

A stylized graphic of the Green Line Corridor in Washington, D.C. The corridor is represented by a thick green line with white circular nodes at each station. The line starts at the bottom left, goes up, then right, then down, then right, and finally up and right. It passes through the Anacostia River, which is shown in light blue. Several icons of D.C. landmarks are placed along the corridor: the Lincoln Memorial, the Washington Monument, the U.S. Capitol, and the Supreme Court Building. A light blue geometric shape is in the top right corner.

# GreenPrint *of* Growth

**A Decade of Population  
Growth, Job Creation, and  
Investment Along D.C.'s  
Green Line Corridor**

**JANUARY 12, 2012**

Research by RCLCO



Report Commissioned by the Capitol Riverfront Business Improvement District



Design by Trialogue Studio



## THE GREEN LINE CORRIDOR

During the last decade, the District of Columbia re-emerged as the region's growth driver. In fact, in 2012, the District had the highest population growth percentage in the nation. During this process, it reversed the historical trend of lost market share of population and jobs to suburban competitors and has become a destination of choice not only for professionals but increasingly for the companies and organizations for which they work.

Regional real estate and economic observers have long pointed to property located along Metro's Red Line in Northwest Washington and the Rosslyn-Ballston (R-B) Orange Line Corridor in Northern Virginia as successful investment and development corridors. Development locations and opportunities in these two corridors have been highly sought-after, garnering not only regional, but national, recognition.

In the 1990s, in concert with the opening of Metro's Green Line service, the District of Columbia began the process of planning and developing a number of neighborhoods around Metro stations into higher-density communities to capture new office and residential growth. In particular, the District's investment spurred the revitalization of at least six vibrant mixed-use urban neighborhoods—Columbia Heights, Gallery Place, U Street, NoMA, Southwest Waterfront, and the Capitol Riverfront (Navy Yard metro station). On this list, all but one is located along Metro's Green Line Corridor.

The Capitol Riverfront Business Improvement District (BID) commissioned Robert Charles Lesser & Co., LLC (RCLCO) to examine the changes that have occurred in communities along Metro's Green Line Corridor study area from Georgia Ave/Petworth to Navy Yard/Capitol Riverfront since the opening of Metro's Green Line service. Until this study, little research had been done about the extent of the changes taking place in these areas and their role in the District's and regional economy.

The findings reveal that the Green Line corridor plays a central and critical role in the District's and the region's population growth, job creation, and investment, and will likely be an engine of future economic growth. Additionally, the data suggests that the Capitol Riverfront—given its Green Line access at the Navy Yard Station and its significant amount of development capacity—is among the most competitive locations in the region for residential, retail, and office development.

*GreenPrint of Growth* finds that a growing number of affluent, young professionals and their employers have chosen to move into communities around Green Line Corridor stations, a fact that is less well-known to many real estate professionals and regional economic observers. Truly, the Green Line Corridor has become a top-tier location for population growth, job creation, and investment.

## 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 development dynamics regionally may or may not be driving new development to Metro-oriented locations generally. Additionally, to understand growth trends of the Green Line Corridor station areas under investigation: Georgia Ave/Petworth, Columbia Heights, U Street, Shaw/Howard University, Mt. Vernon Square/Convention Center, Gallery Place, Archives/Penn Quarter, L'Enfant Plaza, SW Waterfront and Navy Yard;
- 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 exactly who lives and works in the Green Line Corridor;
- Forecast forward the total amount of development that is likely to emerge around these Green Line Corridor stations and the entirety of the Capitol Riverfront BID; 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 if potential demand is fully realized.

To accomplish the objectives above, RCLCO examined historical, current, and projected economic and demographic shifts taking place along transit corridors in the District and the region. RCLCO also deployed its MetroLogic™ modeling, which is designed to forecast real estate growth and impacts on a regional scale. RCLCO also analyzed decades of actual residential real property transactions to estimate the income levels and purchasing power commensurate with stabilized transaction price levels.

Finally, RCLCO completed a demand forecast and fiscal impact and jobs analysis for the next 20 years along Green Line Corridor study area stations as well as specifically for the Capitol Riverfront neighborhood.



## SUMMARY OF FINDINGS

RCLCO analysis suggests that the Green Line Corridor study area has become a formidable competitor—and regional leader—for capturing highly-prized young professional housing demand and high-wage employment. It is now well-poised to become the new economic spine of the region.

### 1. Green Line Corridor study areas are capturing a large share of the region’s young, professional, and affluent households.

The Green Line Corridor station areas added more 18-to-34-year-old households in the 2000s than the Rosslyn-Ballston corridor, and also added more of these households than Northwest D.C. Red Line and Northwest D.C. Orange Line station areas combined.

- In the 2000’s, The R-B Corridor added 3,395 18-to-34-year-old households, while the Northwest D.C. Red Line added 2,354, and the Northwest D.C. Orange Line added just 406. Meanwhile, the Green Line Corridor station areas added 3,466 18-to-34-year-old households.
- Compared to the 1990s, the Green Line Corridor captured nearly ten times as many young households in the 2000s.
- During the 2000’s, the quarter-mile area around the Green Line Corridor stations captured approximately 32% of the entire growth in 18-to-34-year-old households in the District.

#### STATIONS IN CORRIDORS STUDIED

<b>Green Line Corridor:</b>	<b>NW D.C. Red Line:</b>	<b>The R-B Corridor:</b>	<b>NW D.C. Orange Line:</b>
Georgia Ave/Petworth,	Union Station,	Rosslyn,	Smithsonian,
Columbia Heights,	Judiciary Square,	Court House,	Federal Triangle,
U Street,	Gallery Place,	Clarendon,	Metro Center,
Shaw/Howard University,	Metro Center,	Virginia Square /GMU,	McPherson Square,
Mt. Vernon Square/ Convention Center,	Farragut North,	Ballston/MU	Farragut West,
Gallery Place,	Dupont Circle,		Foggy Bottom-GWU
Archives/Penn Quarter,	Woodley Park,		
L’Enfant Plaza,	Cleveland Park,		
SW Waterfront,	Van Ness,		
Navy Yard	Tenleytown		

1990-2000: 18-TO-34-YEAR-OLD HOUSEHOLD GROWTH



GREEN LINE CORRIDOR

**373**



NW DC RED LINE

**418**



VA ROSSLYN-BALLSTON

**1,491**



NW DC ORANGE LINE

**597**

2000-2010: 18-TO-34-YEAR-OLD HOUSEHOLD GROWTH



GREEN LINE CORRIDOR

**3,466**



NW DC RED LINE

**2,354**



VA ROSSLYN-BALLSTON

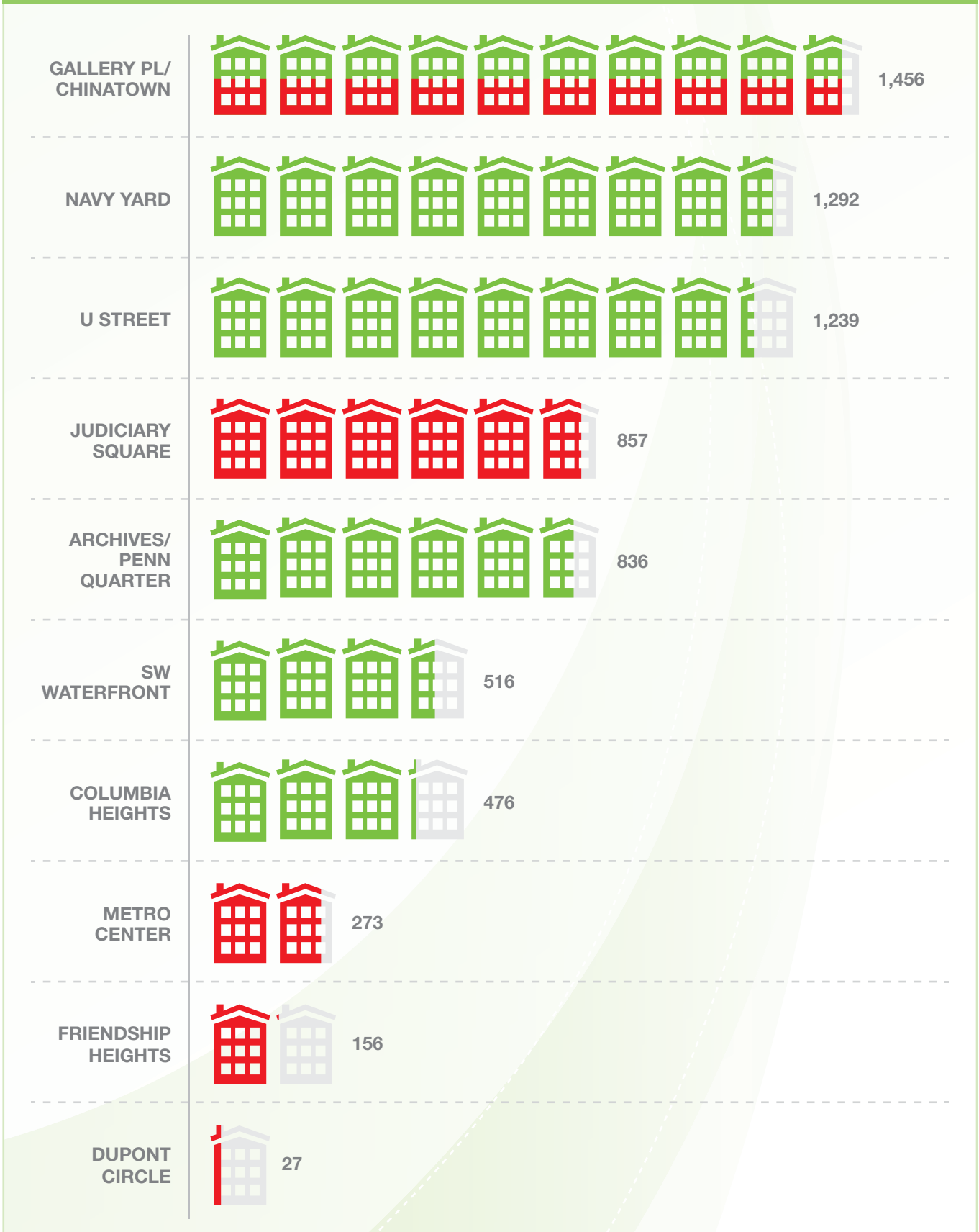
**3,395**



NW DC ORANGE LINE

**406**

2000-2011: MULTIFAMILY UNITS ADDED AT NW D.C. RED LINE & GREEN LINE CORRIDOR STATIONS





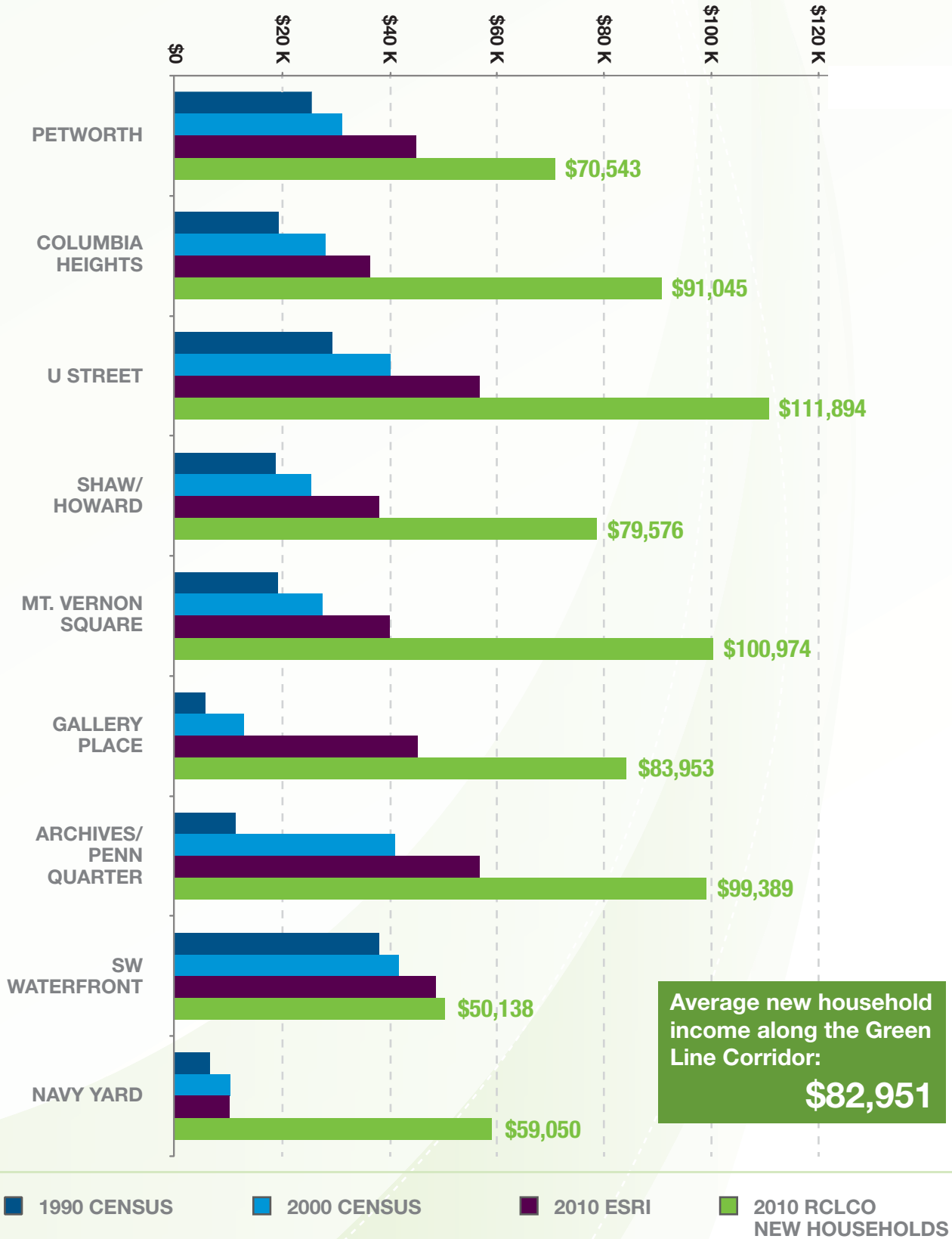
## 2. During the District's decade of growth, the Green Line Corridor captured significant multifamily units and is poised to continue this development trend.

Over the past ten years, multifamily condos and apartments added near Green Line Corridor station areas outpaced Northwest D.C. Red Line station areas in total development units added, and there is significant future market-driven demand potential along the Green Line Corridor through 2030.

- Between 2000 - 2011, six of the top ten locations for multifamily housing built around NW D.C. Red Line and Green Line Corridor Metro stations in D.C. were at Green Line Corridor stations.
- Over the next twenty years, RCLCO forecasts market-driven demand for 8,100 housing units, 4,350,000 square feet of office space and approximately 400,000 square feet of retail in the Green Line Corridor study area.
- The market-driven demand projected for the Green Line Corridor over the next twenty years represents a 20% capture of all new residential development, a 21% capture of all new office development in the District of Columbia, and a 22% capture for all new retail in the District of Columbia—while accounting for only 4.2% of the District's land base.

Over the next 20 years the Green Line Corridor study area may see market-driven demand for **8,100** housing units, **4.4 million SQ** of office and approximately **400,000 SF** of retail.

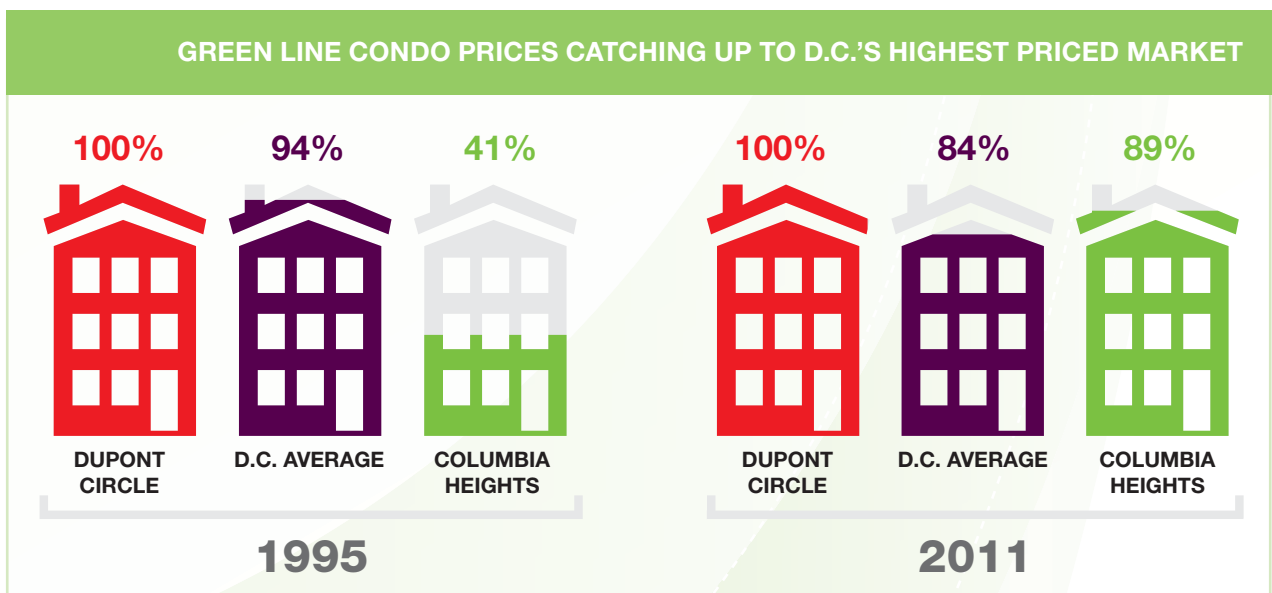
NEW HOUSEHOLD INCOMES ALONG THE GREEN LINE EXCEED TRADITIONAL DATA ESTIMATES



### 3. New households at the Green Line Corridor station areas have incomes that are among the highest in the region.

New housing units around Metro stations, largely built on formerly vacant and under-utilized land, have attracted new households that have incomes that are at least 50% higher than existing data sources would suggest. Analysis of three decades of residential property transaction records in D.C. indicates that new households along the Green Line Corridor have incomes that are among the highest in the region.

- Household incomes of new households along the Green Line Corridor study area average around \$80,000 or more, compared to current estimates that place median 2010 Green Line Corridor study area incomes close to \$40,000 annually.
- By 2010, the for-sale multifamily pricing at certain Green Line Corridor station areas caught up to and even eclipsed pricing in the top of the market high-priced Dupont Circle neighborhood. Average prices for Green Line Corridor multifamily for-sale units in the first part of the decade ranged in absolute dollars from \$143,000 to \$200,000 and in per square foot terms from \$154 to \$223. By the end of the decade—including years during and after the recession—average transaction prices for these units ranged from \$443,000 to \$550,000 and in per square foot terms from \$413 to \$600 at some station areas.



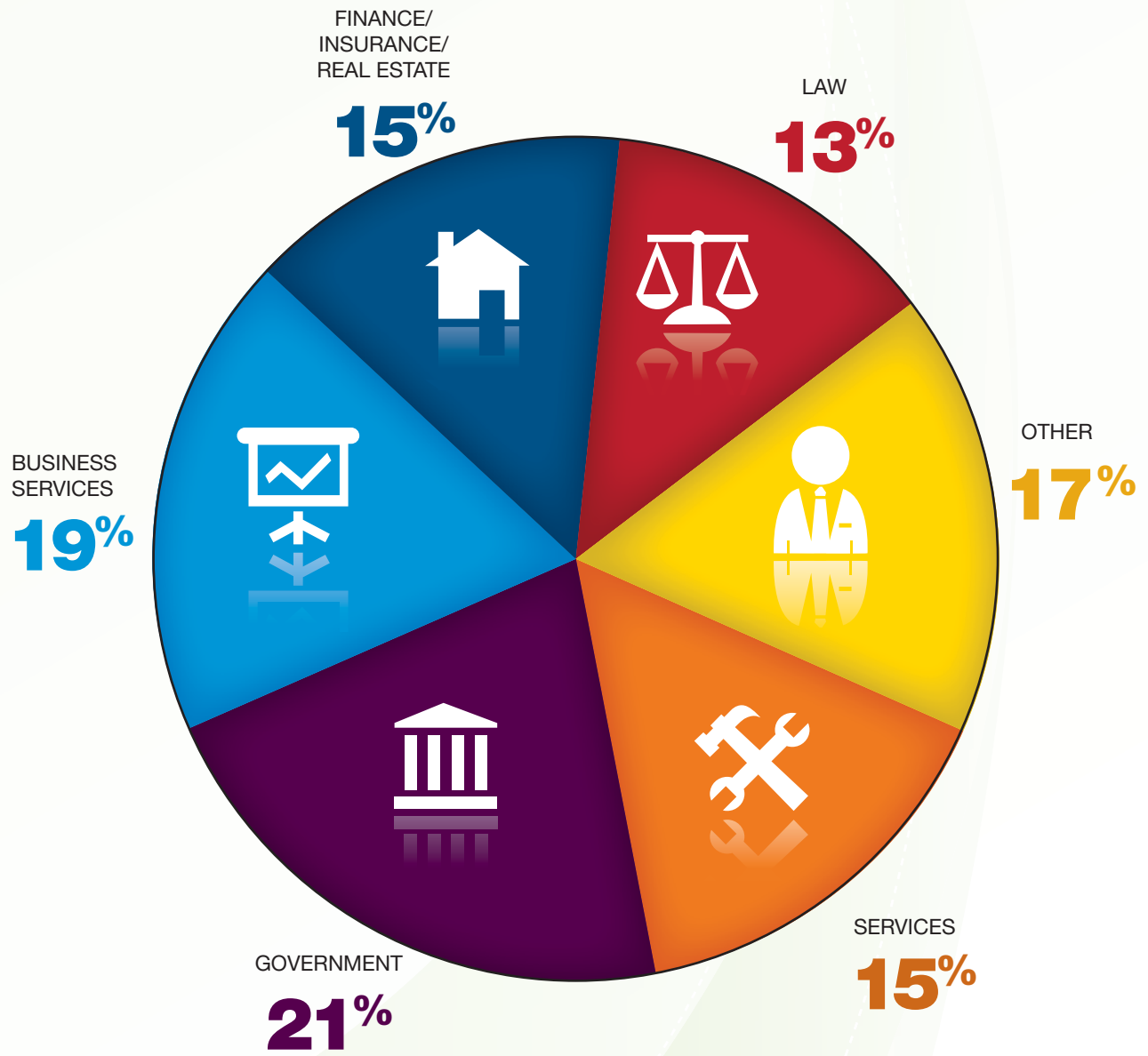
#### 4. Green Line Corridor stations are magnets for high-paying jobs.

Green Line Corridor station areas have emerged as job centers that are outcompeting areas in Northwest D.C. and Arlington County for high-paying, private sector, professional jobs. Detailed examination and analysis of actual business listing databases before and after the recession reveal that sectors including legal, management, finance/insurance/real estate (FIRE), and architecture/engineering all exhibited higher affinities for Green Line Corridor station areas than either the Rosslyn-Ballston Corridor or Northwest D.C. Red Line Corridor station areas. Meanwhile, the above analyses revealed that social service, nonprofit, and government jobs, which are sometimes associated with lower salaries and lease rates, gravitated to the Rosslyn-Ballston Corridor during the same time period.

- RCLCO analysis of the employment patterns along Green Line Corridor station areas overall indicate that professional services already comprise nearly 50% of the jobs currently located in these areas. In fact, FIRE, business services, and legal sectors drive 47% of the employment composition, meaning that private sector employment, not government or retail, is driving the microeconomics along the Green Line Corridor station areas.
- Of the 24,600 net new jobs added to the District of Columbia during the past decade, about 11,200 of them were added within one-quarter mile of a Green Line Corridor station area—equating to approximately 46% of the total growth. While it is not possible to say conclusively that there is a cause-and-effect relationship between Green Line Corridor locations and increasing concentration of certain kinds of jobs within a quarter-mile of the stations, the level of capture is certainly impressive.

**Legal, management, finance, insurance, real estate, architecture, and engineering all exhibited higher affinities for the Green Line Corridor station areas than Rosslyn-Ballston Corridor or the NW Red Line Corridor.**

2010: COMPOSITION OF EMPLOYMENT ALONG THE GREEN LINE CORRIDOR



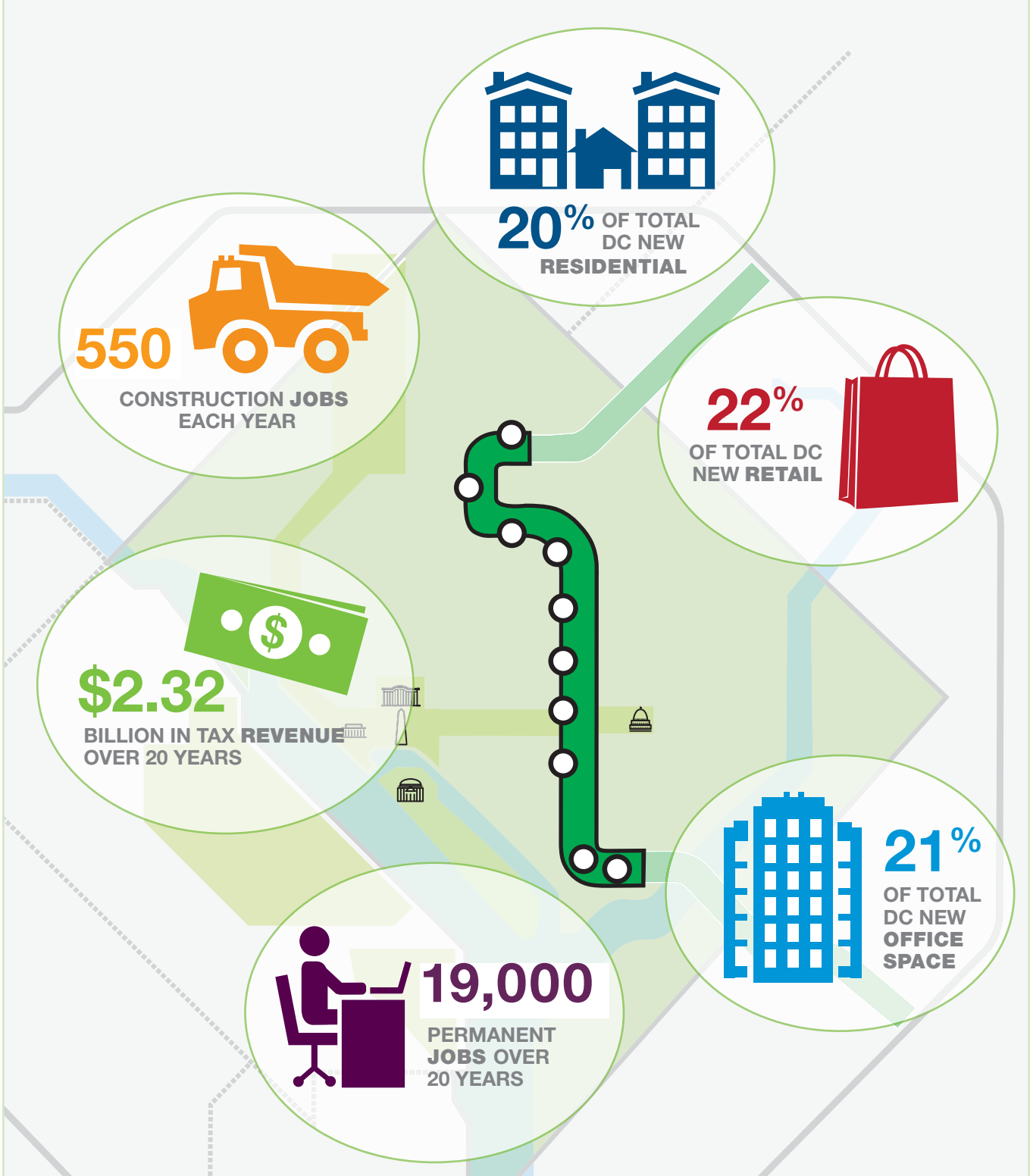
## 5. The Green Line Corridor generates significant tax revenues and job creation.

The Green Line Corridor, consisting of a quarter mile study area around metro stations from Georgia Ave/Petworth to Navy Yard/Capitol Riverfront, is already a major source of tax revenue and job creation for the District and could increase its contribution to the District’s annual tax revenue by 37% by 2030—all while accounting for only 4.2% of the District’s land base.

- Existing real property within the quarter mile area around the Green Line Corridor station study areas generates approximately \$538 million in annual tax revenue today.
- The new development projected to take place along the Green Line Corridor study area could generate \$2.32 billion in additional tax revenue over the next 20 years. Of that revenue, the quarter-mile around the Navy Yard Metro in the Capitol Riverfront neighborhood alone is projected to contribute \$1.05 billion.
- New development over the next twenty years along the Green Line Corridor is projected to add approximately 19,000 permanent jobs. Furthermore, assuming construction expenditures are spread evenly across the 20 year projection period, the new development will support nearly 550 construction jobs each year.
- Over the next twenty years, new development in the entire 500 acre Capitol Riverfront neighborhood, beyond just the quarter mile study area of the Navy Yard Metro, is projected to produce \$2.28 billion in tax revenue, 21,000 permanent jobs, and 585 construction jobs each year.



**NEXT 20 YEARS: GREEN LINE CORRIDOR—1/4 MILE AROUND METRO STATIONS\***



\*Green Line Corridor study area includes 1/4 mile around the following stations: Georgia Ave/Petworth, Columbia Heights, U Street, Shaw/Howard University, Mt. Vernon Square/Convention Center, Gallery Place, Archives/Penn Quarter, L'Enfant Plaza, SW Waterfront and Navy Yard.

## SUMMARY

### Twenty years after the opening of Metro’s Green Line service, the Green Line Corridor has emerged as an economic engine in the District and the Region.

Examination and analysis of multiple data sources provide new insights into the Green Line Corridor’s population growth and incomes, employment growth and economic development, and future development, tax revenues, and job location potential. Few places in the region or the nation combine the economic strength with the level of infrastructure, connectivity, and demonstrated market appeal, as the District of Columbia. Within this context, the Green Line Corridor in D.C. has already demonstrated its capacity to be out in front of the District’s overall growth curve and is well-positioned to continue this growth into the next decade and beyond.

The connection to the Green Line and its aforementioned competitive advantages, combined with its ample development capacity compared with other parts of the District and the region, position the Capitol Riverfront as a primary “receiving zone” for this development energy. Specifically, the analysis conducted suggests that the Capitol Riverfront—given its Green Line access at the Navy Yard Station and its significant amount of development capacity—is among the most competitive locations in the region for households, companies, and retailers.

#### FOCUS ON THE FACTS: A CHANGING REALITY

##### CONVENTIONAL WISDOM

1. Young professionals are primarily flocking to the Rosslyn-Ballston corridor.
2. The District’s residential growth is concentrated in NW D.C. along the Red Line.
3. The District’s Red Line is the “high-income” corridor.
4. The Green Line corridor economy is driven by public sector jobs.
5. The region’s future growth will be concentrated westward.

##### CURRENT TRENDS

1. The Green Line corridor outcompeted the Rosslyn-Ballston corridor at attracting young professionals in the 2000’s.
2. Green Line residential growth outpaced NW D.C. areas along the Red Line in the 2000’s.
3. New Green Line households have top-of-market incomes.
4. The Green Line is a magnet for high-paying, private sector jobs.
5. The Green Line is and will continue to be a regional economic engine and growth corridor.



Full report is available online at

**[www.capitolriverfront.org](http://www.capitolriverfront.org)**