teleworking are highly valued. However, this will need to be balanced with younger generations who support in-person job training.

### Where Federal Workers Live

Federal workers may no longer be tethered to living within proximity to their physical offices and can be geographically dispersed, but still likely within the region. Federal workers may consider residences in more affordable or suburban or rural areas, away from urban centers. The extended flexibility could alleviate housing cost pressures for some, and regions previously not considered commutable may see an influx of federal employees and potentially have secondary efforts, supporting new communities.

## **Public Transportation & Commuting**

Moderate telework adoption will have a pronounced impact on public transportation and commuting patterns in the NCR. We would expect public transit usage to remain at similar levels to what we see today, with metro ridership still low compared to pre-pandemic levels, and bus ridership and parking usage largely recovered. Shorter neighborhood commutes would likely continue as well. Furthermore, this shift may lead more federal workers to consider driving, causing heavier weekday rush hour traffic and greater demand for parking near federal facilities.



# **Scenario 3:**

## **Maximum Telework**

## Scenario 3: Maximum Telework

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The maximum telework scenario assumes that pandemic-era maximum telework policies are in place, or even expanded for eligible employees. Our assumption is 50% of all federal employees are eligible for telework under this scenario, teleworking eight to 10 days per two-week period. This scenario is analyzed across our four trends:

### Federal Real Estate

Maximum telework would herald a transformative shift in real estate strategy for the federal government, greatly accelerating the efforts to reduce the federal footprint. Federal agencies that have research and lab space concentrated in Maryland and national security and defense-related spaces in Virginia have limited opportunity for their federal employees to telework due to their mission, so administrative spaces would see the most shift under this scenario. The decrease in daily office space use, marked by an office utilization rate as low as 9% for some agencies, means the nature of office spaces could shift to primarily serve collaborative, meeting, or specialized work needs. The emphasis may shift from individual workstations to more communal and adaptable spaces, ensuring that the limited in-office days are utilized for teamwork and collaborative efforts.

While this would likely be the case for administrative spaces, reduction becomes more of a challenge for research and lab and national security and defense-related spaces. These spaces often are less inclined to telework due to their missions, and thus any changes in real estate are often not just dependent on telework policy. Therefore, areas like Arlington, VA may not experience as big of a shift due to a robust presence of national security and defense-related spaces. However, Alexandria, VA could experience a significant contraction in federal office space given that 94% of its office spaces are nearing lease termination, coupled with a lack of national security and defense-related spaces. From a sustainability perspective, federal buildings' energy use would potentially decrease depending on the agencies' choice of how to use spaces, but energy use at home would likely increase. To understand the net impact of this telework scenario on sustainability, additional research would be needed. Across all scenarios, the federal government should consider the importance of having federal facilities near existing infrastructure and how that would support access considerations.

### Federal Workforce Demographics

The maximum telework scenario will help agencies retain and attract new talent in an age where flexibility and teleworking are highly valued. The implementation of a maximum telework schedule would have the potential to usher in a shift in federal workforce demographics. The broadened reach of federal job opportunities could attract a wider demographic range from various geographical areas, broadening the talent pool. This scenario may also see a rise in workers from younger generations who prioritize flexibility. Moreover, it might cater well to older employees, providing them with an option to work in a more comfortable home environment, possibly even extending the average retirement age.

### Where Federal Workers Live

A predominantly remote federal workforce can dramatically reshape the residential patterns of federal employees. Without the need to commute frequently, living in the immediate vicinity of an office or even within the same city might no longer be a priority. This could trigger a migration from city centers to suburbs or even more distant rural areas, seeking larger living spaces or more serene environments. Remote workers can live in any state and be located outside of the region. This, in turn, could stimulate local economies and housing markets in areas previously not favored by federal employees.

## Public Transportation & Commuting

With most federal workers teleworking most of the time, public transit systems, especially in metropolitan areas, could witness a drastic fall in daily ridership. The already beleaguered public transportation systems may need to reevaluate routes, frequencies, and overall operations to remain financially viable. Commuting patterns will undergo a significant transformation, with substantially reduced rush-hour congestions and potentially more evenly distributed traffic throughout the day. This could potentially lead to additional parking needs around facilities as individual commuters increase driving on days in the office, but this remains an unknown. While overall this could lead to environmental benefits and infrastructure longevity, it also poses challenges for the sustainability of urban public transport systems that previously relied heavily on daily commuters.

# Conclusion

## Conclusion

While the Biden Administration has called for plans for federal employees to work more in agency offices, this will likely differ depending on the agency and the facilities' usage. Given this uncertainty, our scenario planning is used to better understand the cumulative impacts of federal telework and hybrid workplaces on the NCR.

The goal of the scenarios is to allow stakeholders to consider the ramifications of federal telework shifts across trends. This analysis could be applied by each agency (or county) on an individual basis to evaluate their unique implications. Below are the summary takeaways from the scenario planning analysis, from minimum to maximum telework, unveiling the potential changes each scenario could cause. As this issue continues to evolve, and given the scope of the federal government, scenarios can continue to be reevaluated.

Scenario	Office Utilization	Real Estate Implication	Workforce Demographic	Where Federal Workers Live	Public Transit & Commuting
Minimum	High (around 90%)	Potential to reduce leases as strategy; maximize owned facilities.	Challenges to recruitment and retainment.	Proximity to federal workplace important.	Mild reduction in public transit use; vehicular traffic nearly normal.
Moderate	Medium (15%-35%)	Reduction in leased space; potential rethink of space allocation and use.	Support talent recruitment and retainment for talent, favoring flexibility.	Could allow for geographic dispersion of where federal workers live in region.	Significant reduction in peak-hour congestion; Moderate public transit reduction.
Maximum	Low (9%-19%)	Major reductions in office spaces; emphasis on collaborative spaces.	Major shifts in recruitment and retention of talent.	Could allow for significant dispersion of federal workers nationally.	Drastic reduction in public transit; major change in peak traffic hours.

**Federal Real Estate:** The need for physical office space is inversely proportional to the degree of telework adopted. While minimum telework scenario might still require a substantial amount of office space, with a focus on reducing leased space and maximizing underutilized owned facilities, a maximum telework scenario might lead to a fundamental rethink of the need for physical space. Overall, this could also impact the urban design of the region as well.

**Federal Workforce Demographics:** A minimum or maximum telework scenario could impact recruiting and retainment of federal workforce staff, as many employees prefer some teleworking. A maximum telework scenario could also potentially support geographic diversity in recruiting.

**Where Federal Workers Live:** The implications of telework on residential patterns can be significant. Maximum telework could see a shift allowing federal workers to choose anywhere to live, changing the landscape of regions previously not favored by federal employees.

**Public Transportation & Commuting:** Every increase in the teleworking rate can further suppress the demand for public transit and reshape commuting habits. Maximum telework might contribute to a considerable reduction in daily ridership on public transportation, leading to potential service alterations.

## Telework Implications by County in the NCR

Our final analysis is on the implications of teleworking by county. Given the government-wide policy to reduce the footprint, coupled with the potential for a long-term version of some level of teleworking, leases across the region were analyzed for their likelihood of being reduced. Anticipated lease expirations in the next few years provides an opportunity to change the federal real estate footprint. GSA has stated that in a post-pandemic environment, they anticipate agencies wanting to downsize space through increased lease buyouts or consolidating offices.<sup>53</sup> For this reason, our analysis focuses on leases set to expire in the next five years. Finally, we analyzed the use of the spaces across our three categories – administrative offices, research and labs, and national security and defense - to understand how likely they may be reduced.

The following provides a summary of that analysis:

**Washington, DC** holds almost half of all federal real estate leases in the region, making it substantially important for the federal government holdings and signaling changes in federal telework policy could have significant impact. Given telework-eligible jobs, there could be a significant decrease in office workers depending on the telework scenario.

**Prince George's County, MD** will have potential challenges with 46% of its office space leases nearing their termination, signaling moderate impact. While the absence of security/defense-related agencies could signify high exposure, agencies like the National Oceanic and Atmospheric Administration, known to require substantial lab spaces, can offer a degree of stability. The indispensability of in-person presence in labs for various scientific activities can act as a crucial buffer against sharp reductions in the occupied spaces in this county, potentially reducing the overall impact of telework trends on office space occupancy.

**Montgomery County, MD** where 15% of leases are nearing their expiration, finds itself in a peculiar position. The presence of entities like the National Institute of Health and the U.S. Department of Health & Human Services, known for their extensive lab spaces, makes this county less susceptible to the shifts towards telework. The resilience of research and lab spaces, where scientists and researchers are required to work in person, might counterbalance the potential impact, rendering it minimal to moderate.

**Fairfax County, VA** will see 27% of the leased spaces expiring. The imminent expiration of over a quarter of its leases could be counteracted by the stability offered by the national security and defense agencies entities, signaling moderate impact.

**Arlington County, VA** where approximately 25% of its commercial leases are approaching their expiration dates can expect some moderate impact. However, Arlington is home to significant national security entities, signaling moderate impact. This robust presence of security/defense-related agencies may potentially serve as a mitigating factor against substantial declines in office occupancy rates.

**City of Alexandria, VA** finds itself in a precarious position, with a staggering 94% of its office spaces nearing lease termination coupled with a lack of key security agencies. However, this high rate is most likely representing one agency, the US Patent and Trademark Office, so impact could remain low.

**Loudoun County and Prince William County, VA, and City of Fairfax, VA** display lease expirations ranging from 0% to 15%. Their agency composition and lease dynamics indicate a potential low to moderate impact from the telework trend.

While each county's unique blend of agencies and lease expirations plays a role in how they might be impacted, the presence or absence of national security agencies emerges as a pivotal factor. As the telework landscape continues to evolve, it will be paramount for local stakeholders and policymakers to stay attuned to these nuances to strategize effectively.

## Next Steps

This study builds upon past efforts and studies and is not meant to be definitive in predicting policymakers' choices. Rather, it differentiates itself by viewing these issues through three scenarios to understand how teleworking could impact a range of trends across the region - one that could be used as additional information becomes available. This report could support agencies and counties on an individual basis evaluate the unique implications federal telework policy could have, allowing stakeholders to consider where in the matrix they may fall. Beyond use of this tool, we also recognize that additional study considerations – such as sustainability and equity – may be key areas for consideration and additional study given the evolving nature of this issue.

As next steps, NCPC will update the policies in the Federal Workplace Element to address the key issues identified in this report.

# Appendices



# **Appendix A: Acknowledgements & Engagement**

# Appendix A

## Acknowledgements

This report was commissioned by the National Capital Planning Commission (NCPC) in partnership with the Metropolitan Washington Council of Governments (COG) to better understand the impacts of federal telework and hybrid workplaces on the National Capital Region (NCR). NCPC and COG enlisted the support of our consult team who produced the report: The Schreifer Group, HR&A Advisors Inc., and Wells + Associates. We are grateful to the project team and stakeholders that gave their time and energy in developing and supporting this report.

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Melissa Lindsjo, Urban Planner, NCPC  
Paul DesJardin, Director, Department of Community Planning Services, COG

Jill Schreifer, Founder & CEO, The Schreifer Group  
Abbey Ness, Senior Planner and Project Manager, The Schreifer Group  
Stan Wall, Managing Partner Washington DC, HR&A Advisors, Inc.  
Rebecca Rosen, Director, HR&A Advisors, Inc.  
Marco Rodriguez, Analyst, HR&A Advisors, Inc.  
Jim Watson, Senior Associate, Wells + Associates  
Sid Rayaprolu, Geospatial Data Scientist, Wells + Associates

## Background on Stakeholder Engagement and Research

Below is an overview of our stakeholder engagement and research to support this report's findings. We thank all the stakeholders for their time and insights.

### ***Roundtable Discussion Around the Future of the Federal Workplace - May 5, 2023***

This event included subject matter experts and federal agency stakeholders that were grappling with the long-term impacts of telework on the regional economy and real estate portfolio of the federal government. Speakers: Teri Goodman, NCPC; Nina Albert, GSA; Allison Davis, WMATA; Terry Clower, George Mason University; and Bob Peck, Gensler.

Attendees: Marcel Acosta, NCPC; Clark Mercer, COG; Paul McMahon, DOD; Rebecca Guerra, DOD; Elliot Doomes, GSA; Liz Price, WMATA; Anita Cozart, DC Office of Planning; Anthony Fusarelli Jr, Arlington County Planning; Caroline (Carrie) McCarthy, Chief of Montgomery Planning's Research and Strategic Projects Division; Karl Moritz, City of Alexandria; Tracy Strunk, Fairfax County; Kui Zhao, Prince George's County. *A survey was shared with participants following this discussion.*

### ***Federal Department and Agency Interviews - July - September 2023***

Department of Agriculture  
Department of Defense  
Food and Drug Administration  
General Services Administration  
National Aeronautics and Space Administration  
Naval Facilities Engineering Systems Command  
National Institute of Health  
Smithsonian Institution  
US Secret Service

## ***Engagement on Draft Findings - December 2023- January 2024***

NCPC presented draft findings, requesting additional comments to incorporate in this report to the NCPC Commissioners on December 7, 2023, and to the COG Planning Directors Meeting on December 15, 2023. NCPC also held two additional stakeholder sessions with GSA, USDA, WMATA, DC Government, DOD, and NAVFAC on our draft findings. NCPC received comments and feedback that were incorporated into the final report.

### ***Key Reports and Data Reviewed***

Federal Real Property, July 2023, <https://www.gao.gov/assets/gao-23-106200.pdf>

Food and Drug Administration Muirkirk Road campus Draft Master Plan

GAO Federal Real Property, Agencies Need New Benchmarks to Measure and Shed Underutilized Space.

October 2023 - <https://www.gao.gov/assets/d24107006.pdf>

GSA Equity Action Plan. <https://www.gsa.gov/governmentwide-initiatives/diversity-equity-inclusion-and-accessibility>

Inventory of Federal Facilities

Measuring, Monitoring, and Improving Organizational Health and Organizational Performance in the

Context of Evolving Agency Work Environments – April 13, 2023 [https://www.whitehouse.gov/wp-](https://www.whitehouse.gov/wp-content/uploads/2023/04/M-23-15.pdf)

[content/uploads/2023/04/M-23-15.pdf](https://www.whitehouse.gov/wp-content/uploads/2023/04/M-23-15.pdf)

Metro Ridership Snapshot – May 2023-[https://www.wmata.com/initiatives/ridership-portal/upload/](https://www.wmata.com/initiatives/ridership-portal/upload/May-2023-Ridership-Snapshot.pdf)

[May-2023-Ridership-Snapshot.pdf](https://www.wmata.com/initiatives/ridership-portal/upload/May-2023-Ridership-Snapshot.pdf)

Preliminary Results Show Federal Buildings Remain Underutilized Due to Longstanding Challenges and

Increased Telework – July 13, 2023 - <https://www.gao.gov/products/gao-23-106200>

Population Change in the Washington Region – April 11, 2023

<https://sfullerinstitute.gmu.edu/2023/04/11/population-change-in-the-washington-region/>

Strengthening the federal workforce – FY 2022: [https://www.whitehouse.gov/wp-](https://www.whitehouse.gov/wp-content/uploads/2021/05/ap_5_strengthening_fy22.pdf)

[content/uploads/2021/05/ap\\_5\\_strengthening\\_fy22.pdf](https://www.whitehouse.gov/wp-content/uploads/2021/05/ap_5_strengthening_fy22.pdf)

State of the Commute Survey Report – September 2022:

[https://www.mwcog.org/documents/2022/09/20/state-of-the-commute-survey-report--carsharing-](https://www.mwcog.org/documents/2022/09/20/state-of-the-commute-survey-report--carsharing-state-of-the-commute-telework-travel-surveys/)

[state-of-the-commute-telework-travel-surveys/](https://www.mwcog.org/documents/2022/09/20/state-of-the-commute-survey-report--carsharing-state-of-the-commute-telework-travel-surveys/)

Washington Region Labor Force Stagnation – March 9, 2023-

<https://sfullerinstitute.gmu.edu/2023/03/09/washington-region-labor-force-stagnation/>

# Appendix B: Case Studies

## Department of Defense Washington Headquarters Service

The DOD WHS is proactively confronting the post-pandemic challenges, optimizing its spatial assets, and refining telework policies in the backdrop of mission-critical demands.

### Facility Overview

The DOD WHS oversees a vast real estate portfolio in the NCR. Its primary facilities include the Pentagon, an iconic five-sided building with 6.5 million square feet of office space serving as the DOD's headquarters, and the Mark Center in the City of Alexandria, and 4.5 million square feet of leased space predominantly located in Arlington County in Crystal City/National Landing and Rosslyn. The Pentagon is integrated into the broader Defense Contract Management Agency (DCMA) portfolio, which features national military installations and GSA leased spaces. Additionally, a new Army facility at Ft. Belvoir in Fairfax County is being developed as an overflow space for the Pentagon. Most of the workplaces under the WHS umbrella function as administrative spaces. Due to national security, the mission necessitates mostly in-person work environment. However, leased space is often designated for personnel who lack the clearances required to access the Pentagon. In terms of staff distribution, the WHS oversees 55,000 employees, with approximately 22,000 stationed at the Pentagon.

### Evolving Space Needs

Over the last half-decade, the space requirements of the Pentagon have seen noticeable shifts. Current initiatives include a restacking effort at the Pentagon, which is influenced by telework policies and is intended to help accommodate Space Force physical space requirements. Post-pandemic metrics suggest prospects for less telework and a consistent increase in-person attendance, and many offices have displayed hesitance in relinquishing their spatial holdings.

### Telework Policy

The DOD has outlined broad telework guidelines for those teleworking between 30-60% of their time, a shared office is provided, while those teleworking over 60% find themselves in a space shared with four other individuals. However, the exact nuances of telework policies get determined by individual mission leadership. One significant impediment to the broader adoption of telework within the DOD is the mandate for cyber activities to be conducted within the Pentagon's secure environment.

### Talent Recruitment

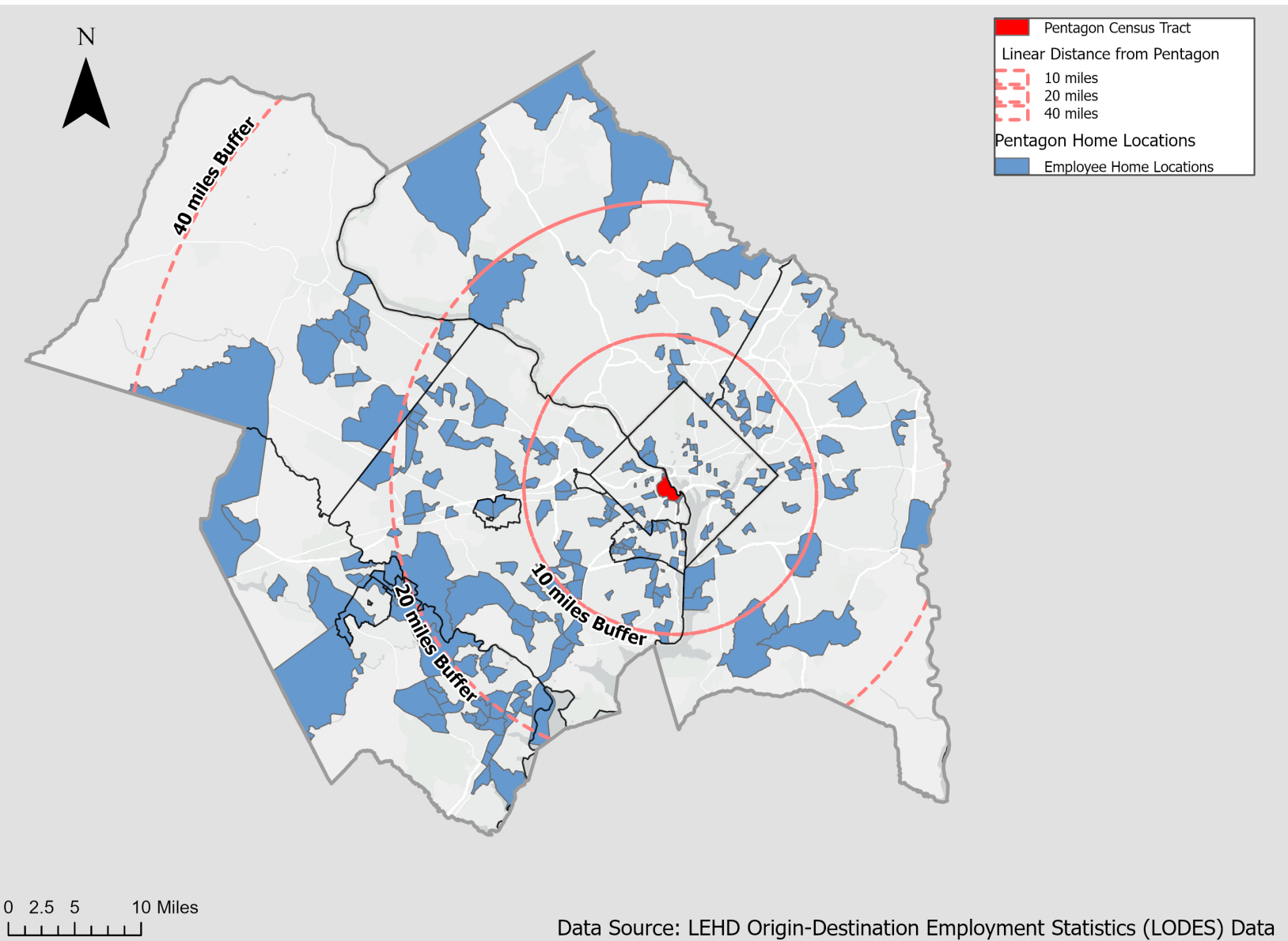
Like many federal agencies, the Pentagon encounters challenges in the recruitment landscape. While younger talent has shown a preference for some telework options, DOD has remained reserved in its approach to any hybrid teleworking mode.

### Workforce Dispersion

According to the data, prior to the pandemic, the residences of personnel working at the Pentagon Census Tract were predominantly situated in the Western and Southwestern regions of the NCR. There is no anticipated expansion of distribution of residents given the limited shifts in telework options (Figure 7).

## Map of Home Locations of Employees Working within Pentagon Census Tract (2020) (Figure 7)

*Description:* Map provides a visual representation of employee home locations by census tract within the National Capital Region. The legend utilizes a uniform color to identify employee residences in each tract, all of whom work at the Pentagon census tract. To add geographic context, multi-ring buffers are included, with ring boundaries indicating 10 miles, 20 miles, and 40 miles of geodesic/linear distance from the central Pentagon census tract. The Pentagon census tract itself is highlighted in red, making it a focal point of interest within this comprehensive geographical analysis.



## Food and Drug Administration Headquarters: White Oak Campus

Federal telework has significantly influenced the real estate and commuting needs of federal agency tenants like the Food and Drug Administration (FDA) at the White Oak Campus in Montgomery County, MD. While the benefits, such as cost savings from reduced space requirements, are evident, challenges remain, especially in transportation planning. As the landscape of federal employment continues to evolve, agencies will need to adapt to ensure efficiency and effectiveness.

### Facility Overview

The FDA's White Oak Campus, owned by the GSA, is a diverse location with labs and office spaces. It currently houses 2-3,000 employees daily, a substantial reduction from the 7-8,000 seen before the pandemic. Apart from White Oak, the FDA maintains labs in College Park, MD and several other facilities in MD. The White Oak Campus, situated in the White Oak area of Silver Spring, MD, has been a significant site for the agency since 1990, across 130 acres of the White Oak Federal Research Center. In 2001, the GSA embarked on a mission to consolidate the FDA's operations in the DC metropolitan area, including its Rockville headquarters and other disparate office locations. This included the dedication of the Life Sciences Laboratory in December 2003, which opened its doors to 104 employees. By December 2018, the White Oak Campus grew substantially, boasting 10,987 employees who occupied roughly 3.8 million square feet of space spread across ten office buildings and four laboratory facilities.

The FDA Reauthorization Act of 2017 projected a 64% surge in FDA's workforce, anticipating 18,000 employees over the subsequent 15 years. This has set the stage for an ambitious expansion plan, adding approximately 1.6 million square feet of office and specialized use spaces to the existing infrastructure.

### Telework Policy

The FDA's telework policies, shaped by the pandemic, stipulate that laboratorians are allowed to telework one to two days a week. Given that their in-person requirements exceed 50%, they are allocated personal workstations. The Department of Health and Human Services (HHS) office space policy categorizes staff as follows:

- Remote workers have no designated space.
- Teleworkers, defined as remote more than 50% of the time, are provided with 50% of a shared office space.
- In-person staff, regardless of whether they have a remote option, receive full private office space.

### Real Estate Needs

HHS' policies in response to the pandemic led to a significant reduction in the FDA's space requirements. The FDA is now consolidating its staff into the White Oak Campus, leading to substantial cost savings. Pre-pandemic, fewer employees worked remotely, making consolidation more challenging. However, as telework policies evolved, there was a significant push to reduce the footprint.

### Talent Recruitment

Historically, the FDA has had a progressive stance on telework, which was instrumental in attracting talent. Given the competition with the pharmaceutical industry for skilled professionals, the option of telework became a significant component for drawing talent to the FDA.

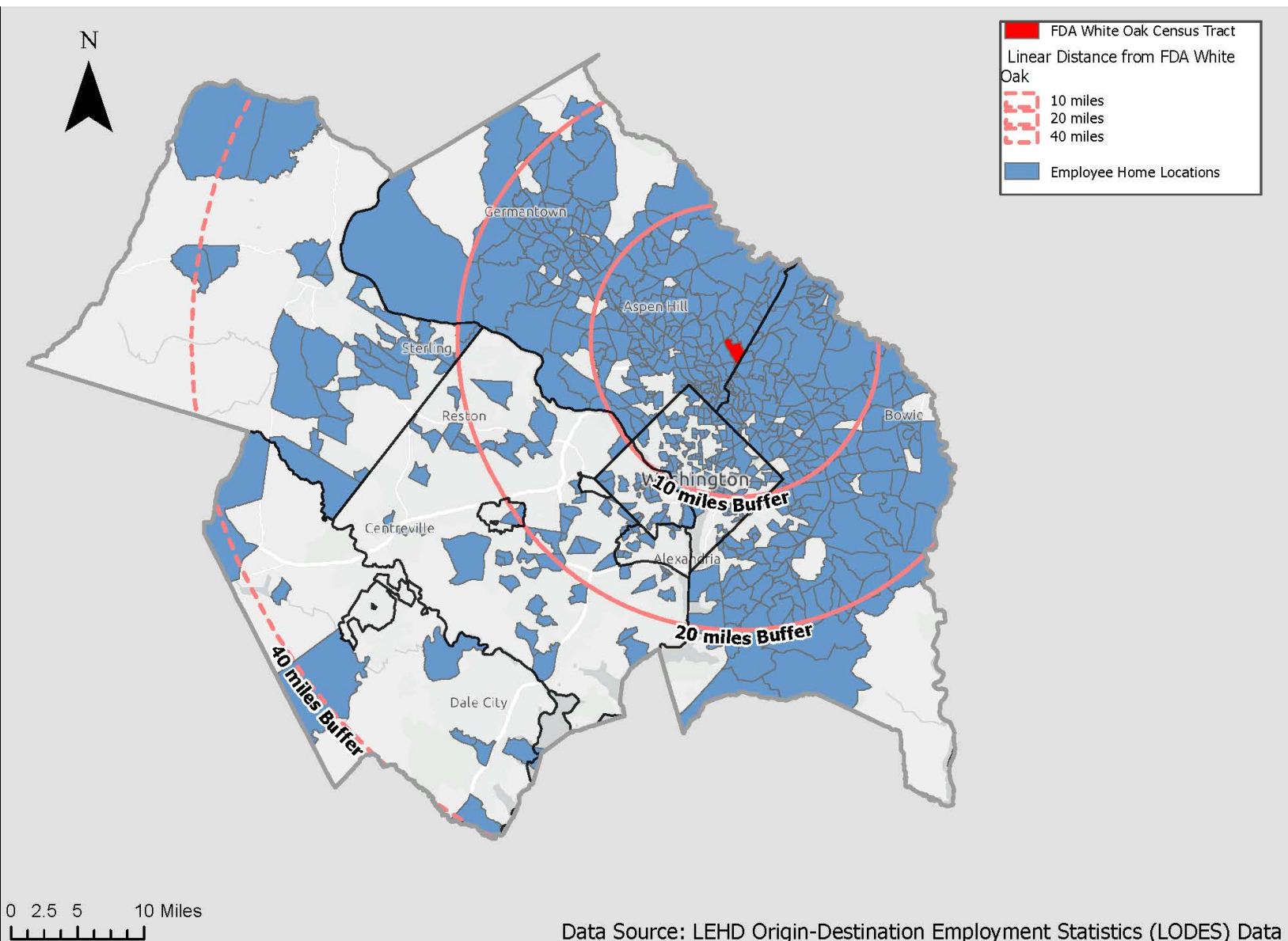
### Transportation & Commuting

White Oak is situated away from Metro stations, so the FDA has implemented regular shuttle services to cater to its employees. The teleworking policy has also led the White Oak shuttle to a reduction in ridership. The telework policy has made shuttle services less cost-effective, so the FDA is considering other strategies to encourage public transit ridership.

**Workforce Dispersion:** The map shows that before the onset of the pandemic, individuals employed within the White Oak Campus Census Tract primarily resided in the Northeast sector of the NCR. The rigorous telework policies typically associated with research and development roles in this sector do not lend themselves to the expectation of a diversified geographical distribution of residences resulting from increased telework opportunities. However, staff in administrative and non-laboratory roles, who have the flexibility to work remotely, may opt to reside in more distant locales, notwithstanding the potential for extended commute times on days they are required to be on-site.

### Map of Home Locations of Employees Working within FDA White Oak Census Tract (2020) (Figure 8)

*Description:* Map provides a visual representation of employee home locations by census tract within the National Capital Region. The legend utilizes a uniform color to identify employee residences in each tract, all of whom work at the FDA White Oak census tract. To add geographic context, multi-ring buffers are included, with ring boundaries indicating 10 miles, 20 miles, and 40 miles of geodesic/linear distance from the central FDA White Oak census tract. The FDA White Oak census tract itself is highlighted in red, making it a focal point of interest within this comprehensive geographical analysis





## General Services Administration (GSA) 1800F Headquarters

The GSA's 1800F Headquarters is emblematic of the larger shift in how governmental facilities are adapting in an age of telework and digital transformation. Through proactive strategies, the GSA continues to redefine what modern facility management looks like. Due to longstanding and persistent ventilation issues, the unrenovated portions of the building remain largely unoccupied. However, they are already considering potential future options including multi-tenant occupancy, hosting the Presidential Transition Team, and expanding the Workplace Innovation Lab.

### Facility Overview

Located in DC, the GSA 1800F Headquarters is sprawling, over 500,000 million square feet. Historically, at its peak, the facility's utilization hovered around 40-45%. On some days, particularly at the start and end of the workweek, this figure dipped to as low as 9%. However, the facility's resilience has shone post-pandemic, easily integrating operations into the functional wings, and handling its growth in assigned personnel despite the reduction in usable space.

### Evolving Space Needs

Prior to the pandemic, GSA was already in a transformative phase, focused on consolidating and introducing flexible work. In 2023, GSA developed the 25,000-square-foot Workplace Innovation Lab at 1800F, a collaborative space that showcases office design, furniture, and technology to meet the needs of today's hybrid federal workers. GSA encourages agencies to try new technology and furniture from various vendors prior to purchasing. It also includes sustainable technology solutions to support GSA's efforts to achieve net zero carbon facilities.<sup>54</sup> The Lab provides agencies an opportunity to consider the future of federal work.

### Telework Policy

The GSA's refined telework policies are central to the facility's post-pandemic adaptation. GSA employees in the NCR are mandated to be physically present twice per pay period, a policy adapted to suit diverse job roles. While the 1800F facility was designed to accommodate a vast number, the adaptation to telework means that a significant portion of GSA's national workforce is permanently remote, leveraging the potential of digital tools while minimizing physical presence.

### Talent Recruitment

The GSA, like its contemporaries, grapples with the ever-evolving preferences of the modern workforce. Young professionals today value flexibility, and while GSA has taken strides in adopting telework, the challenge remains in striking a balance between remote work and the facility's innate operational needs.

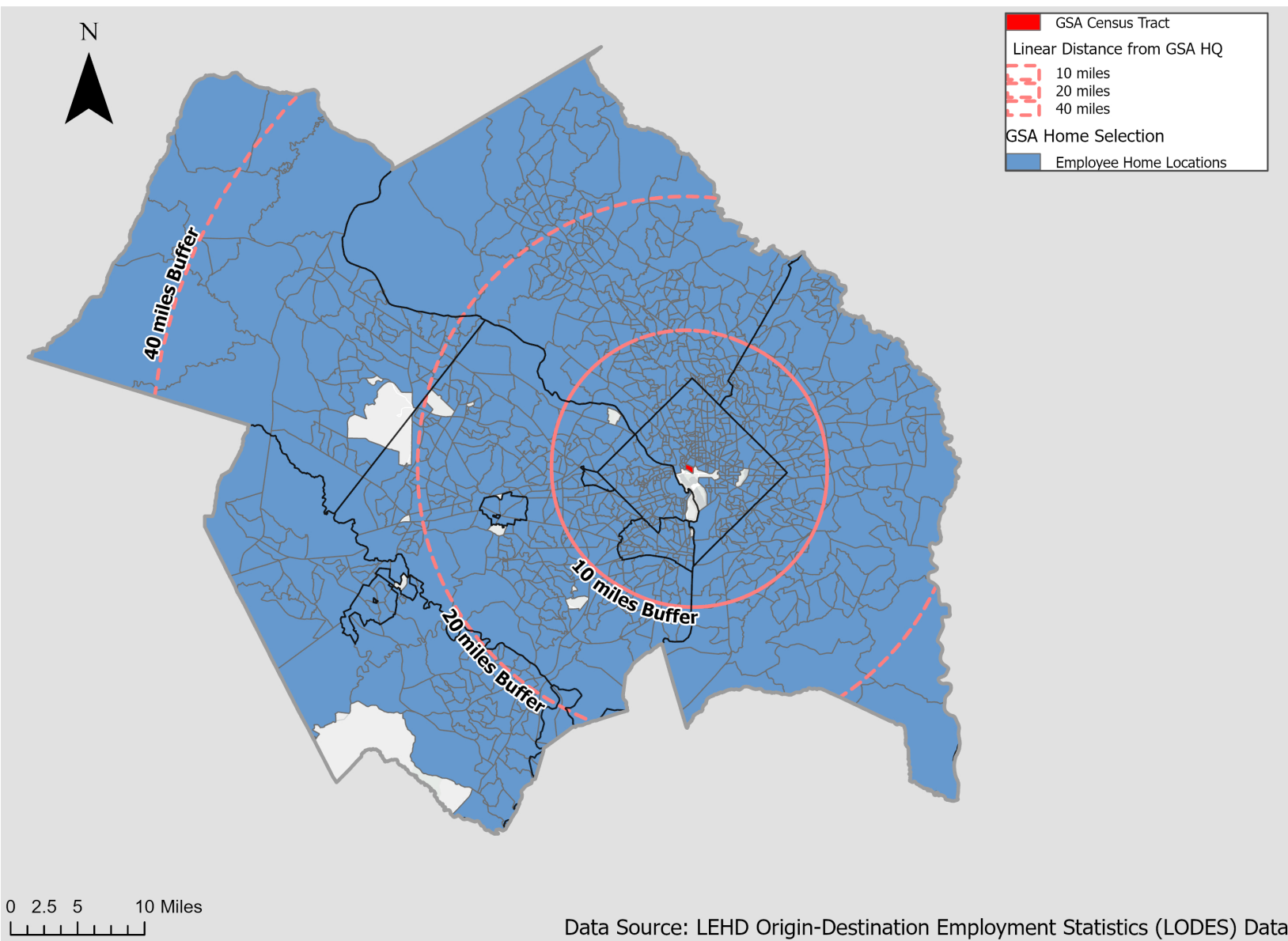
### Transportation & Commuting

The increased telework flexibility has influenced commuting habits as many employees, now less frequently in-office, choose to drive when they do attend, and sometimes attend for only part of the workday. Additionally, some have transitioned from permanent garage spaces to on-street parking. Despite having limited parking at the facility, the new pattern has not posed significant issues, mainly due to reduced in-person attendance. This change underscores the importance of adapting facilities and policies in line with evolving work habits.

**Workforce Dispersion:** The below map shows that prior to the pandemic, the residences of those employed at the GSA HQ Census Tract were predominantly located within a 15-minute driving radius of downtown DC. Given that employees are required to commute to the office only twice per pay period, many may contemplate relocating to more affordable suburban areas on the periphery or even entirely outside of the NCR to benefit from cost-effective housing options.

### Map of Home Locations of Employees Working within GSA 1800F Headquarters (HQ) Census Tract (2020) (Figure 9)

*Description:* Map provides a visual representation of employee home locations by census tract within the National Capital Region. The legend utilizes a uniform color to identify employee residences in each tract, all of whom work at the GSA HQ census tract. To add geographic context, multi-ring buffers are included, with ring boundaries indicating 10 miles, 20 miles, and 40 miles of geodesic/linear distance from the central GSA HQ census tract. The GSA HQ census tract itself is highlighted in red, making it a focal point of interest within this comprehensive geographical analysis.



# **Appendix C: Scenario Update Methodology**

### C. Scenario Update Methodology

**Office utilization at a Maximum Telework scenario** was derived by multiplying the average Washington, DC Workplace Occupancy Barometer from Kastle for March 2020 to March 2021 (19%), which measured office occupancy as a percentage of the pre-pandemic average, by the Maximum Telework scenario estimates. We used the same estimate for the lowest quantile for moderate telework and maximum telework because otherwise, the maximum telework estimate would have been larger than the moderate telework scenario.

**Office utilization at a Moderate Telework scenario** was estimated using figures from GAO's "Agencies Need New Benchmarks to Measure and Shed Underutilized Space." These figures represent average utilizations for 21.5 million square feet of usable office space—conference rooms, team rooms, and offices—in the headquarters buildings of 24 agencies during three weeks in January, February, and March of 2023. According to GAO, 17 of 24 agencies' buildings were at 25% capacity or less.

**Office utilization at a Minimum Telework scenario** was estimated by dividing the usable square foot footprint of federal office buildings by an average benchmark employee space allowance of 180 square foot per employee, in line with GSA and GAO practices. This gave us the employee capacity of each building. Then we divided the employee capacity of each property by the number of total personnel. To deal with outliers, we set a ceiling of 100% utilization and a floor of 67% in line with testimony from agency personnel published in the latest GAO report on pre- and post-pandemic office utilization trends.

Given that parking demand is a direct function of office utilization, we assume that parking occupancy estimates are the same as the office utilization estimates.

## Endnotes

<sup>1</sup> Cover photo - Credit line: Carol M. Highsmith's America, Library of Congress, Prints and Photographs Division. Link: <https://www.loc.gov/pictures/item/2010630893/>

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despite recent struggles, poll shows. Washington Post. March 2023, <https://www.washingtonpost.com/transportation/2023/03/18/metro-poll-ridership-covid/>

<sup>46</sup> WMATA Presentation

<sup>47</sup> WMATA Ridership Snapshot May 2023. <https://www.wmata.com/initiatives/ridership-portal/upload/May-2023-Ridership-Snapshot.pdf>

<sup>48</sup> "Ensuring the intertwined post-pandemic recoveries of downtowns and transit systems". 2023.

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<sup>49</sup> Nolen, Author: Casey. "Metro Warns of Massive Service Cuts and 'death Spiral for Transit' with \$750M Shortfall." *Wusa9.Com*, 21 June 2023, [www.wusa9.com/article/traffic/mission-metro/metro-warns-massive-service-cuts-death-spiral-transit-750-million-shortfall/65-9c0dc54f-8f65-46c4-8390-51e8108ac1a5](http://www.wusa9.com/article/traffic/mission-metro/metro-warns-massive-service-cuts-death-spiral-transit-750-million-shortfall/65-9c0dc54f-8f65-46c4-8390-51e8108ac1a5).

<sup>50</sup> "WMATA Reveals Plans for 'Fiscal Cliff' Doomsday Budget One Year from Now." *The Eno Center for Transportation*, 15 Sept. 2023, [enotrans.org/article/wmata-reveals-plans-for-fiscal-cliff-doomsday-budget-one-year-from-now/#:~:text=WMATA%20management%20says%20this%20deficit,million%20ten%20years%20from%20now](http://enotrans.org/article/wmata-reveals-plans-for-fiscal-cliff-doomsday-budget-one-year-from-now/#:~:text=WMATA%20management%20says%20this%20deficit,million%20ten%20years%20from%20now).

<sup>51</sup> "D.C.-Area Traffic Is Nearly Back to Pre-Pandemic Levels Even as Offices Remain Half Empty. Why Commuters Are Still Choosing to Drive." *Bizjournals.Com*, [www.bizjournals.com/washington/news/2023/04/10/dc-traffic-pandemic-metro.html](http://www.bizjournals.com/washington/news/2023/04/10/dc-traffic-pandemic-metro.html). Accessed 18 Sept. 2023.

<sup>52</sup> HR&A developed scenarios to support internal and stakeholder discussions and for the Future of the Federal Workplace roundtable discussion in May 2023. This event included subject matter experts and federal agency stakeholders that were grappling with the long-term impacts of telework on the regional economy and real estate portfolio of the federal government. The purpose of these scenarios was as a tool to help assess the impact of different policy options on the long-term real estate needs of individual agencies. These scenarios were then updated and refined – based on the panel learnings and initial discussions – to identify key trends that would affect each variable. Based on this overview of existing conditions and our research to date—including, market analysis, survey results, and desk research – these scenarios have been updated in this memo to reflect new assumptions and learnings.

<sup>53</sup> GAO Federal Real Property, *GSA Could Further Support Agencies' Post-Pandemic Planning for Office Space Use*, September 2022. <https://www.gao.gov/assets/gao-22-105105.pdf>

<sup>54</sup> GSA's Workplace Innovation Lab opens to Federal Agencies, <https://www.gsa.gov/about-us/newsroom/news-releases/gsas-workplace-innovation-lab-opens-to-federal-agencies-01252023>

<sup>55</sup> GSA's Workplace Innovation Lab opens to Federal Agencies, <https://www.gsa.gov/about-us/newsroom/news-releases/gsas-workplace-innovation-lab-opens-to-federal-agencies-01252023>

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