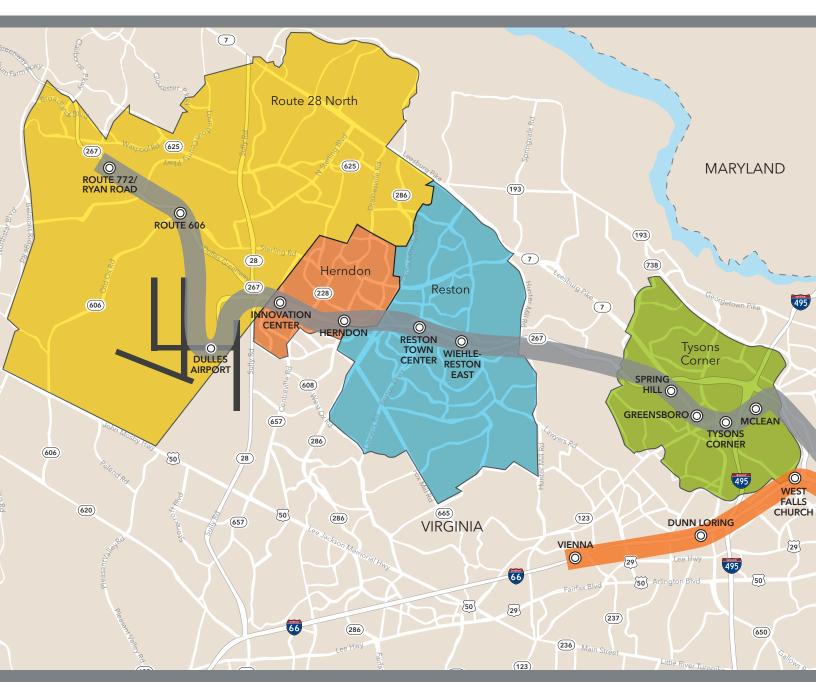
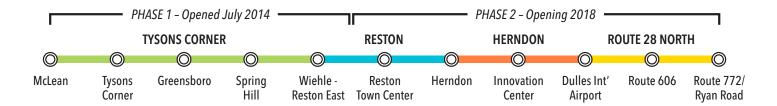
THE SILVER LINE

ECONOMIC AND OFFICE MARKET IMPACT – 2015-2040





The Silver Line is an extension of the Washington Metropolitan Area Transit Authority (WMATA) rail line, which runs from Route 772 in Loudoun County, Virginia, to Largo Town Center in Largo, Maryland. When fully completed, the Silver Line will consist of 34 stations, of which 11 will be new in Northern Virginia. Five of these new stations have opened as of July 2014. The remaining six stations are planned to open by 2018.

The new stations will be located in the Tysons Corner, Reston, Herndon, and Route 28 North submarkets. This white paper projects job growth and office demand over the next 25 years in each submarket. In addition, given over 60% of office using job growth will surround the new Metro stations we drill these projections down to a half mile radius for each new station. Following are highlights from the report. Thereafter analysis and recommendations are provided by submarket.

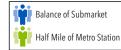
EMPLOYMENT AND OFFICE DEMAND PROJECTIONS						
	2015	2040	Job Growth 2015 to 2040			
ENTIRE SUBMARKET						
Number of Total Employees	352,200	537,000	184,800			
Number of Office Employees	148,804	218,788	69,984			
		Projected Office Demand:	13,996,800			
WITHIN A HALF MILE OF MET	RO STATION					
Number of Total Employees	153,400	245,100	91,700			
Number of Office Employees	72,440	115,135	42,695			
		Projected Office Demand:	8,539,000			
SOURCE: Metropolitan Washington Council of Governments, ESRI, Transwestern						

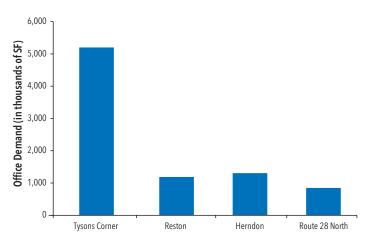
HIGHLIGHTS

- From 2015 to 2040, a total of 70,000 office using jobs are projected to be added to the four submarkets impacted by the new Silver Line Metro stations. 61% of these jobs are expected to be within a half mile of the new Metro stations. Most of this growth is due to occur from 2015 to 2030, as 75% of new office using jobs are expected to be added during this period.
- Most office using job growth will occur within a half mile of the new Metro stations, with the exception of the stations located in the Route 28 North submarket.
- Of the 14.0 million square feet of office demand projected for the four submarkets from 2015 to 2040, 8.5 million square feet is expected surrounding the Metro stations. Tysons Corner is expected to experience the greatest office demand during this period.
- Although above average growth near Metro is expected, the growth will be lighter than it could be due to several factors as discussed in the conclusion. of this report.
- Tenants will remain interested in newer or fully renovated office space. Given most office inventory near the Metro stations is Class B/C and will continue to age through 2040, property owners should focus on renovating this space to Class A to remain competitive to tenants.
- New development is warranted more so for Tysons Corner near the new Metro stations, but not out of the question for Reston or Herndon in select locations. New development could occur in the Route 28 North submarket near Metro, as the current inventory is relatively low.

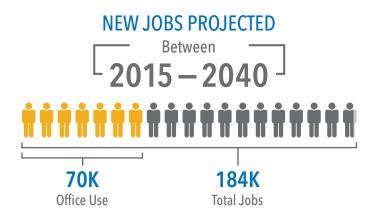


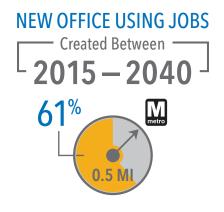
SOURCE: Metropolitan Washington Council of Governments, ESRI, Transwestern





SOURCE: Transwestern







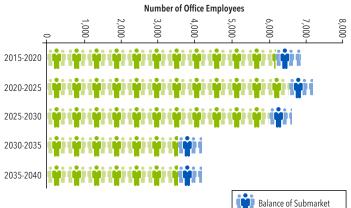


TYSONS CORNER

Recommendation: Develop new office product or renovate Class B/C product to Class A near Metro to capture demand, which should occur mostly from 2015 to 2030.

Tysons Corner is projected to add 56,000 new jobs from 2015 to 2040, a 47% increase. This growth rate translates to 1.9% per year, which is above the 10-year historical annual growth rate of 1.0% for Fairfax County.

Of the 56,000 new jobs projected for Tysons Corner, approximately 29,100 jobs are expected to be office using. Most growth is projected to occur from 2015 to 2030, as 71% of the new office using jobs will be created during this period. In recent years tenants have allocated on average 200 square feet per employee, which totals 5.8 million square feet of office demand from 2015 to 2040, or 233,000 square feet per year.



SOURCE: Metropolitan Washington Council of Governments, ESRI, Transwestern



Approximately 89% of the projected office using jobs arriving in Tysons Corner from 2015 to 2040 will be located within a half mile of the new Metro stations. This translates to a total of 5.2 million square feet of potential office demand near the Metro stations in Tysons Corner, or 208,000 square feet per year. Of the four new Metro stations in Tysons Corner, the Spring Hill and McLean Metro stations are projected to experience the greatest rise in office using employment, which translates to 2.0 million square feet and 1.6 million square feet of potential office demand from 2015 to 2040, respectively.



EMPLOYMENT AND OFFICE DEMAND PROJECTIONS					
	2015	2040	Job Growth 2015 to 2040		
ENTIRE SUBMARKET					
Number of Total Employees	120,200	176,200	56,000		
Number of Office Employees	62,504	91,624	29,120		
		Projected Office Demand:	5,824,000		
WITHIN A HALF MILE OF METRO STATION					
Number of Total Employees	68,400	118,400	50,000		
Number of Office Employees	35,568	61,568	26,000		
		Projected Office Demand:	5,200,000		
SOURCE: Metropolitan Washington Council of Governments, ESRI, Transwestern					

Tysons Corner has an office inventory of 18.6 million SF within a half mile of Metro, of which approximately 64% is Class B/C. Currently tenants in the market are seeking newer or fully renovated office space that is close to quality amenities and transit, a trend we expect to continue. With our projection of 5.2 million square feet of potential demand from 2015 to 2040 surrounding the Metro stations, we believe available space will tighten as demand rises particularly during the 2015 to 2030 period. Tenants will be further challenged if they are seeking newer office space, as most of the current inventory is older product and will continue to age through year 2040. Given this, we recommend developing new office product or renovating Class B/C product to Class A in der to capture this rising demand

EMPLOYMENT AND OFFICE DE	MAND PROJEC	TIONS	
	2015	2040	Job Growth 2015 to 2040
MCLEAN STATION			
Number of Total Employees	13,200	28,800	15,600
Number of Office Employees	6,864	14,976	8,112
		Projected Office Demand:	1,622,400
	2015	2040	Job Growth 2015 to 2040
TYSONS CORNER STATION			
Number of Total Employees	27,200	37,000	9,800
Number of Office Employees	14,144	19,240	5,096
		Projected Office Demand:	1,019,200
	2015	2040	Job Growth 2015 to 2040
GREENSBORO CORNER STATIC	ON		
Number of Total Employees	10,800	16,600	5,800
Number of Office Employees	5,616	8,632	3,016
		Projected Office Demand:	603,200
	2015	2040	Job Growth 2015

17,200

8,944

SOURCE: Metropolitan Washington Council of Governments, ESRI, Transweste

36,000

18,720

Projected Office Demand:

to 2040

18,800

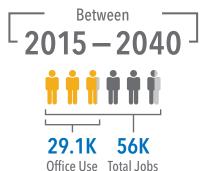
9,776

1,955,200

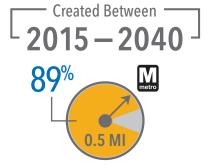
	2,000 -								
sands of SF)	1,500 -								
d (in thou	1,000 -								
Office Demand (in thousands of SF)	500 -								
	0 -	McLean	, Ty	sons Corner	Gree	ensboro	, ,	Spring Hill	

SOURCE: Transwestern





NEW OFFICE USING JOBS



SPRING HILL STATION

Number of Total Employees

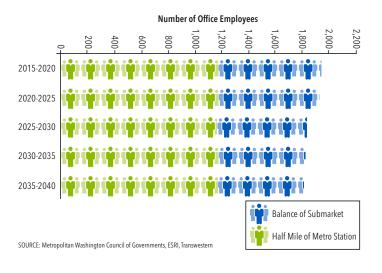
Number of Office Employees

RESTON

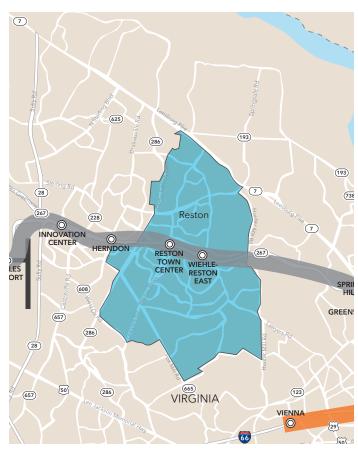
Recommendation: Focus on renovating Class B/C product to Class A near Metro in order to capture demand, which should steadily occur from 2015 to 2040.

Reston is projected to add 17,600 new jobs from 2015 to 2040, a 26% increase. This growth rate translates to 1.0% per year, which is on par with the 10-year historical annual growth rate of 1.0% for Fairfax County.

Of the 17,600 new jobs projected for Reston, approximately 9,300 jobs are expected to be office using. Office using employment growth is expected to be relatively consistent per five year period from 2015 to 2040. In recent years tenants have allocated on average 200 square feet per employee, which totals 1.9 million square feet of office demand from 2015 to 2040, or 75,000 square feet per year.



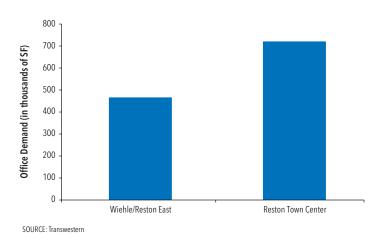
Approximately 64% of the projected office using jobs arriving in Reston from 2015 to 2040 will be located within a half mile of the new Metro stations. This translates to a total of 1.2 million square feet of potential office demand near the Metro stations in Reston, or 47,000 square feet per year. Of the two new Metro stations in Reston, Reston Town Center is projected to experience a greater rise in office using employment, which translates to 721,000 square feet of potential office demand, compared to Wiehle-Reston East at 466,000 square feet.

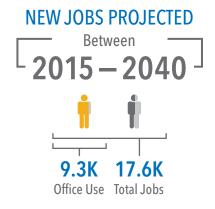


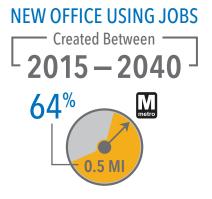
EMPLOYMENT AND OFFICE DEMAND PROJECTIONS					
	2015	2040	Job Growth 2015 to 2040		
ENTIRE SUBMARKET					
Number of Total Employees	67,600	85,200	17,600		
Number of Office Employees	35,828	45,156	9,328		
		Projected Office Demand:	1,865,600		
WITHIN A HALF OF METRO STATION					
Number of Total Employees	45,400	56,600	11,200		
Number of Office Employees	24,062	29,998	5,936		
		Projected Office Demand:	1,187,200		
SOURCE: Metropolitan Washington Council of Governments, ESRI, Transwestern					

Reston has an office inventory of 11.7 million square feet within a half mile of Metro, of which approximately 50% is Class B/C. With our projection of 1.2 million square feet of potential demand from 2015 to 2040 surrounding the Metro stations, which averages only 47,000 square feet per year, we expect supply and demand will be relatively in balance during this period. Given this, coupled with tenant demand for newer or fully renovated office space, we believe the focus should be on renovating Class B/C product to Class A. This is not to say that a spec office project would not be successful in the right location, particularly near Reston Town Center as this location is already a draw to tenants and is due to experience greater demand. However, to keep the vacancy rate at controlled levels, new office construction should be kept in check.

EMPLOYMENT AND OFFICE DEMAND PROJECTIONS					
	2015	2040	Job Growth 2015 to 2040		
WIEHLE/RESTON EAST STATION	1				
Number of Total Employees	17,200	21,600	4,400		
Number of Office Employees	9,116	11,448	2,332		
		Projected Office Demand:	466,400		
	2015	2040	Job Growth 2015 to 2040		
RESTON TOWN CENTER STATIC	N				
RESION TOWN CENTER STATIC					
Number of Total Employees	28,200	35,000	6,800		
		35,000 18,550	6,800 3,604		
Number of Total Employees	28,200	'	,		





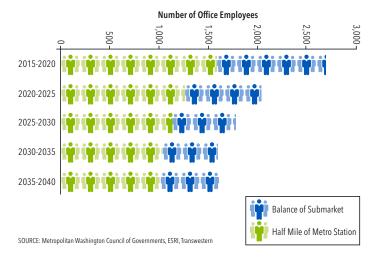


HERNDON

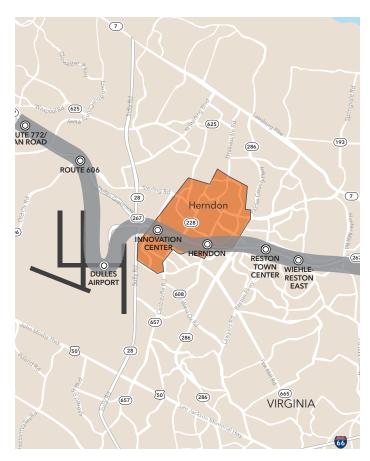
Recommendation: Focus on renovating Class B/C product to Class A near Metro in order to capture demand, which should occur mostly from 2015 to 2020 but remain steady thereafter.

Herndon is projected to add 20,200 new jobs from 2015 to 2040, a 44% increase. This growth rate translates to 1.8% per year, which is above the 10-year historical annual growth rate of 1.0% for Fairfax County.

Of the 20,200 new jobs projected for Herndon, approximately 9,700 jobs are expected to be office using. Most growth could occur from 2015 to 2020, but remain steady thereafter, as most new office jobs are added during this period. In recent years tenants have allocated on average 200 square feet per employee, which totals 1.9 million square feet of office demand from 2015 to 2040, or 77,000 square feet per year.



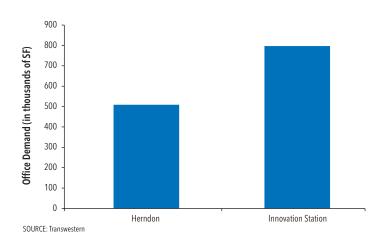
Approximately 67% of the projected office using jobs arriving in Herndon from 2015 to 2040 will be located within a half mile of the proposed Metro stations. This translates to a total of 1.3 million square feet of potential office demand near the proposed Metro stations in Herndon, or an average 52,000 square feet per year. Of the two proposed Metro stations in Herndon, Innovation station is projected to experience a greater rise in office using employment, which translates to 797,000 square feet of potential office demand, compared to the Herndon station at 509,000 square feet.

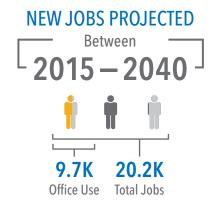


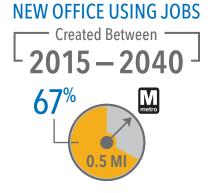
EMPLOYMENT AND OFFICE DEMAND PROJECTIONS					
	2015	2040	Job Growth 2015 to 2040		
ENTIRE SUBMARKET					
Number of Total Employees	45,900	66,100	20,200		
Number of Office Employees	22,032	31,728	9,696		
		Projected Office Demand:	1,939,200		
WITHIN A HALF OF METRO STATION					
Number of Total Employees	19,800	33,400	13,600		
Number of Office Employees	9,504	16,032	6,528		
		Projected Office Demand:	1,305,600		
SOURCE: Metropolitan Washington Council of Governments, ESRI, Transwestern					

Herndon has an office inventory of 4.7 million SF within a half mile of the Metro stations of which approximately 61% is Class B/C. With our projection of 1.3 million square feet of potential demand from 2015 to 2040 surrounding the proposed Metro stations, which averages only 52,000 square feet per year, we expect supply and demand will be relatively in balance during this period. Given this, coupled with tenant demand for newer or fully renovated office space, we believe the focus should be on renovating Class B/C product to Class A. This is not to say that a spec office project would not be successful in the right location, particularly near Innovation station as this location is due to experience greater demand. However, to keep the vacancy rate at controlled levels, new office construction should be kept in check.

EMPLOYMENT AND OFFICE DEMAND PROJECTIONS					
	2015	2040	Job Growth 2015 to 2040		
HERNDON STATION					
Number of Total Employees	11,600	16,900	5,300		
Number of Office Employees	5,568	8,112	2,544		
		Projected Office Demand:	508,800		
	2015	2040	Job Growth 2015 to 2040		
INNOVATION STATION					
Number of Total Employees	8,200	16,500	8,300		
Number of Office Employees	3,936	7,920	3,984		
		Projected Office Demand:	796,800		
SOURCE: Metropolitan Washington Counc	il of Governments, ES	RI, Transwestern			





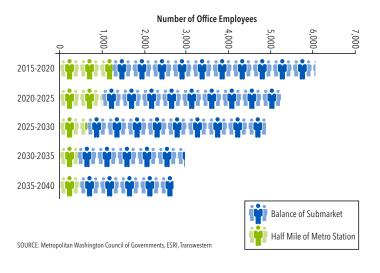


ROUTE 28 NORTH

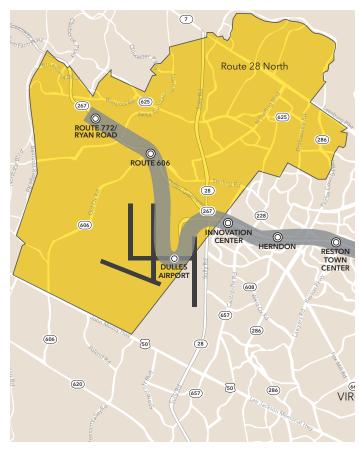
Recommendation: Given relatively low office inventory surround the proposed Metro stations, limited new development could be justified to capture demand, which should occur mostly from 2015 to 2030.

Route 28 North is projected to add 91,000 new jobs from 2015 to 2040, a 77% increase. This growth rate translates to 3.1% per year, which is above the 10-year historical annual growth rate of 1.0% for Fairfax County.

Of the 91,000 new jobs projected for Route 28 North, approximately 21,800 jobs are expected to be office using. Most growth is projected to occur from 2015 to 2030, as 74% of the new office using jobs will be created during this period. In recent years tenants have allocated on average 200 square feet per employee, which totals 4.4 million square feet of office demand from 2015 to 2040, or 175,000 square feet per year.



Approximately 19% of the projected office using jobs arriving in Route 28 North from 2015 to 2040 will be located within a half mile of the proposed Metro stations. Unlike the other submarkets, the Route 28 North submarket is projected to experience greater growth outside the half mile radius of the proposed Metro stations. This is due in part to two Metro stations, Dulles Station and Route 606 Station, located on or adjacent to Dulles International Airport.

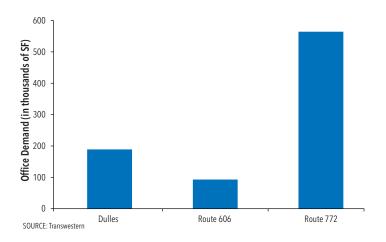


EMPLOYMENT AND OFFICE DEMAND PROJECTIONS				
	2015	2040	Job Growth 2015 to 2040	
ENTIRE SUBMARKET				
Number of Total Employees	118,500	209,500	91,000	
Number of Office Employees	28,440	50,280	21,840	
		Projected Office Demand:	4,368,000	
WITHIN A HALF OF METRO STATION				
Number of Total Employees	19,800	36,700	16,900	
Number of Office Employees	3,306	7,537	4,231	
		Projected Office Demand:	846,200	
SOURCE: Metropolitan Washington Council of Governments, ESRI, Transwestern				

Of the three new Metro stations in Route 28 North, the Route 772 station is projected to experience the greatest rise in office using employment, which translates to 564,000 square feet of potential office demand from 2015 to 2040.

The Route 28 North submarket currently has a relatively low office inventory of 594,000 square feet within a half mile of the proposed Metro stations. With our projection of 846,000 square feet of potential demand from 2015 to 2040 surrounding the Metro stations, which averages 34,000 square feet per year, we expect demand to outpace supply given the current inventory level. Given this, we believe limited new construction could be warranted as demand rises, particularly from 2015 to 2030.

EMPLOYMENT AND OFFICE DEMAND PROJECTIONS				
	2015	2040	Job Growth 2015 to 2040	
DULLES STATION				
Number of Total Employees	17,700	24,000	6,300	
Number of Office Employees	2,655	3,600	945	
		Projected Office Demand:	189,000	
	2015	2040	Job Growth 2015 to 2040	
ROUTE 606 STATION				
Number of Total Employees	500	2,000	1,500	
Number of Office Employees	155	620	465	
		Projected Office Demand:	93,000	
	2015	2040	Job Growth 2015 to 2040	
ROUTE 772 STATION				
Number of Total Employees	1,600	10,700	9,100	
Number of Office Employees	496	3,317	2,821	
		Projected Office Demand:	564,200	
SOURCE: Metropolitan Washington Counci	of Governments, E	SRI, Transwestern		



NEW JOBS PROJECTED Between 2015 - 204021.8K 91K Office Use **Total Jobs**



CONCLUSION

We project 91,700 new jobs will be added within a half mile of the new Silver Line Metro stations from 2015 to 2040. With approximately 42,700 of these jobs office using, this translates to 8.5 million square feet of office demand during this period, or 285,000 square feet per year. This is above the average of 206,000 square feet absorbed annually during the past 10-years. Although our projection is above the historical average, we believe a handful of factors are holding it back from greater gains.

- 1. The Silver Line Metro stations in Northern Virginia are above ground, which limits growth immediately surrounding the station.
- 2. The submarkets impacted by the Silver Line are already developed, due in large part to Tysons Corner and Reston Town Center. Currently, there is a total of 69.4 million square feet of office inventory in these four submarkets before the arrival of Metro. This compares to the RCB Corridor, which was largely undeveloped with only 5.6 million square feet of office inventory before the arrival of Metro in the 1980s. Today, the RCB Corridor has 24.0 million square feet of office inventory.
- 3. Projected job growth is expected to be limited due to the tightening of the federal budget. We project an average of 30,000 new jobs per year from 2015 to 2040 for the entire Washington metro area. This is below the 20-year annual average of 42,600.

Regardless, the Silver Line Metro stations will be an added benefit to Northern Virginia, as growth is expected to be above average surrounding the stations. To take advantage of this projected growth, we recommend focusing on renovating older product to Class A space, as most of the office inventory near the stations is older and will continue to age through 2040. Currently tenants in the market are seeking newer or fully renovated office space that is close to quality amenities and transit, a trend we expect to continue. Notably, WRIT will spend \$35 million on renovating of 7900 Westpark to bring it to Class A status to attract tenants. To be competitive, we expect more property owners to follow suit in renovating older stock to Class A. We believe new development is warranted more so for Tysons Corner near the new Metro stations compared to the other submarkets impacted by the Silver Line. Although new development is not out of the question for Reston or Herndon, we believe developers should be cautious and select prime locations for new development as demand and supply will be more in balance in these two submarkets. Notably, limited new development could occur in the Route 28 North submarket near Metro, as the current office inventory is relatively low.







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