

A stylized map of the Green Line Corridor in Washington, D.C. The corridor is represented by a thick green line with white circular markers indicating stations. It starts in the northwest, goes south, then east, then south again, and finally east towards the bottom right. The map includes a light blue area representing the Potomac River in the southwest and a light blue area representing the Annapolis Waterfront in the northeast. Several iconic D.C. landmarks are marked with small icons: the Lincoln Memorial, the Washington Monument, the U.S. Capitol, and the Supreme Court Building. The title 'GreenPrint of Growth 2.0' is written in a large, bold, green font, and 'Five Years Later' is written in a smaller, bold, green font below it.

GreenPrint of Growth 2.0

Five Years Later

**A Story of Accelerated Growth That
Has Solidified the Green Line Corridor
as the District's Preferred Location for
New Households and Development**



DC Amplified. Life Simplified.

RCLCO

GROWTH HAS FOLLOWED THE GREENPRINT

Five years ago, the Capitol Riverfront Business Improvement District (BID) commissioned RCLCO to quantify the growth that had occurred along the Green Line Metro Corridor, from Petworth to Navy Yard-Ballpark, in the 20 years since service began.

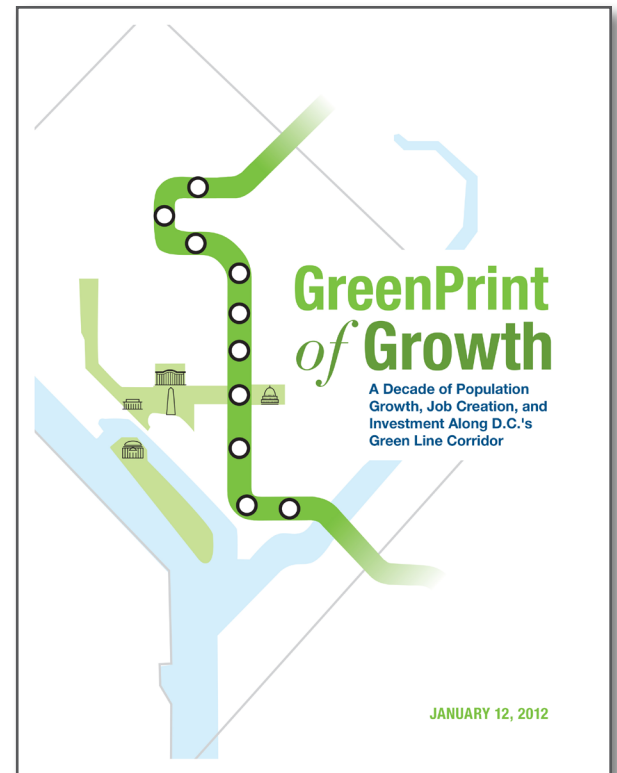
The resulting report, *GreenPrint of Growth*, surprised many people when it showed that the Green Line Corridor had attracted a significant amount of the District's population growth and job creation, and it boldly posited that the Corridor would likely be an engine of future economic growth. Further, the report predicted that the Capitol Riverfront, given the development capacity around the Navy Yard-Ballpark station, would be among the most competitive locations for new development.

In this new report, *GreenPrint of Growth 2.0*, RCLCO examines the growth that has occurred within a quarter-mile of the Green Line stations from Petworth to Navy Yard-Ballpark since the original report. Looking back, we find that **the Green Line Corridor has performed above and beyond expectations.**

The Green Line is now the **region's corridor of choice for young professionals, and it is also attracting jobs and retail amenities.** The Green Line Corridor alone

accounts for 48% of the District's new households under 35 since 2010. This has fueled the Green Line's quick transition from an emerging destination for new development to a corridor of vibrant neighborhoods where residents can live, work, and shop at one station, or on one Metro line.

Moreover, the growth and development has occurred up and down the corridor. While the Shaw and U Street stations have experienced their fair share, **growth at the Green Line stations south of L'Enfant Plaza has been as impressive as those stations north of Gallery Place.** Based on construction activity to date and projects that are planned to deliver by 2019, Navy Yard-Ballpark station is one of the Green Line's biggest magnets for new households and development this decade.



STUDY OBJECTIVES AND METHODOLOGY



The study analyzed numerous data sources to understand the magnitude of development, shift in demographics, and job creation that is occurring along the Green Line Corridor.

The objectives of the study were to:

- » Provide insight into the extent to which regional development dynamics may or may not be driving new development to Metro-oriented locations, in general, and highlight growth trends for the following Green Line Corridor station areas, in particular: Georgia Ave-Petworth, Columbia Heights, U Street, Shaw-Howard University, Mount Vernon Square-Convention Center, Gallery Place, Archives-Penn Quarter, L'Enfant Plaza, Waterfront, and Navy Yard-Ballpark;
- » Create a data-driven analysis of the character, quantity, value, and quality of the development activity within a quarter-mile radius of these station areas;
- » Compare the development statistics of the above Green Line Corridor study area to the Northwest D.C. Red Line Corridor station areas, the Northern Virginia Rosslyn-Ballston Corridor Orange Line station areas, and the Northwest D.C. Orange Line station areas;
- » Characterize and qualify the “Green Line Corridor Household” in terms of income level and likely daytime employment—and create a more refined understanding of who lives and works in the Green Line Corridor; and
- » Quantify the total fiscal impact to the District of Columbia in terms of future real property tax benefit and job creation that would accrue over the next 20 years based on planned and projected future development activity along both the Green Line Corridor and in the entirety of the Capitol Riverfront BID.

Stations Included in Each Corridor

DC Green Line	NW DC Red Line	NW DC Orange Line	R-B Corridor
Georgia Ave-Petworth Columbia Heights U Street Shaw-Howard Univ Mt. Vernon Square-Convention Center Gallery Place-Chinatown Archives-Penn Quarter L'Enfant Plaza SW Waterfront Navy Yard-Ballpark	Union Station Judiciary Square Gallery Place-Chinatown Metro Center Farragut North Dupont Circle Woodley Park Cleveland Park Van Ness-UDC Tenleytown	Smithsonian Federal Triangle Metro Center McPherson Square Farragut West Foggy Bottom-GWU	Rosslyn Court House Clarendon Virginia Square-GMU Ballston-MU

KEY HEADLINES

1

The Green Line is the strongest growth corridor for young professionals, **attracting 1 of every 2 new households under age 35** in the District since 2010. Moreover, the Green Line stations south of L'Enfant Plaza are attracting an equivalent share of the Green Line's new young professional households as stations north of Gallery Place.

2

One out of every 4 new apartments built in the District since 2000 has been built along the Green Line Corridor. During that time, Navy Yard-Ballpark has added more units than any other Green Line Corridor station, and more than twice as many as Shaw or U Street.

3

Based on the average resale prices of condos built after 2000, the average income for new Green line households has increased by nearly 50% since 2012, to \$121,600. For the Navy Yard-Ballpark station, new household **incomes have increased over 80%, to \$108,600.**

4

Stations along the Green Line Corridor are seeing **new condo deliveries garner a premium of over 30%** compared to resale pricing. Look for this trend to continue at the Navy Yard-Ballpark station, where 640 new condo units are planned to deliver by 2019.

5

Green Line stations have captured **50% of the District's retail development** since 2010. The Navy Yard-Ballpark station area alone will add the equivalent of 1.5 CityCenters worth of retail by 2019.

6

Between 2010 and 2016, the number of jobs located on the Green Line Corridor grew by 50% to **76,000 jobs**, with high-wage sectors representing a majority of the growth.

7

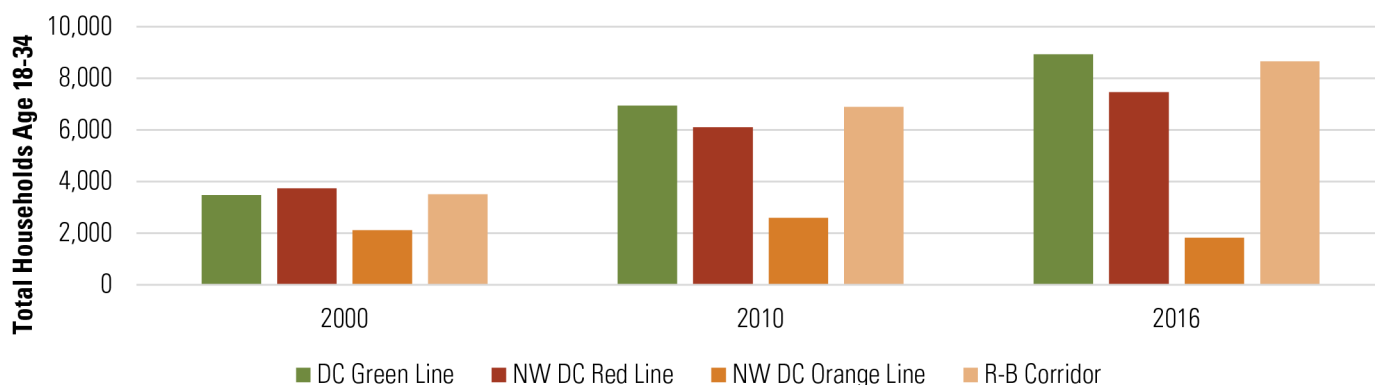
Residential growth and development activity along the Green Line Corridor is anticipated to generate **\$3.66 billion in tax revenues** to the District over the next 20 years.

SUMMARY OF FINDINGS

1 The Green Line is the strongest growth corridor for young professionals, attracting 1 of every 2 new households under age 35 in the District since 2010. Moreover, the Green Line stations south of L'Enfant Plaza are attracting an equivalent share of the Green Line's new young professional households as stations north of Gallery Place.

Growth in households age 18 to 34 continues to be concentrated along the Green Line Corridor. Even in 2010, the Green Line outranked the R-B Corridor for total young households. In the years since, it has increased its lead.

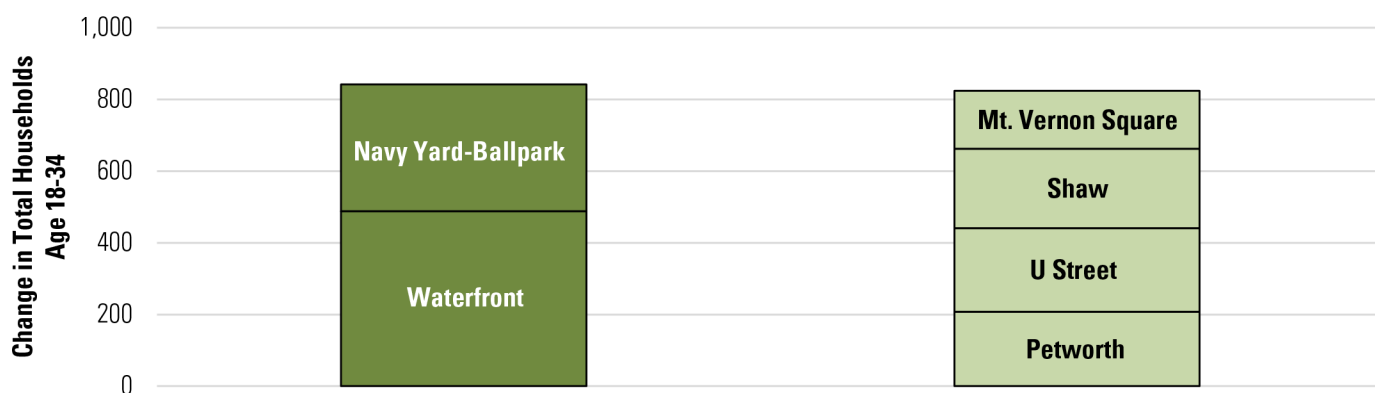
Total Households Age 18-34 by Corridor



Source: Esri Business Analyst; RCLCO

Perhaps more surprising is that the Waterfront and Navy Yard-Ballpark stations together added as many new young households since 2010 as the Petworth, U Street, Shaw, and Mount Vernon stations combined.

2010-2016: Change in Households Age 18-34 by Green Line Station Area



Note: Columbia Heights station excluded from graph because the number of households under 35 did not increase at that station.

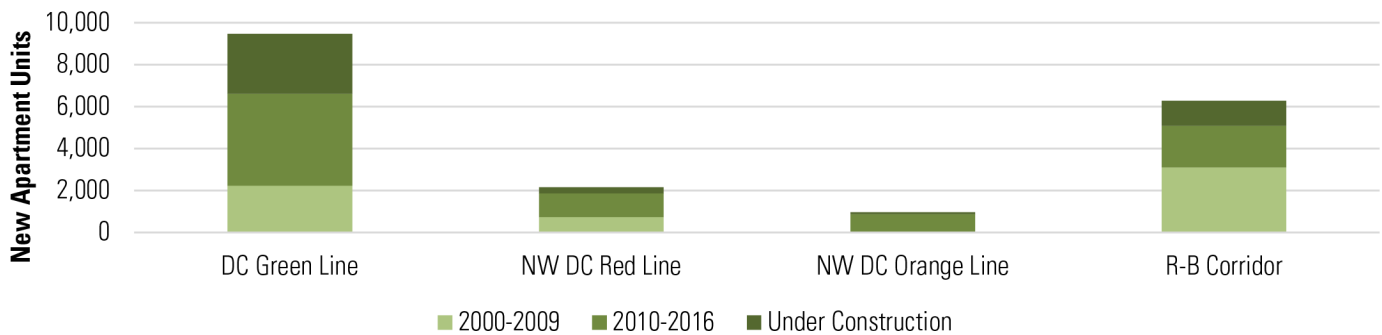
Source: Esri Business Analyst; RCLCO

SUMMARY OF FINDINGS

2 One out of every four new apartments built in the District since 2000 has been built along the Green Line Corridor. During that time, Navy Yard-Ballpark has added more units than any other Green Line Corridor station, and more than twice as many units as Shaw or U Street.

The Green Line Corridor continues to outperform other Metro corridors for new apartment development. After all of the units currently under construction deliver, the Green Line will have added 9,500 new apartment units since 2000, 50% more than the R-B Corridor.

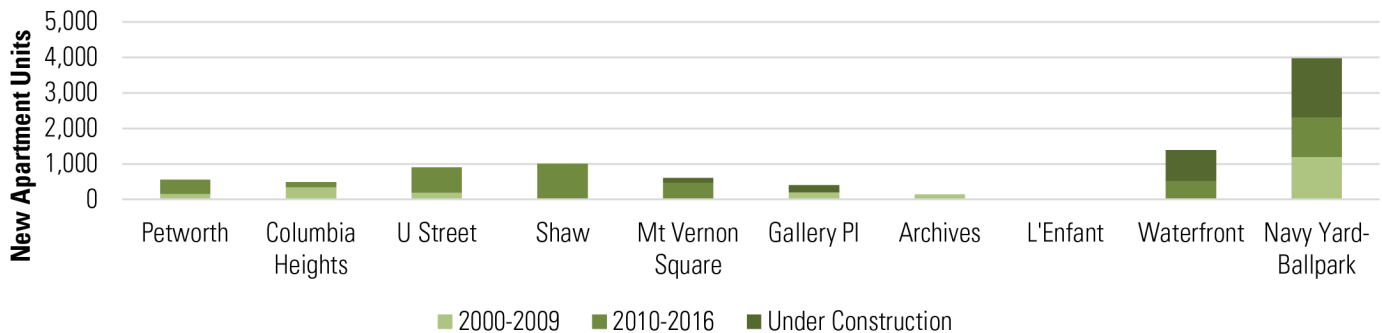
Apartment Development by Corridor



Source: Axiometrics; RCLCO

The Navy Yard-Ballpark station has captured more Green Line Corridor apartment development than any other station. It added more than 2,300 new apartment units between 2000 and 2016, twice as many as Shaw or U Street. After the delivery of an additional 1,650 units that are currently under construction at Navy Yard-Ballpark, the station will have four times more new apartments than Shaw or U Street.

Green Line Apartment Development by Station



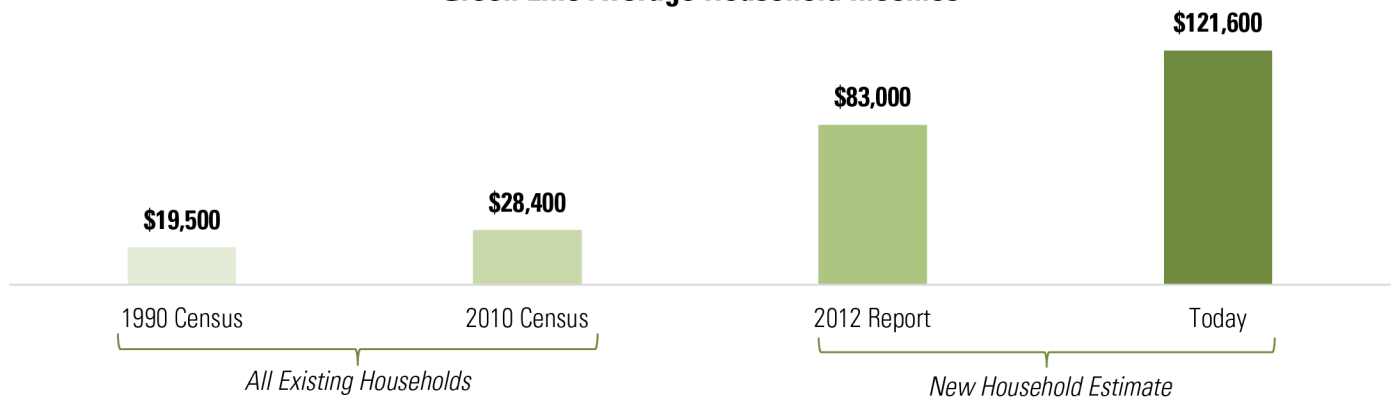
Source: Axiometrics; RCLCO

SUMMARY OF FINDINGS

3 Based on the average resale prices of condos built after 2000, the average income for new Green line households has increased by nearly 50% since 2012, to \$121,600. For the Navy Yard-Ballpark station, new household incomes have increased over 80%, to \$108,600.

The 2012 *GreenPrint of Growth* report found that new Green Line households were earning over \$80,000 per year. As home prices have continued to rise, so have the incomes of new households. Today, home prices suggest the average new Green Line household earns over \$120,000 per year, an increase of 47% over five years ago.

Green Line Average Household Incomes

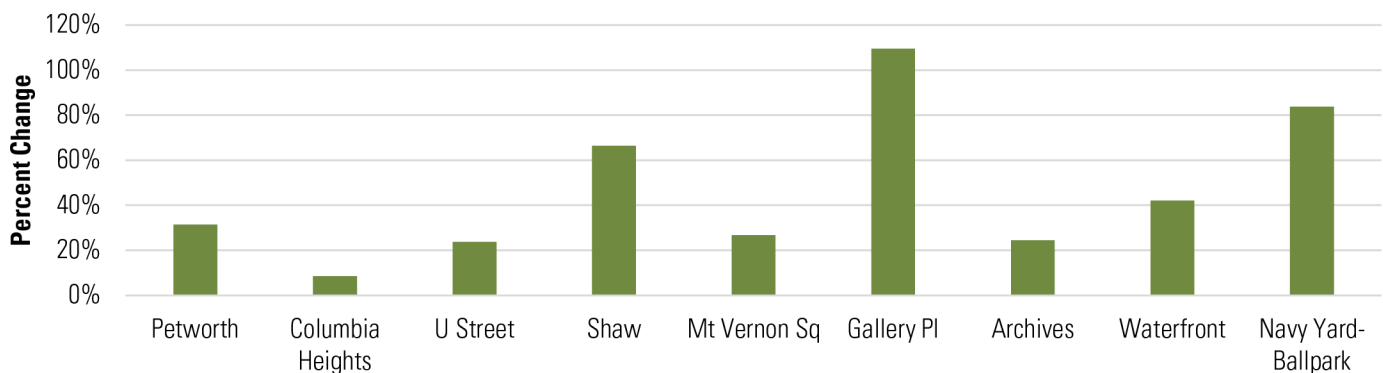


New resident incomes based on 3-year average sale price of condos built since 2000.

Source: District CAMA files; RedFin; RCLCO

The most dramatic increase in new household incomes occurred at Gallery Place (due to the delivery of the luxury condos at CityCenter), followed by Navy Yard-Ballpark station, where new household incomes have increased 84% since 2012.

2012-2016 Percent Change in New Household Incomes by Green Line Station



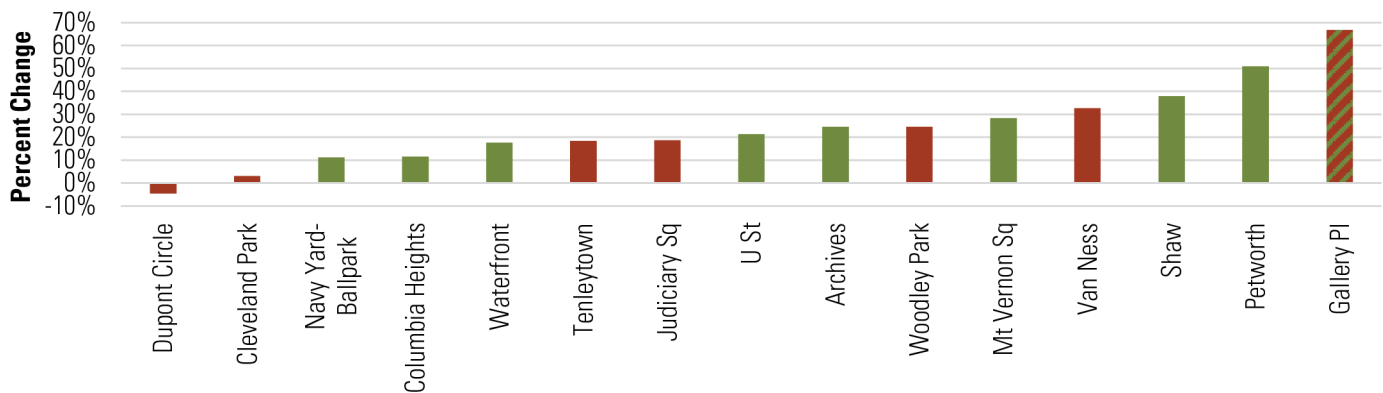
Source: District CAMA files; RedFin; RCLCO

SUMMARY OF FINDINGS

4 Stations along the Green Line Corridor are seeing new condo deliveries garner a premium of over 30% compared to resale pricing. Look for this trend to continue at the Navy Yard-Ballpark station, where 640 new condo units are planned to deliver by 2019.

The Green Line leads the way in price growth for condo sales since 2010. The stations with the strongest price growth are those that have also seen new supply, because new condos can push prices faster than value appreciation alone can.

Change in Average Condo Sales Price Since 2010 by Station



Note: Data shows the growth between the 2010-2012 and 2014-2016 average sale price for new & resale condos. 3-year average used based on methodology of the 2012 GreenPrint report.

Source: District CAMA files; RedFin; RCLCO

Sales data for condos built since 2013 suggests that new condos are resetting resale pricing by an average of over 30%. Look for this trend to continue at Navy Yard-Ballpark, where 640 condos are slated to deliver by 2019.

New Versus Resale Pricing for Condos Built Since 2013

Metro Station	New Condos, \$/SF	Resale Condos, \$/SF	Price Premium for New
Petworth	\$470	\$431	9%
Columbia Heights	\$568	\$530	7%
U Street	\$706	\$625	13%
Mt Vernon Sq	\$750	\$592	27%
Waterfront	\$800	\$446	79%
Woodley Park	\$1,200	\$522	130%
Navy Yard-Ballpark (Projected)	\$700	\$533	31%
Weighted Average	\$721	\$520	39%

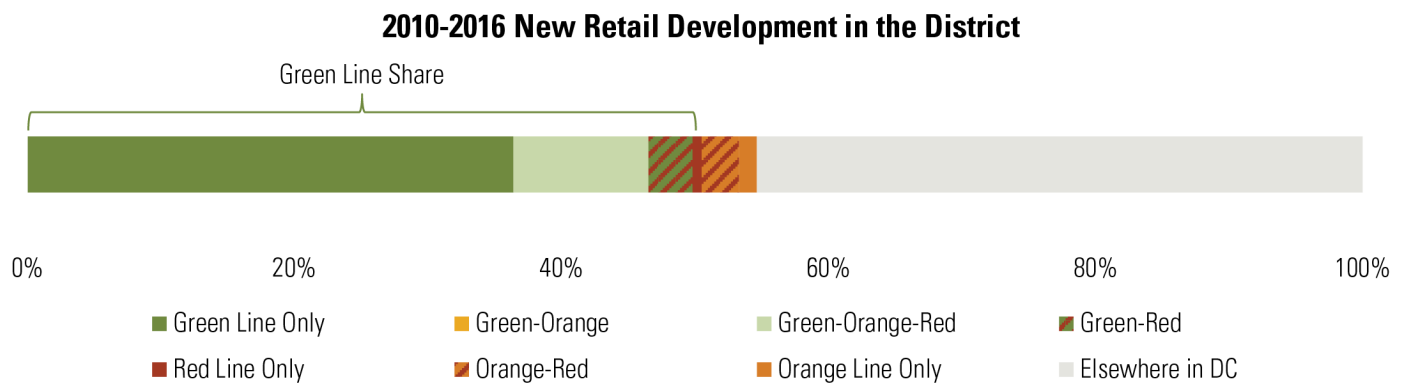
Note: Only shows those Metro stations where new condo supply has delivered since 2013.

Source: District CAMA files; RedFin; Delta Associates; RCLCO

SUMMARY OF FINDINGS

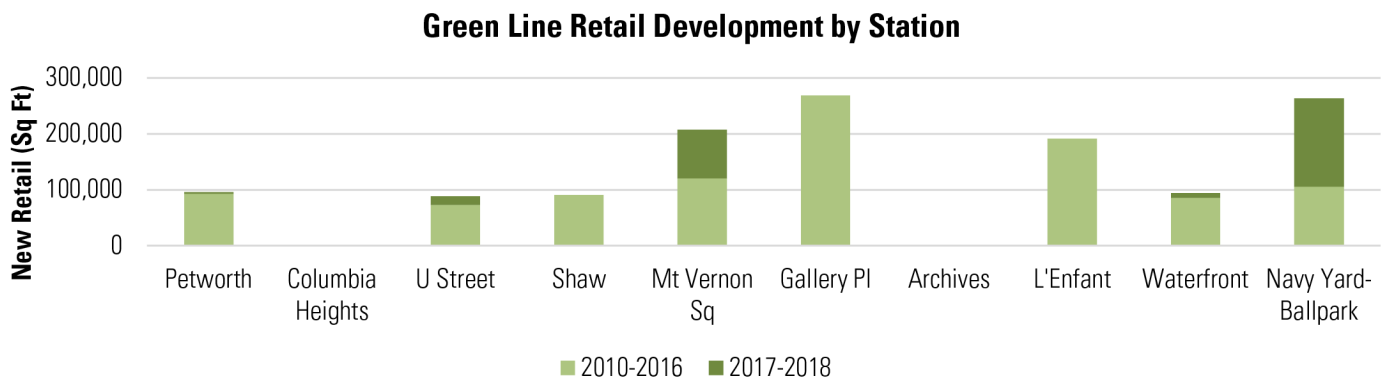
5 Green Line stations have captured 50% of the District's retail development since 2010. The Navy Yard-Ballpark station area alone will have added the equivalent of 1.5 CityCenters worth of retail by 2019.

The Green Line Corridor's outsized share of the District's retail development (new construction and redevelopment) is consistent with its strong share of apartment deliveries, as much of the new retail since 2010 has delivered as part of mixed-use developments. And no, the gains were not entirely fueled by CityCenter—in fact, CityCenter only represented 20% of the Green Line Corridor's retail development.



*Note: Categories with multiple lines are within a quarter mile of multiple Metro lines. For example, projects within a quarter mile of both Gallery Place and Chinatown are on the Green, Orange, and Red lines and categorized above as Green-Orange-Red. Includes new and renovated retail spaces.
Source: Washington DC Economic Partnership; RCLCO*

Considering the near-term pipeline, Navy Yard-Ballpark station accounts for more retail development than any other Green Line Corridor station. In fact, it represents 22% of the entire Green Line Corridor. The acceleration of retail development at Navy Yard-Ballpark station reflects the strong growth of the station's residential base and indicates that the area is quickly becoming an established, amenitized neighborhood.



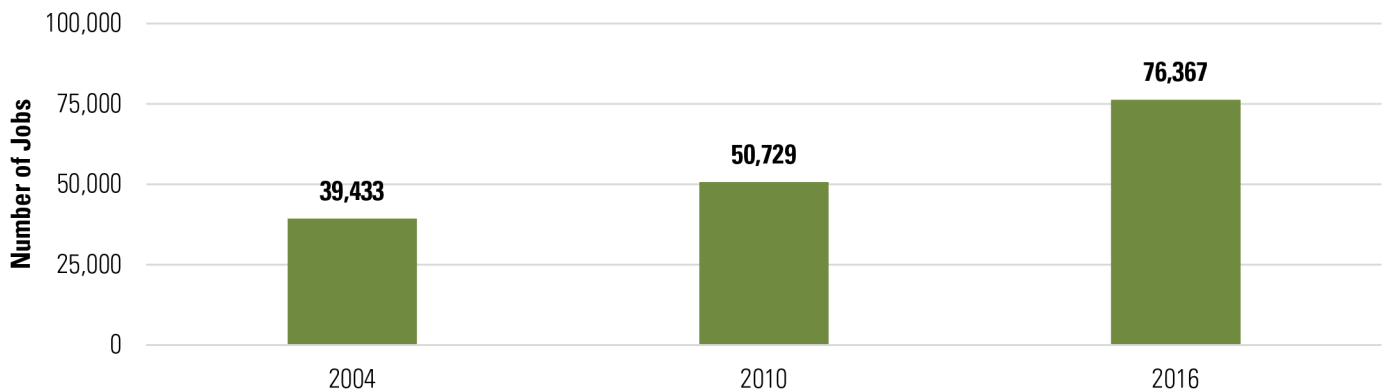
*Note: Includes new and renovated retail spaces.
Source: Washington DC Economic Partnership; Capitol Riverfront BID; RCLCO*

SUMMARY OF FINDINGS

6 Between 2010 and 2016, the number of jobs located on the Green Line Corridor grew by 50% to 76,000 jobs, with high-wage sectors representing the majority of the growth.

The growth of the Green Line Corridor's jobs base has accelerated since 2010, subsequent to the first major wave of residential growth along the Corridor between 2000 and 2009. Today, over 75,000 people work on the Green Line Corridor.

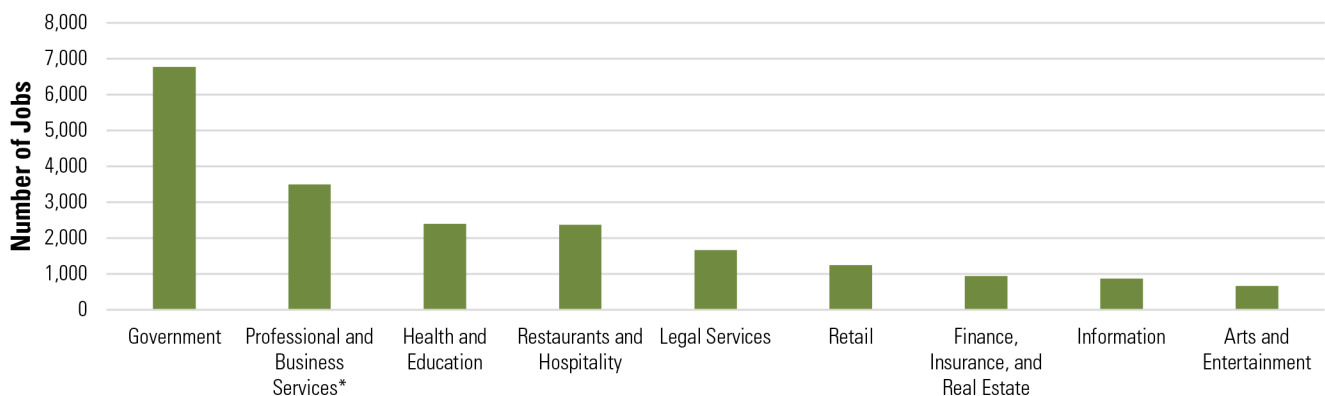
Total Green Line Corridor Employment



Source: InfoUSA; RCLCO

Green Line Corridor employment growth since 2010 has been fueled by several sectors. High-wage jobs accounted for the largest share, representing 58% of job gains in the District during that time and 63% of new jobs on the Green Line Corridor. As the Corridor becomes a regional destination for retail, dining, and entertainment, employment also increased in these sectors. Overall, every major sector saw an increase in employment since 2010, a testament to the Green Line Corridor's diversified and growing jobs base.

2010-2016: Change in Green Line Employment Growth for Selected Sectors



*Excluding legal services, shown separately.
Note: graph does not show all job sectors. InfoUSA; RCLCO

SUMMARY OF FINDINGS

7 Residential growth and development activity along the Green Line Corridor is anticipated to generate \$3.66 billion in tax revenues to the District over the next 20 years.

The tremendous development along the Green Line Corridor also supports new jobs and significant new tax revenues to the District of Columbia. Based on pipeline projects as well as recent historical development activity, RCLCO conducted a fiscal impact analysis to quantify the jobs and revenue that would be generated by existing and estimated new residential and commercial development along the Green Line Corridor over the next 20 years.

20-Year (2017-2036) Fiscal Impact of the Green Line Corridor



\$3.66 billion in tax revenue



22,500 permanent jobs



1,100 annual construction jobs

Note: Jobs are shown as full-time equivalents.

Source: RCLCO

The analysis found that development along the Green Line Corridor would generate \$3.66 billion in General Fund tax revenues to the District over the next 20 years. This revenue estimate includes the development projects' direct on-site revenues from real property tax, personal property tax, income tax, sales and meal taxes from retail and restaurants in the Green Line Corridor, hotel tax, individual income tax, recordation tax, and other miscellaneous revenues to the General Fund, which includes all revenues except for those that are dedicated to specific funding streams such as the Convention Center Fund, Neighborhood Investment Fund, or the District's WMATA Subsidy. The revenue estimates also include sales and meals taxes on retail spending by residents of the new residential developments.

The fiscal analysis also estimates that the new development will support 22,500 permanent jobs and 1,100 average annual construction jobs over the same 20-year period. This only includes jobs located in the developments along the Green Line Corridor or associated with their construction; it does not include jobs indirectly generated by the spending of the businesses, employees, and residents of the developments, which would make the job generation numbers even higher. Note that because the new buildings may draw tenants and residents from elsewhere in the District, not all of the permanent jobs associated with the Green Line's development will necessarily be "new" to the District.

IN SUMMARY



RCLCO

When it was first published in 2012, the *GreenPrint of Growth* report's findings upended conventional wisdom about where the District's household growth, young professional population, and development activity was concentrated, as well as which locations in D.C. would drive future economic growth.

This update not only bears out the predictions made in the 2012 report, it also finds that the pace of growth and change along the Green Line Corridor has accelerated.

What was still seen five years ago as an emerging corridor is quickly solidifying its position as a top-tier destination for young and high-earning professionals, new residential development; shopping, dining, and service retail; and jobs.

All of the components of a vibrant neighborhood are coming into place, not only at the corridor-level, but at the individual station-level as well. While some stations like U Street or Shaw are perhaps assumed to have captured the lion's share of the investment, **the transformation is in fact occurring up and down the Green Line**, from Petworth to Navy Yard-Ballpark.

Research by RCLCO



Report Commissioned by the Capitol Riverfront Business Improvement District



Cover image from the 2012 GreenPrint of Growth report; image design by Trialogue Studio

