Unequitable Growth & Concentrated Financial Vulnerability in the Nation's Capital:
Consumer Credit Trends in the District of Columbia, 2007-2017

Regional and Community Analysis • Federal Reserve Bank of Richmond

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Introduction

### Economic Change in the District of Columbia

The mortgage crisis that sparked the Great Recession had far-reaching impacts on Americans' financial well-being. After the housing bubble burst between 2006 and 2007 and the banking sector underwent a liquidity crisis, the median U.S. house price fell by approximately 30%, stock markets plummeted, and 8.7 million Americans lost their jobs.[1] American families lost 40% of their wealth overall, and a quarter of families lost over 75%.[2,3] Though most Americans were negatively impacted by the Great Recession, the effects were most acutely felt among lower-income, less educated and minority households. White households were 30% less likely to lose wealth than African-American, Hispanic and Native American households, for example, and 38% less likely to fall into debt.[4]

Over the following 10 years, home prices rebounded in most of the country, unemployment fell below pre-Great Recession levels and households shed outstanding debt.[5,6,7] Still, 10 years after the downturn, millions of families continue to struggle economically and poverty remains elevated in many communities, even as topline indicators show an improving economy.[8] Even though overall wealth today is higher than in 2007, this has been driven by gains at the top: Households in the top 10% income group have recovered their wealth losses from the Great Recession, while those in the bottom 90% still have not.[9]

Residents of the District of Columbia were not spared from the economic hardships the rest of the country faced; however, by some topline metrics, D.C. outperformed states economically in the years after the Great Recession ended. While unemployment sharply increased after 2007, by the middle of 2010 it was one of only three states or territories to have already recovered jobs lost in the downturn.[10] Further, real median household income in the District of Columbia increased by 27% between 2007 and 2015, an increase larger than any county in the region.[11]

Nevertheless, these economic improvements were not shared among all residents. Much of the growth in median income was driven by an increase in the number of upper-income residents rather than broad-based improvements (see Figure 1). Between 2007 and 2017, the number of households with annual incomes of at least $200,000 increased 62%, the largest growth rate of any income group, while the population of residents making below $10,000 also grew more quickly than the city overall.

Figure 1: Population Change by Annual Household Income, 2007-2017
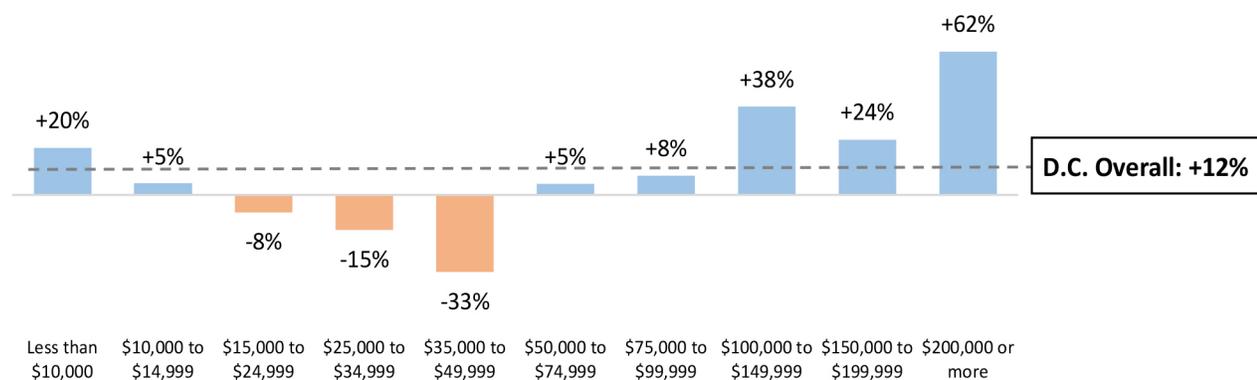
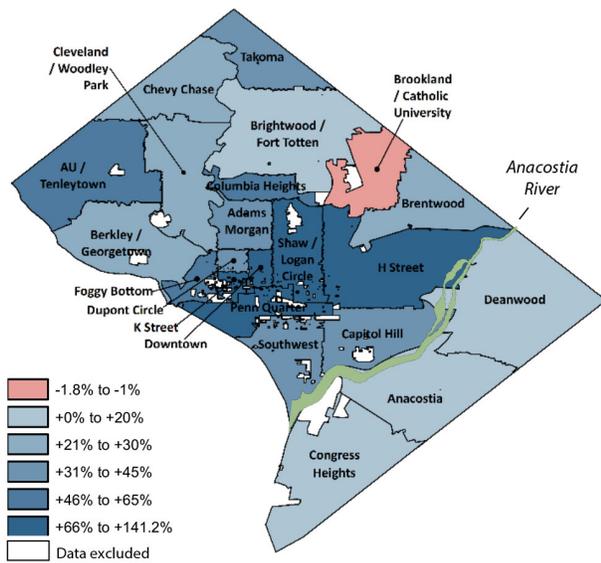**Note:** Values adjusted to 2017 dollars.
Sources: 2007 IPUMS USA: Version 8.0; American Community Survey 1-Year Estimates, 2017

Additionally, the number of moderate-income households (those with annual incomes between 50% and 80% of the citywide median) fell.[12]

Further, economic disparities between communities worsened. By 2017, the poverty rate among African-Americans in the city was nearly quadruple the rate for white residents and was 3 percentage points greater than before the Great Recession began (this differs from the nation overall, where the black poverty rate, while still over double that for white Americans, was nearly 2 percentage points lower in 2017 than in 2007).[13] These economic inequities accompanied population losses as D.C., a formerly majority African-American city, on net, lost more than 1,000 African-American residents between 2007 and 2017 even though the citywide population grew by over 100,000 (+18%).[14]
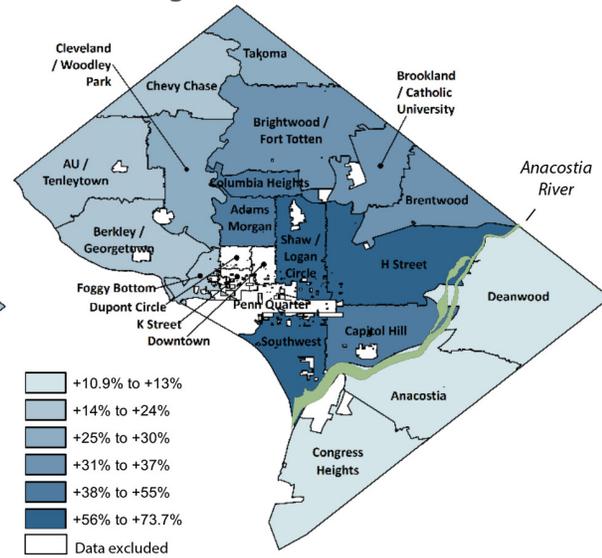
Divisions are also apparent in the geographic distribution of income and growth in D.C., which largely, but not entirely, align with the city's segregated racial dynamics. Communities such as Chevy Chase and AU/Tenleytown are nearly 90% white and in 2017 had median household incomes over four times those of communities to the east of the Anacostia River, where over 90% of residents are African-American. Indeed, 10 years after the Great Recession ended, Deanwood, Anacostia and Congress Heights continue to face low investment and wealth growth: Between 2007 and 2017, household income and single family home prices grew by some of the slowest rates in the city (see Maps 1 and 2). Still, the demographic and economic trajectories of these communities differ from other historically African-American neighborhoods. For example, between 2007 and 2017, inflation-adjusted median income increased by 79% in the Shaw/Logan Circle community, and the rate of home price growth was among the highest in the city.[15,16]

Map 1: D.C. Median HH Income, Change 2007-2017

Legend:
- -1.8% to -1%
- +0% to +20%
- +21% to +30%
- +31% to +45%
- +46% to +65%
- +66% to +141.2%
- Data excluded

Source: GeoLytics Population Estimates, 2007-2017

Map 2: D.C. Single Family Home Price, Change 2007-2017

Legend:
- +10.9% to +13%
- +14% to +24%
- +25% to +30%
- +31% to +37%
- +38% to +55%
- +56% to +73.7%
- Data excluded

Source: Federal Housing Finance Agency's Annual House Price Index, 2007-2017

However, what does it mean that even as wealth has rapidly grown in areas such as Shaw and H Street, poverty remains higher than in areas with comparable median incomes? What explains the divergent economic outcomes seen among historically minority communities and the city as a whole?

The following report will probe the factors that are driving such differences in community growth and income in the District of Columbia. Specifically, the report will seek to answer the following questions:

1. Are consumers in D.C. overall on better financial footing compared to before the Great Recession, and if not, where are the most pronounced market weaknesses?

2. What specific vulnerabilities do low- and moderate-income communities experience in the District of Columbia, and what can be done to improve those consumers' financial stability?

3. How does the District of Columbia compare to adjacent counties in the Washington MSA, both in terms of residents' risk of future economic upheaval and opportunities for growth?

Research Approach

To address these questions, this report analyzes different indicators of access and health in the credit economy. Consumer credit is an essential component of growth in the American economy, driving consumer spending on large items.[17] However, as the financial crisis of 2007-2008 dramatically revealed, poorly allocated credit can spark instability. Measures of consumer credit can therefore reveal the extent to which consumers have recovered from the economic downturn and indicate areas of weakness in the economy.

The report discusses consumer credit data from the Federal Reserve Bank of New York's Consumer Credit Panel/ Equifax (CCP) for adults aged 25 and older in the District of Columbia overall, in the adjacent counties in the Washington MSA and in Baltimore, Maryland. Furthermore, the report analyzes data within individual communities in D.C. (defined with ZIP code boundaries), as well as between groups of communities defined by their income and growth levels. Specifically, the report groups data among consumers in low-income, moderate-income, mid-income/mid-growth, mid-income/high-growth and high-income areas of the city (for more information on geographic scope and segmentation group definitions, see *About the Data*).

The report will analyze trends for three groups of indicators: *Access*, *Health & Utilization* and *Debt & Payment History*.

Access

Indicators of credit access measure residents' ability to obtain credit when it is needed or desired. In order to access credit, one first needs a credit file and credit score with a major credit bureau (such as Equifax, Transunion, etc.). Even when someone is included in the credit economy, however, one may not be able to easily and quickly take out debt if he or she does not have a revolving credit product (such as a credit card or home equity line of credit). In addition to credit inclusion, therefore, indicators in this category will also measure the prevalence of revolving credit products:

- *Included* – The portion of adult residents aged 25 years and older with an active credit file and an Equifax Risk Score

- *Revolving Credit* – The portion of included consumers who have at least one credit product that automatically renews as debts are paid off and who have nonzero credit limits on those products

Health & Utilization

Indicators of health and utilization will probe credit scores and utilization levels. For indicators of credit health, this report uses Equifax Risk Scores, which range from 300 to 850. Broadly, these indicators will reveal whether consumers are well-positioned to take on more debt in the future and whether their income is keeping up with their credit habits. Specifically:

- *Prime Credit* – Portion of consumers (excluding unscored consumers) with Equifax Risk Scores of 660 or above

- *Subprime Credit* – Portion of consumers (excluding unscored consumers) with Equifax Risk Scores below 600[18]

- *Low Credit Utilization* – Portion of consumers in the credit economy who have at least 70% available capacity on their revolving credit limit

- *Credit Constrained* – Portion of consumers in the credit economy who have outstanding revolving debt that is more than 75% of their revolving credit limit

Debt & Payment History

Indicators of debt and payment history include a range of different types of debt. The report will analyze changes in *median debt* and *severely delinquent debt* (at least 90 days past due) among borrowers of each of the following types:

- *Auto* – Automobile loan debt from both monoline automobile finance companies and multipurpose lenders

- *Credit Card* – Debt from general-purpose credit cards, excluding debit cards and credit cards for use at specific retailers

- *Home Equity Line of Credit[19]* – Debt from revolving home equity

- *Mortgage Debt* – Debt from first- and junior-lien mortgages and home equity installment loans

The following sections present data for each of these indicators, followed by discussions that highlight significant findings. For a quick reference to 2017 ZIP-code-level indicators, see *Summary Statistics* at the end of the report.

Indicators Summary Table, 2017

	Indicator	Definition	D.C.	U.S.	Arlington County	Fairfax County	Montgomery County	Prince George's County	Baltimore City
Access	Included	% of 25+ population w credit score	79%	86%	90%	91%	91%	86%	76%
	Revolving Credit	% of included consumers with revolving credit products	81%	74%	87%	85%	83%	77%	72%
Health & Utilization	Prime	% of included consumers with Equifax Risk Score >660	71%	71%	87%	84%	80%	55%	56%
	Subprime	% of included consumers with Equifax Risk Score <600	19%	17%	6%	8%	11%	28%	29%
	Credit Constrained	% of borrowers with debt >75% of limit	21%	19%	12%	15%	16%	30%	25%
	Low Credit Utilization	% of borrowers with debt <30% of limit	44%	38%	58%	52%	49%	27%	31%
Debt & Payment History	Median Auto Debt	Median auto debt among borrowers	$14,223	$14,603	$12,837	$15,006	$ 14,800	$16,782	$14,018
	Sev Del Auto Debt	% of auto borrowers with debt 90 DPD+	11%	7%	2%	3%	4%	11%	14%
	Median Credit Card Debt	Median credit card debt among borrowers	$2,867	$2,558	$2,894	$3,170	$2,823	$3,039	$2,318
	Sev Del Credit Card Debt	% of credit card borrowers with debt 90 DPD+	9%	9%	4%	5%	6%	14%	13%
	Median Mortgage Debt	Median mortgage debt among borrowers	$319,894	$147,006	$358,815	$315,944	$289,227	$215,346	$131,492
	Sev Del Mortgage Debt	% of mortgage borrowers with debt 90 DPD+	2%	1%	1%	1%	1%	3%	3%
	Median HELOC Debt	Median HELOC debt among borrowers	$70,687	$33,337	$66,793	$51,260	$53,476	$36,511	$29,694

Note: Analyzed jurisdictions include the District of Columbia; Arlington County, Virginia; Fairfax County, Virginia; Montgomery County, Maryland; Prince George's County, Maryland; and Baltimore City, Maryland.

Source: FRBNY Consumer Credit Panel / Equifax

Access

Introduction

Approximately 26 million adults, or about 11% of all adults in the United States, lack credit records in the United States, and an additional 19.6 million (8.3%) have unscored credit records.[20] Previous research has found that the likelihood of having a credit record is closely correlated with age, income and ethnicity. Forty-five percent of consumers living in low-income neighborhoods in America do not have credit records, for example, compared with 9% of consumers living in upper-income neighborhoods.[21,22] As discussed in the next section, not having a credit score limits one's access to jobs, housing and even cellphones.

Without a credit score, consumers also cannot access credit products that are important for financial growth. In particular, revolving credit products like credit cards, which allow consumers to take out debt whenever they need it, play an essential role in stabilizing households' personal finances and reducing costs. According to a 2014 survey, for example, 14% of U.S. households use credit cards to finance some portion of educational expenses.[23] Credit cards also facilitate bulk purchases of food or other necessities that have a less expensive per-unit cost. Nevertheless, widespread access to credit cards in the U.S. is only a recent phenomenon, and there remain persistent inequities in adoption by household income.

Researchers have identified some causes of differences in access to credit. Lux and Greene (2016) posited that demand for revolving credit products remains high, but that federal rules and regulations imposed since the Great Recession have limited supply.[24] Other evidence suggests consumers' demographic, socioeconomic and geographic characteristics impact what products they are aware of. Firestone (2011) found that between August 2009 and October 2010, African-American households were 27% less likely to receive credit card offers from five large lenders and Latino households were 17% less likely – even after controlling for credit, income and other variables.[25] Additionally, Argyle et al. (2017) found that when one lives in an area with few nearby bank options, there are higher search costs for credit products and higher interest rates than for those who live in areas with plentiful bank options. These studies and other research underscore how access to consumer credit can be limited by a wide range of factors that may be beyond the individual's control. [26,27]

The following section discusses trends for indicators related to consumer credit access in the District of Columbia, specifically pertaining to residents' overall participation in the credit economy and ownership of products necessary to readily access credit. These results reveal the following findings:

1. **In 2016, residents in low- and moderate-income communities in the District of Columbia were the least likely to be included in the credit economy.**

2. **Over the short term, the Great Recession pushed some residents in most income groups out of the credit economy.**

3. **Some of D.C.'s wealthiest communities experienced long-term decreases in the number of consumers included in the credit economy.**

4. **Fewer low-income consumers have easy access to credit, both compared with 2007 and with consumers in other areas of D.C.**

Included

The Included consumer credit indicator measures the portion of adult residents aged 25 and older with an active credit file and an Equifax Risk Score.

In the District of Columbia and the U.S. overall, the portion of adult residents 25 years or older who were included in the credit economy dipped during the Great Recession and has not returned to pre-recession levels (see Figure 2). This is also true for most analyzed counties in the Washington MSA. D.C. has one of the lowest inclusion rates among analyzed jurisdictions in the Washington MSA, driven largely by low inclusion rates among residents in low-income communities. Because having a credit score is an essential first step toward accessing most credit products, these trends indicate that many communities in D.C. continue to struggle to access the credit economy.
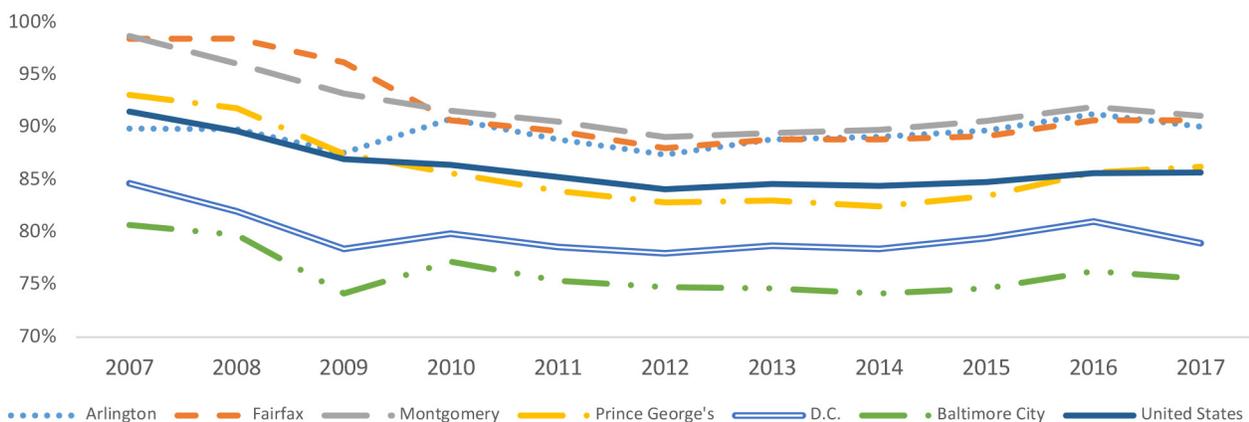
Figure 2: D.C. Included (% of Population), 2007-2017
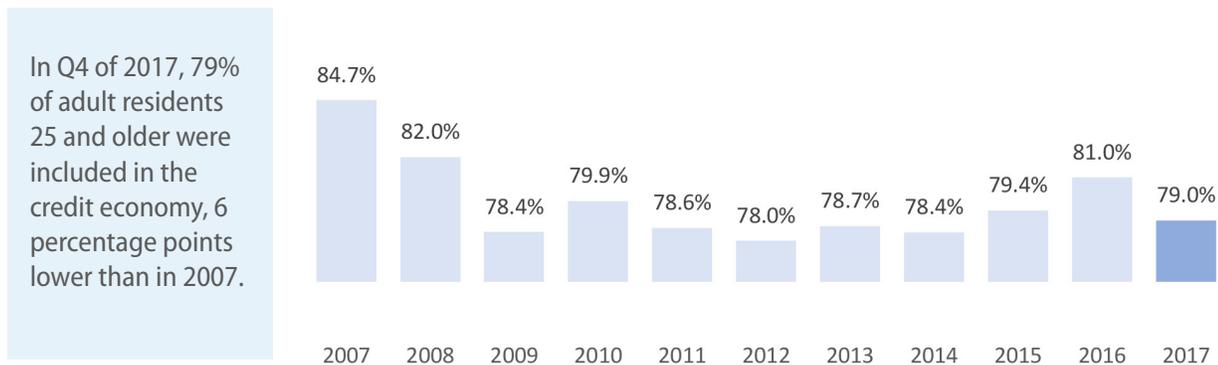
In Q4 of 2017, 79% of adult residents 25 and older were included in the credit economy, 6 percentage points lower than in 2007.

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
84.7%	82.0%	78.4%	79.9%	78.6%	78.0%	78.7%	78.4%	79.4%	81.0%	79.0%

Source: FRBNY Consumer Credit Panel / Equifax; American Community Survey 1-Year Estimates, 2007-2017

In 2017, 91% of adults 25 and older in Fairfax County, Virginia, and Montgomery County, Maryland, were included in the credit economy (see Figure 3). On the other end of the spectrum, about three-quarters (76%) of adults 25 and older in Baltimore City, Maryland, were included in the credit economy in 2017. Among analyzed counties in the Washington MSA, only Arlington County, Virginia, had returned to pre-recession inclusion levels by 2017, while D.C. remained below national levels of inclusion.

Figure 3: Washington MSA Included (% of Population), 2007-2017

Legend: •••••• Arlington — — Fairfax ——— Montgomery —•— Prince George's ——— D.C. —•—•— Baltimore City —— United States
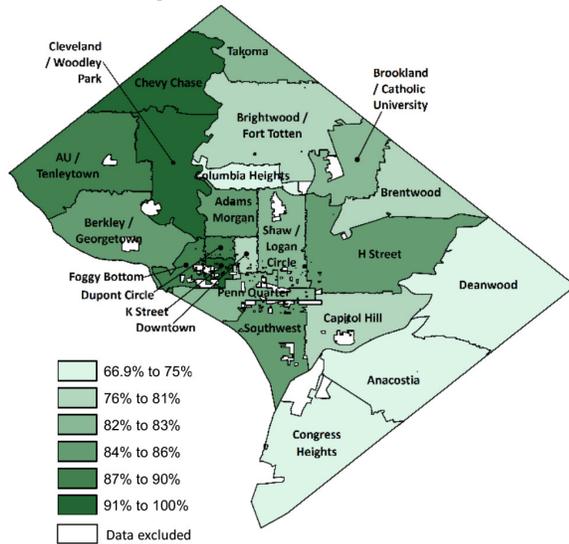
Note: Vertical axis does not start at 0%.
Source: FRBNY Consumer Credit Panel / Equifax; American Community Survey 1-Year Estimates, 2007-2017
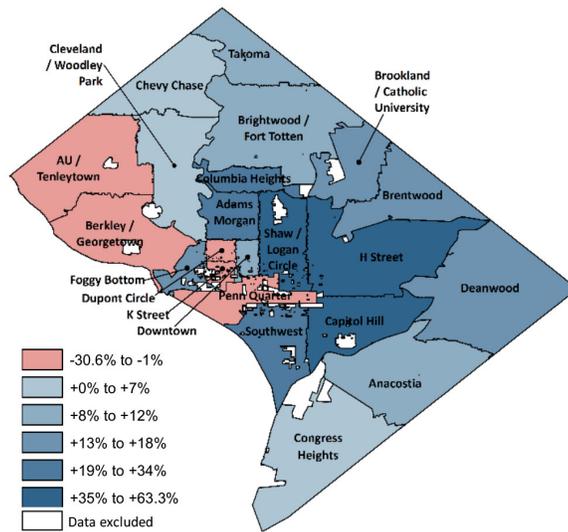
Included, continued

In 2017, nearly all adult residents 25 and older in Chevy Chase were included in the credit economy, compared with just over three-quarters of residents in communities to the east of the Anacostia River (see Map 3). The largest increases in the number of included consumers were in high-growth communities, coming mostly from new residents with prime credit (see Figure 4 and *Prime Credit,* below). Shaw/Logan Circle in particular experienced a 63% increase in the number of included consumers between 2007 and 2017 (see Map 4).

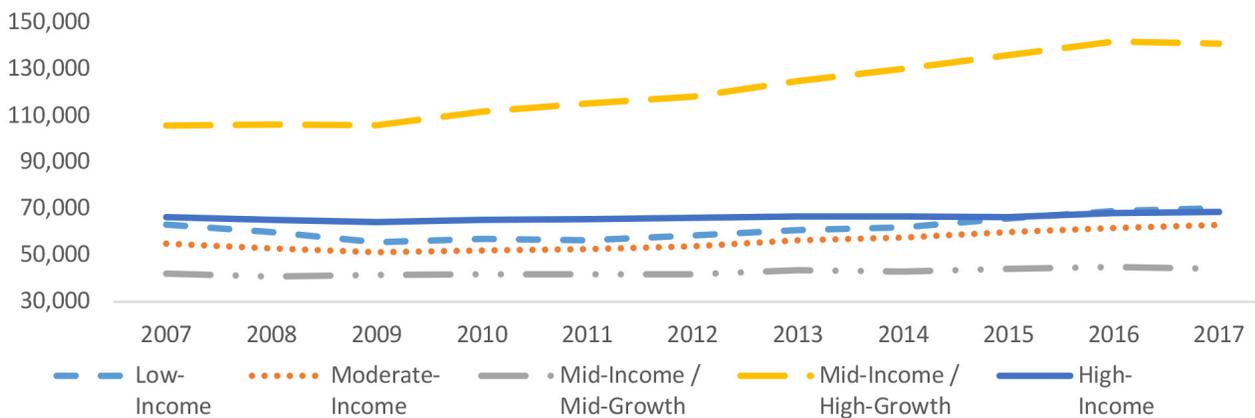**Map 3: D.C. Included
(% of 25+ Population), 2017**

- 66.9% to 75%
- 76% to 81%
- 82% to 83%
- 84% to 86%
- 87% to 90%
- 91% to 100%
- Data excluded

**Map 4: D.C. Included (# of Consumers),
Change 2007-2017**

- -30.6% to -1%
- +0% to +7%
- +8% to +12%
- +13% to +18%
- +19% to +34%
- +35% to +63.3%
- Data excluded

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax; American Community Survey 5-Year Estimates, 2013-2017

Figure 4: D.C. Included (# of Consumers) by Segmentation, 2007-2017

Legend: Low-Income, Moderate-Income, Mid-Income / Mid-Growth, Mid-Income / High-Growth, High-Income
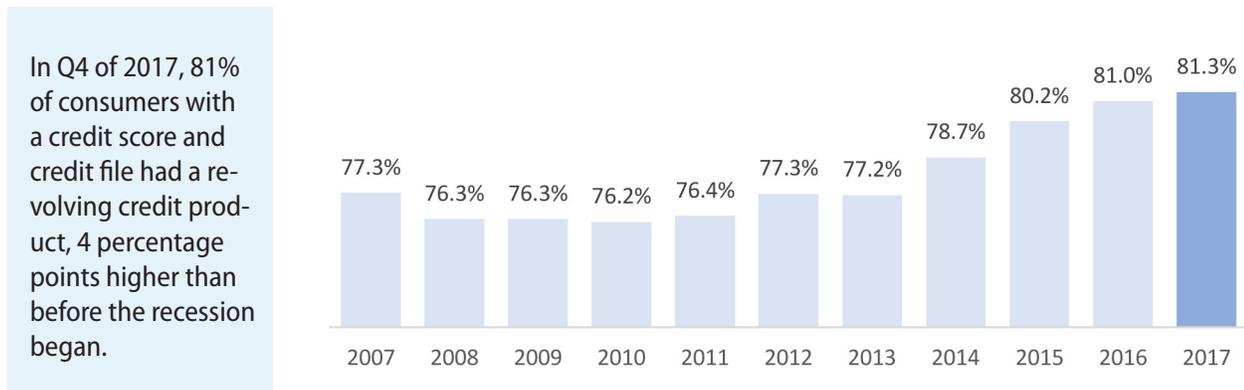
Note: Vertical axis does not start at 0.
Source: FRBNY Consumer Credit Panel / Equifax

Revolving Credit

The Revolving Credit consumer credit indicator measures the portion of consumers included in the credit economy who have at least one credit product that automatically renews as debts are paid off (such as a bankcard or a home equity line of credit).

Although the portion of all adults with a credit score has decreased in D.C., among adult consumers with active credit files, the portion with revolving debt has increased compared to 2007 (see Figure 5). Unlike other forms of credit, revolving credit products offer access to loans quickly and at one's own discretion. The Revolving Credit indicator therefore speaks to consumers' access to more immediate credit. Rates of revolving credit ownership decreased in low-income communities and increased quickest in high-growth neighborhoods (see Figure 7).

Figure 5: D.C. Revolving Credit, 2007-2017

In Q4 of 2017, 81% of consumers with a credit score and credit file had a revolving credit product, 4 percentage points higher than before the recession began.

Year	Value
2007	77.3%
2008	76.3%
2009	76.3%
2010	76.2%
2011	76.4%
2012	77.3%
2013	77.2%
2014	78.7%
2015	80.2%
2016	81.0%
2017	81.3%

Source: FRBNY Consumer Credit Panel / Equifax

Prince George's County and Baltimore City, Maryland, experienced the largest short-term declines in the rate of revolving credit ownership among analyzed counties, decreasing by 5 and 6 percentage points, respectively, between 2007 and 2011 (see Figure 6). Consumers in both areas, however, were more likely to have revolving credit in 2017 than in 2007. Other counties illustrated here in the Washington MSA either did not experience any decline in the rate of revolving credit ownership over this time (Arlington County, Virginia) or experienced a short-term decline of less than 1 percentage point (Fairfax County, Virginia, and Montgomery County, Maryland).

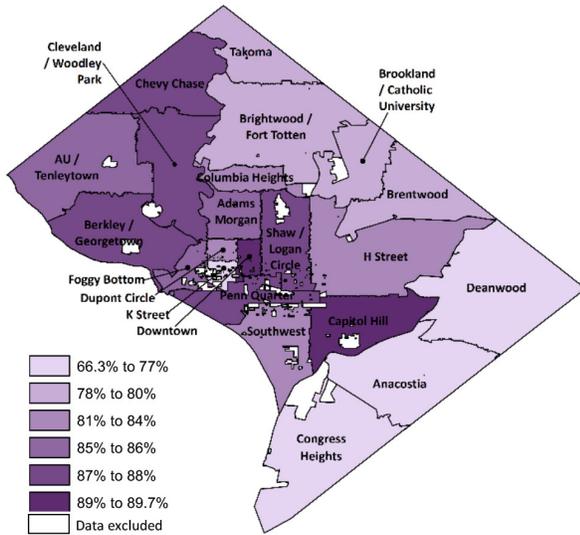**Figure 6: Washington MSA Revolving Credit, 2007-2017**

Arlington · · · · · · Fairfax — — Montgomery —— Prince George's —·— D.C. —— Baltimore City —··— United States ——

Note: Vertical axis does not start at 0%.
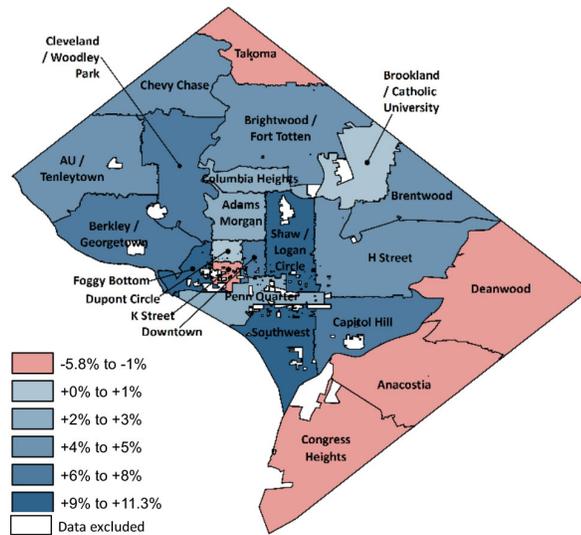**Source**: FRBNY Consumer Credit Panel / Equifax

Revolving Credit, continued

As shown in Map 5, rates of revolving credit are lowest in the three ZIP codes east of the Anacostia River (66% in Anacostia, 67% in Congress Heights and 69% in Deanwood). Although more consumers in the city overall had a revolving credit product in 2017 compared with before the recession, this was not true in every community. Consumers in areas with the lowest median incomes, plus the Takoma community, were less likely to have a revolving credit product (see Map 6). Further, during the Great Recession, high-income communities in Washington experienced a steady increase in the portion of consumers who had a revolving credit product, while low-income neighborhoods have still not returned to pre-recession rates of revolving credit ownership (see Figure 7).

**Map 5: D.C. Revolving Credit, 2017**

Legend (Map 5):
- 66.3% to 77%
- 78% to 80%
- 81% to 84%
- 85% to 86%
- 87% to 88%
- 89% to 89.7%
- Data excluded

Map 6: D.C. Revolving Credit, Change 2007-2017

Legend (Map 6):
- -5.8% to -1%
- +0% to +1%
- +2% to +3%
- +4% to +5%
- +6% to +8%
- +9% to +11.3%
- Data excluded

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax

Figure 7: D.C. Revolving Credit by Segmentation, 2007-2017
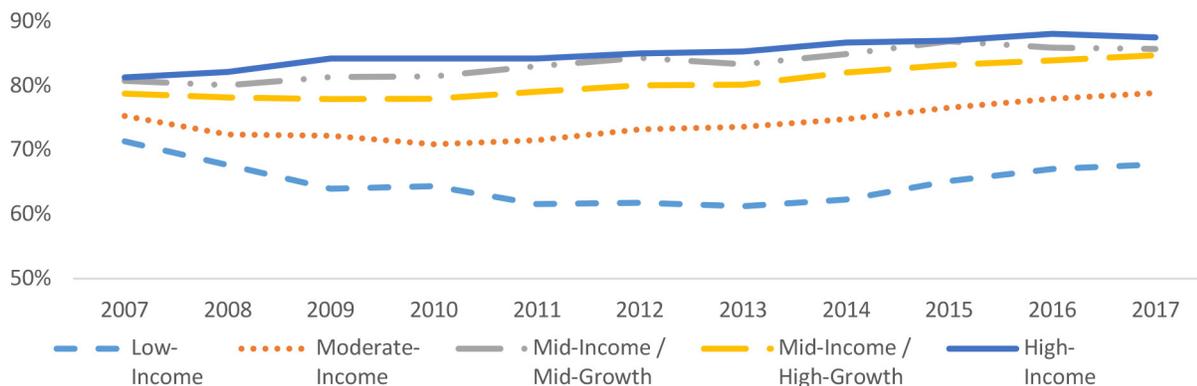
Legend: Low-Income; Moderate-Income; Mid-Income / Mid-Growth; Mid-Income / High-Growth; High-Income

Note: Vertical axis does not start at 0%.
Source: FRBNY Consumer Credit Panel / Equifax

Discussion

Results from D.C. residents' access to the credit economy and revolving credit products reveal the following insights about economic inequities in the city.

1. **In 2016, residents in low- and moderate-income communities in the District of Columbia were the least likely to be included in the credit economy.**

Rates of inclusion in the credit economy were lowest in the three poorest areas of the city: Congress Heights (67%), Anacostia (73%) and Deanwood (74%). Inclusion rates were also under 80% in the Capitol Hill, Brookland/Catholic University and Brentwood areas (see Map 3).

Although existing research has demonstrated a connection between credit and bank access, as shown in Map 7, differences between communities' inclusion rates cannot be entirely explained by proximity to banks.[28,29] Brookland/Catholic University, Deanwood and Congress Heights all have low inclusion rates and some of the fewest banks per resident in the city (the ZIP codes have only one, three and two bank locations, respectively); however, residents of Capitol Hill have adequate access to banking products but are still more likely to be excluded from the credit economy. Further, there is only one banking location in the Southwest ZIP code, but the inclusion rate was over 90% in 2016. Additional research is therefore required to identify how significant bank access is in determining residents' exclusion from the credit economy and to probe other causal factors.
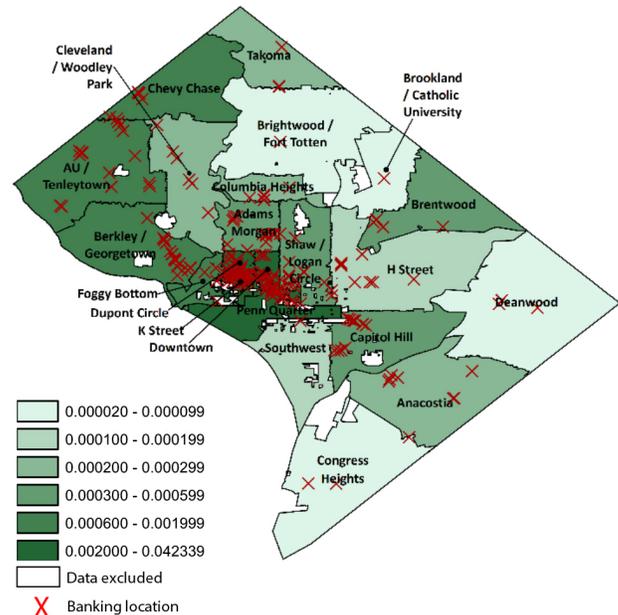
Map 7: D.C. Banking Locations per Adult Resident 25+

Source: Federal Reserve System NIC Structure Data 2007 and 2017; American Community Survey 5-Year Estimates, 2012-2016

2. **Over the short term, the Great Recession pushed residents in most income groups out of the credit economy.**

Even though residents in low-income communities were least likely to be included in the credit economy, following the Great Recession there were decreases in the number of included adults throughout the city. In fact, after 2007 there was a decrease in the number of included consumers in every segmentation group except within high-growth areas. It is true, though, that the initial decrease after 2007 was larger in low- and moderate-income communities. Between 2007 and 2009, the number of included consumers decreased by 12% among low-income consumers and by 7% among moderate-income consumers; in contrast, it decreased by only 2% in mid-income/mid-growth communities and 3% in high-income communities (see Figure 3).

3. **Some of D.C.'s wealthiest communities experienced long-term decreases in the number of included consumers.**

As shown in Map 4, the number of consumers in the credit economy decreased between 2007 and 2017 in five ZIP codes, including the upper-income communities of Dupont Circle (-17%), Penn Quarter (-14%), Berkley/Georgetown (-8%) and AU/Tenleytown (-6%). It is unclear what is driving these decreases, which are occurring despite increases in each area's 25+ population. Each of the declines in consumer populations persisted among both older and younger consumers, as well as among both prime and subprime consumers.

4. Fewer low-income consumers have easy access to credit, both compared with 2007 and with consumers in other areas of D.C.

Among low-income consumers, the portion of included consumers with revolving credit products decreased between 2007 and 2017 (from 71% to 68%, as shown in Figure 7). Credit's utility as an income smoother depends on the borrower's ability to withdraw credit as it is needed, so without access to revolving credit products, many low-income consumers now have fewer options to borrow against future earnings or support their families during temporary dips in income.

Health & Utilization

Introduction

Indicators of consumer credit health are linked to numerous social and economic outcomes.[30] For example, low credit scores[31] can exclude consumers from necessities such as employment and housing. A 2012 survey conducted by the Society for Human Resource Management found that nearly half (47%) of employers considered job applicants' credit scores in employment screenings.[32] Yu and Dunn (2016) found that as a result of these employer credit checks, a 10-percentage-point decrease in credit scores results in a 1.35% decrease in the probability of employment.[33] Similarly, low credit scores can limit housing options, impede individuals' ability to purchase cellphones or automobiles or stymie financing for higher education.

While consumers with subprime credit scores may face individual problems finding employment or housing, a high share of subprime debt in a community could also exacerbate financial instability. Substantial evidence suggests that subprime lending in the years before the Great Recession led to increased financial instability, particularly among African-American and Latino borrowers.[34] From 2005 to 2006, 54% of African-American mortgage-seekers and 47% of Latino borrowers received subprime loans compared with 17% of white borrowers, differences correlated with higher rates of default when house prices fell.[35,36] Of course, credit-constrained households are less positioned to recover from a downturn. Mian, Rao and Sufi (2013) found that declines in home values tend to have a more negative impact on credit-constrained households by limiting their ability to refinance and imposing larger drops in home equity limits (the authors defined credit-constrained households by their loan-to-value ratio and income, whereas this report defines it in terms of borrowers' credit limit).[37]

Credit utilization is also closely tied to consumer decisions and economic opportunity. As consumers borrow more against their future earnings and approach their credit limit, they have less capability to take on more debt, and this can impact purchase habits and other outcomes. Zinman (2005) found that high credit utilization is linked to a lower likelihood of using credit cards for purchases and therefore limited ability to make large purchases.[38] Herkenhoff, Phillips and Cohen-Cole (2016) found that having greater credit availability allows displaced workers to take longer to find a job and therefore earn more when they do because they have time to thoroughly search the job market.[39]

The following section discusses trends for indicators related to consumer credit health and utilization in the District of Columbia, specifically pertaining to residents' Equifax risk scores and their debt levels relative to overall limits. These results reveal the following findings:
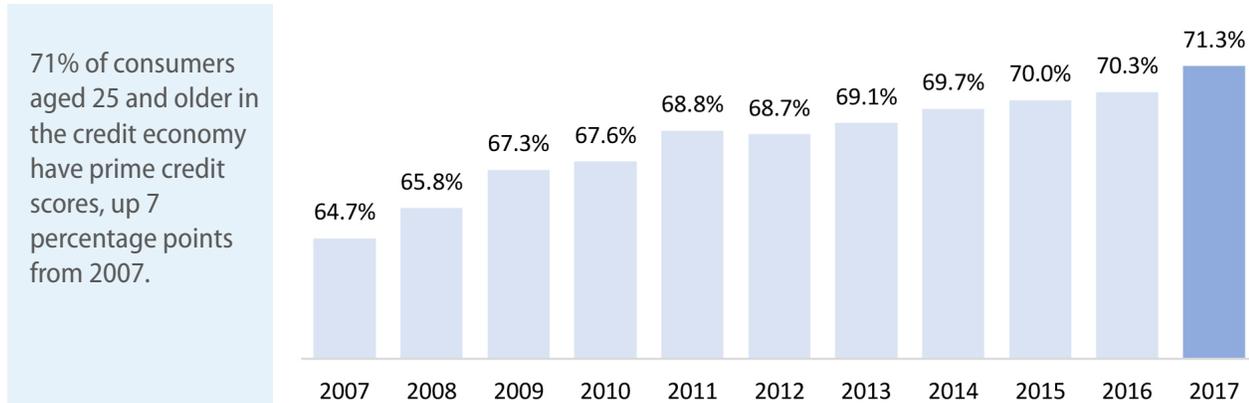
1. **Consumers in low-income communities have significantly lower credit scores and higher utilization levels than those in other communities, and their credit quality continues to decline.**

2. **Consumers in moderate-income communities underwent some of the most rapid improvements in their credit health and capacity for future debt from 2007-2017.**

3. **High-growth communities maintain large populations of subprime consumers.**

Prime Credit

The Prime Credit indicators measure the portion of consumers in the credit economy with an Equifax credit risk score of 660 or higher.

Among consumers with a credit file and an active credit report, credit health steadily improved in the District of Columbia overall during and after the Great Recession (see Figure 8). This trend is distinct from the U.S. overall, where in 2017 there was a smaller portion of consumers with prime credit scores than before the Great Recession. Significant inequities persist between communities' credit scores in 2017, with communities to the east of the Anacostia River having the lowest portions of consumers with prime credit scores and the slowest improvement in consumers' creditworthiness.

Figure 8: D.C. Prime Credit, 2007-2017

71% of consumers aged 25 and older in the credit economy have prime credit scores, up 7 percentage points from 2007.

64.7% (2007), 65.8% (2008), 67.3% (2009), 67.6% (2010), 68.8% (2011), 68.7% (2012), 69.1% (2013), 69.7% (2014), 70.0% (2015), 70.3% (2016), 71.3% (2017)

Source: FRBNY Consumer Credit Panel / Equifax

As shown in Figure 9, 71% of included consumers in the U.S. had prime credit scores in 2017, up from 68% in 2007 and identical to D.C.'s rate. Similarly, every analyzed county in the Washington MSA had higher rates of prime credit scores than before the Great Recession. 2017 rates ranged from 55% in Prince George's County, Maryland, to 87% in Arlington County, Virginia.
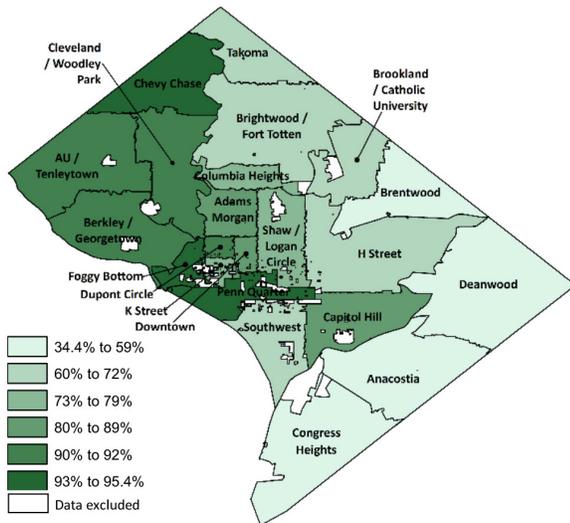
Figure 9: Washington MSA Prime Credit, 2007-2017

Legend: Arlington, Fairfax, Montgomery, Prince George's, D.C., Baltimore City, United States
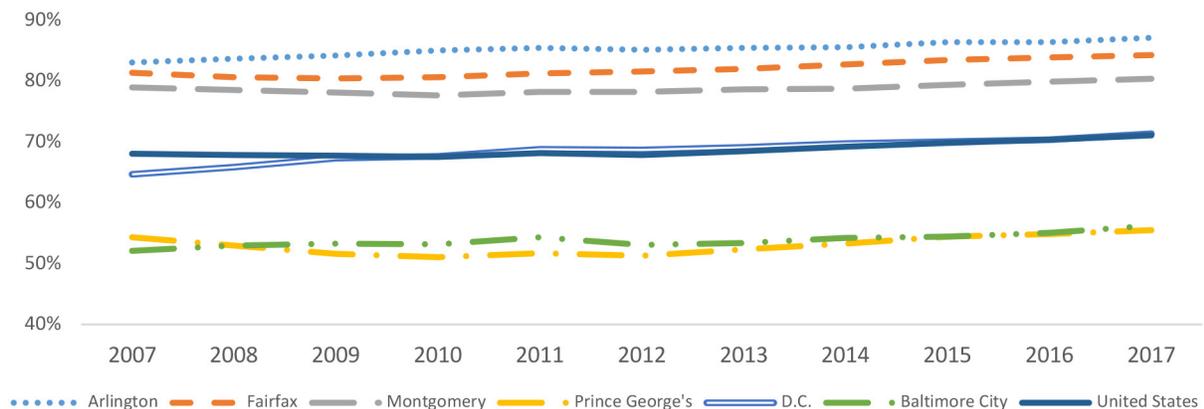
Note: Vertical axis does not start at 0%.
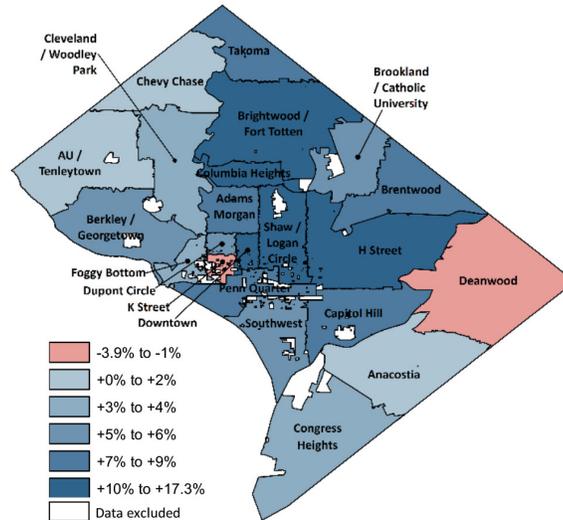**Source**: FRBNY Consumer Credit Panel / Equifax

Prime Credit, continued

In 2017, there were stark divisions among D.C. communities in the portion of consumers with prime credit scores, ranging from 34% in Congress Heights to 95% in Penn Quarter (see Map 8). Portions of consumers with prime credit increased in every community in D.C. except for two (see Map 9); however, in low-income communities, consumer credit quality improved more slowly, just reaching pre-Recession levels in 2017 (see Figure 10). While rates of prime credit improved most rapidly in mid-income/high-growth communities, most of this percentage increase was caused by an influx of new prime credit consumers (as shown in Figure 20), while the number of consumers with prime credit scores increased by 58%, the number with subprime credit scores decreased by only 14%.
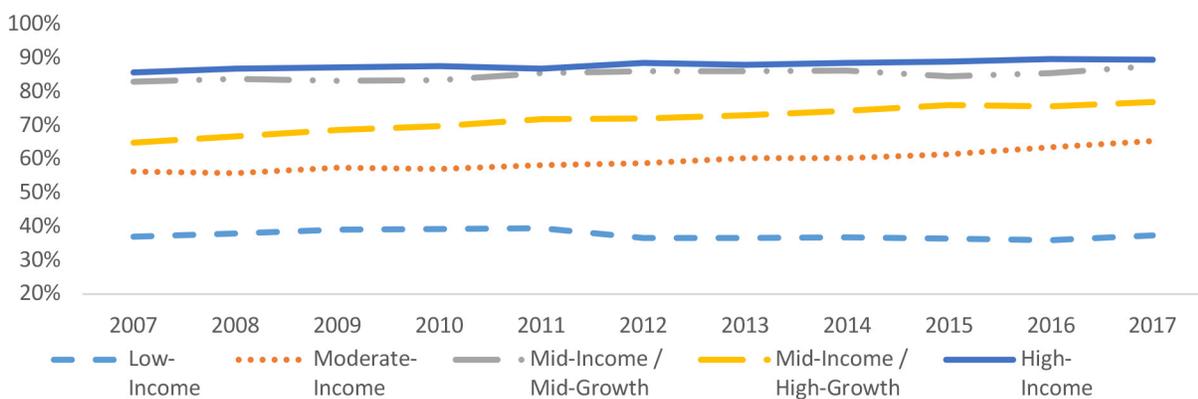
Map 8: D.C. Prime Credit, 2017   **Map 9: D.C. Prime Credit, Change 2007-2017**

Map 8 legend:
- 34.4% to 59%
- 60% to 72%
- 73% to 79%
- 80% to 89%
- 90% to 92%
- 93% to 95.4%
- Data excluded

Map 9 legend:
- -3.9% to -1%
- +0% to +2%
- +3% to +4%
- +5% to +6%
- +7% to +9%
- +10% to +17.3%
- Data excluded

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax

Figure 10: D.C. Prime Credit by Segmentation, 2007-2017

Legend: Low-Income · Moderate-Income · Mid-Income / Mid-Growth · Mid-Income / High-Growth · High-Income

Note: Vertical axis does not start at 0%
Source: FRBNY Consumer Credit Panel / Equifax

Subprime Credit

The <u>Subprime Credit</u> indicators measure the portion of consumers in the credit economy with an Equifax credit risk score of 600 or lower.

Improvements in D.C. consumers' overall credit health are also evident in the portion of consumers with subprime credit scores. In 2017, 19% of included consumers had subprime credit scores, down from 23% in 2007 (see Figure 11); however, these topline improvements mask significant differences among communities. While most communities experienced decreases in the portion of consumers with subprime credits scores, by 2017 nearly half (46%) of consumers in low-income communities still had subprime scores, a statistic that increased since 2011 (see Figure 13). As subprime credit scores can limit employment, housing and a range of other outcomes, this statistic speaks to persistent social and economic barriers in low-income D.C. communities.

Figure 11: D.C. Subprime Credit, 2007-2017

In 2017, 19% of included consumers had subprime credit scores, down 4 percentage points from 2007.

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
22.8%	22.0%	21.2%	20.8%	19.2%	19.8%	19.1%	18.7%	18.7%	18.5%	18.6%

Source: FRBNY Consumer Credit Panel / Equifax

As shown in Figure 9, 71% of included consumers in the U.S. had prime credit scores in 2017, up from 68% in 2007 and identical to D.C.'s rate. Similarly, every analyzed county in the Washington MSA had higher rates of prime credit scores than before the Great Recession. 2017 rates ranged from 55% in Prince George's County, Maryland, to 87% in Arlington County, Virginia.

Figure 12: Washington MSA Subprime Credit, 2007-2017

Legend: Arlington, Fairfax, Montgomery, Prince George's, D.C., Baltimore City, United States

Note: Vertical axis does not start at 0%.
Source: FRBNY Consumer Credit Panel / Equifax

Subprime Credit, continued

Compared to 2007, 2017 rates of subprime credit ownership had decreased in every segmentation group and in all but three communities in the District of Columbia (see Map 11 and Figure 13). Still, there remained significant inequities between neighborhoods in the portion of consumers with subprime credit scores. As shown in Map 10, for example, 50% of included consumers in Congress Heights had subprime credit scores in 2017, compared with zero percent of consumers in Penn Quarter (this low figure may also be attributable to Penn Quarter's comparably small residential population). The largest improvements occurred in moderate-income and mid-income/high-growth communities: in those areas, the percent of consumers with subprime credit scores decreased 8 percentage points between 2007 and 2017 (see Figure 13).

Map 10: D.C. Subprime Credit, 2017

Map 11: D.C. Subprime Credit, Change 2007-2017

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax

Figure 13: D.C. Subprime Credit by Segmentation, 2007-2017

Source: FRBNY Consumer Credit Panel / Equifax

Credit Constrained

The Credit Constrained indicators measure the portion of consumers in the credit economy that have outstanding revolving credit debt that is more than 75% of their revolving credit limit.[40]

When consumers take out large amounts of debt as a portion of their credit limit, regardless of their repayment history, they are less likely to take out new debt and may have their credit scores reduced.[41,42,43] After peaking in 2007 at 24%, the portion of consumers using more than 75% of their credit limits decreased to 20% in 2013 (see Figure 14). Although rates remain lower than before the Great Recession, they are on the rise, particularly in low-income communities. This may foretell a renewed trend toward overleveraging among consumers with the fewest economic opportunities.

Figure 14: D.C. Credit Constrained, 2007-2017

Twenty-one per-cent of consumers in D.C. were credit constrained in 2017, down 4 percentage points from 2007, but up 2 percentage points from 2013.

Source: FRBNY Consumer Credit Panel / Equifax

Among analyzed counties in the Washington MSA, Prince George's County, Maryland, had the highest rate of highly leveraged consumers in 2017 at 30%, while Arlington County, Virginia, had the lowest at 12% (see Figure 15). While most other counties experienced a brief increase in the rate of constrained credit immediately following the recession, D.C. experienced a gradual reduction. Between 2014 and 2017, Baltimore City and Prince George's County, Maryland, experienced upticks in constrained credit, though no other county under analysis did as well.

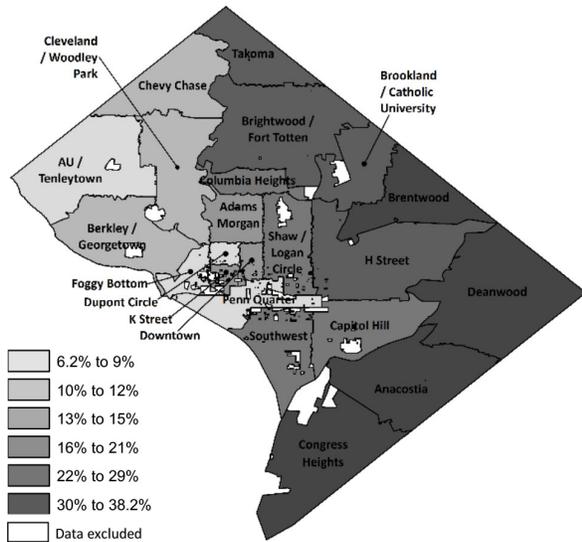**Figure 15: Washington MSA Credit Constrained, 2007-2017**
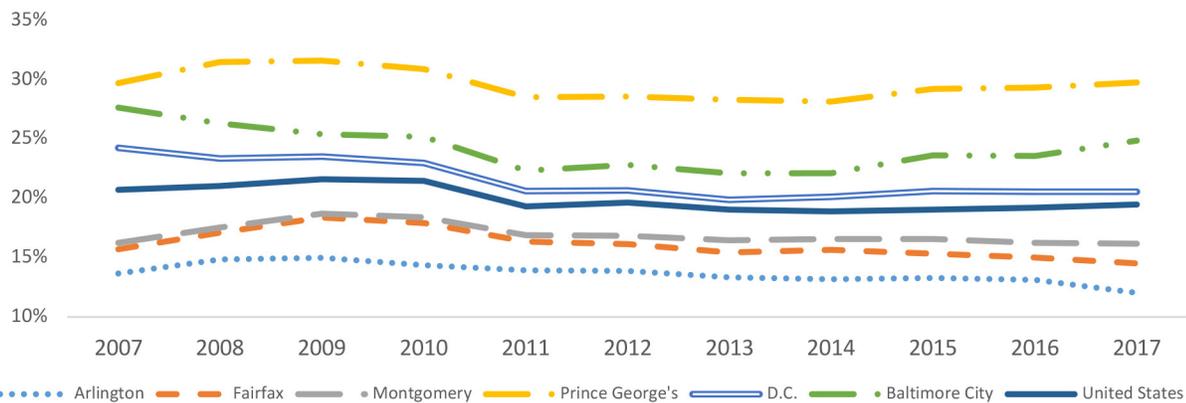
Note: Vertical axis does not start at 0%.
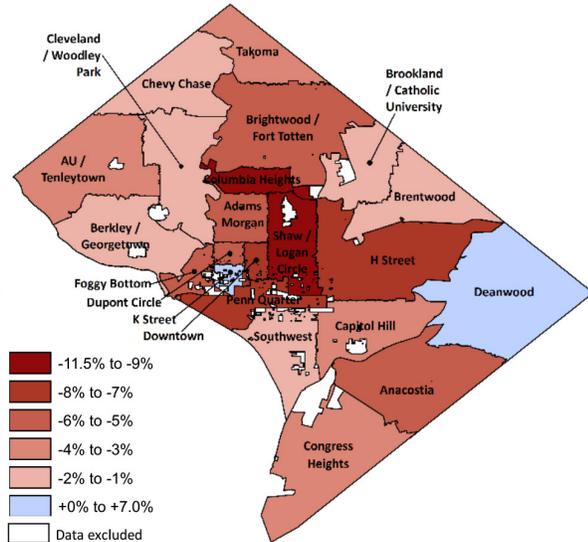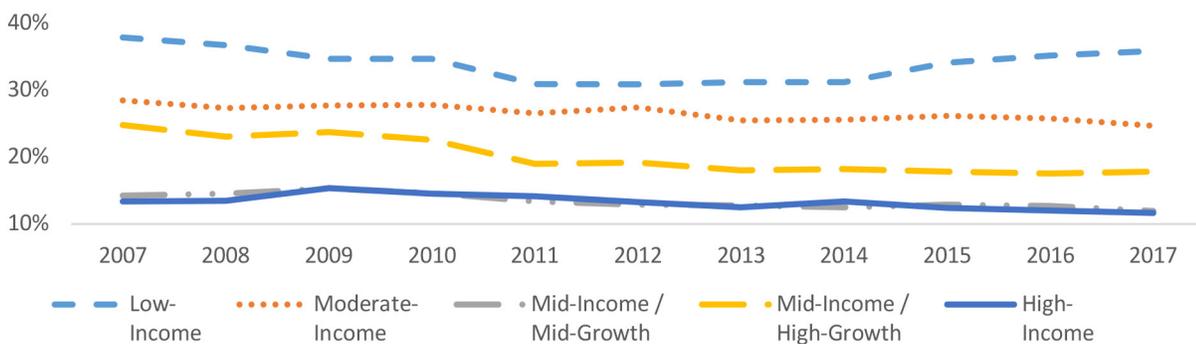**Source**: FRBNY Consumer Credit Panel / Equifax

Credit Constrained, continued

As with other indicators of credit stress, consumers in communities with lower incomes and higher rates of poverty were more likely to be credit constrained in 2017 (see Map 12). Specifically, Deanwood had the highest rates of constrained credit in the city and is one of two ZIP codes where consumers are more likely to have constrained credit than in 2007 (see Map 13). As shown in Figure 16, while this indicator appears to be improving for most areas in Washington, rates of constrained credit appear to be back on the rise among low-income areas. The portion of consumers with constrained credit in this segmentation group have increased by 5 percentage points from 2014 to 2017, whereas for consumers in other segmentation groups, it has changed minimally (no more than +/- 1 percentage point) over the same time period.

Map 12: D.C. Credit Constrained, 2017

Map 13: D.C. Credit Constrained, Change 2007-2017

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax

Figure 16: D.C. Credit Constrained by Segmentation, 2007-2017

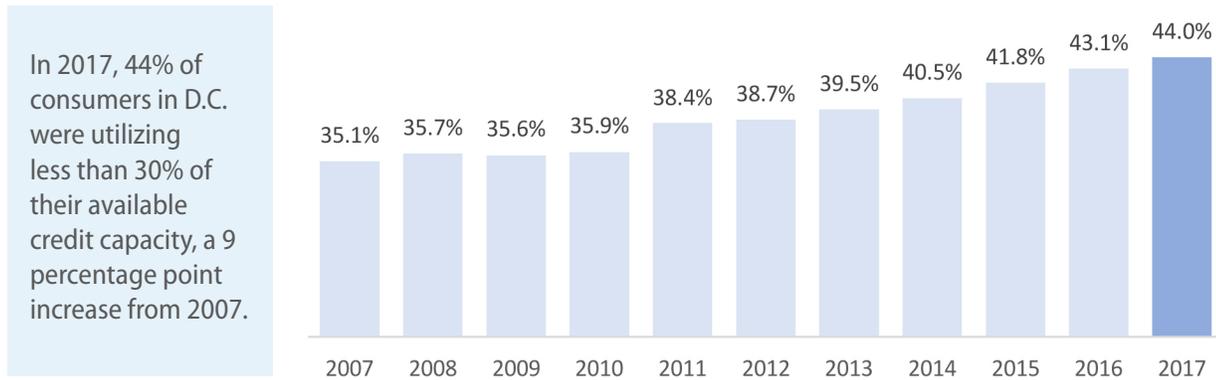**Note:** Vertical axis does not start at 0%
Source: FRBNY Consumer Credit Panel / Equifax

Low Credit Utilization

The Low Credit Utilization indicator measures the portion of consumers in the credit economy that have at least 70% available capacity on their total credit limit.

The portion of consumers with low credit utilization is on the rise in D.C. The rate has steadily increased since 2007 to 44% in 2017 (see Figure 17). Still, this rate places D.C. below most other adjacent counties in the Washington MSA.

Figure 17: D.C. Low Credit Utilization, 2007-2017

In 2017, 44% of consumers in D.C. were utilizing less than 30% of their available credit capacity, a 9 percentage point increase from 2007.

Bar chart values: 35.1% (2007), 35.7% (2008), 35.6% (2009), 35.9% (2010), 38.4% (2011), 38.7% (2012), 39.5% (2013), 40.5% (2014), 41.8% (2015), 43.1% (2016), 44.0% (2017)

Source: FRBNY Consumer Credit Panel / Equifax

Unlike some other areas in the Washington MSA, the rate of low credit utilization in the District of Columbia did not decrease between 2007 and 2017 (see Figure 18); still, its rate remains lower than every county except Prince George's County and Baltimore City, Maryland. Arlington and Fairfax counties, Virginia, had the highest rates of low credit utilization, at 58% and 52% of consumers in the credit economies, respectively.

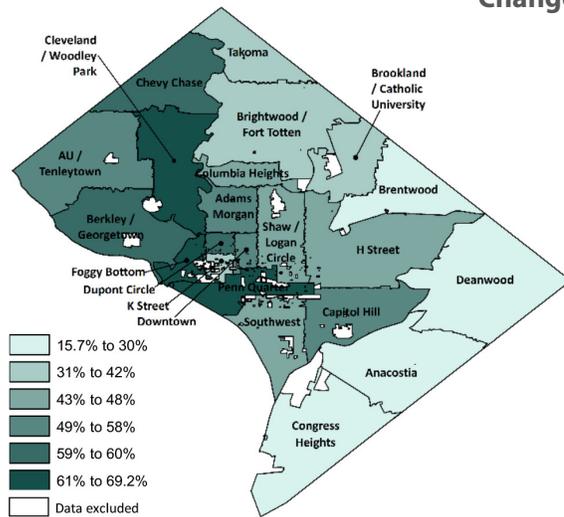**Figure 18: Washington MSA Low Credit Utilization, 2007-2017**
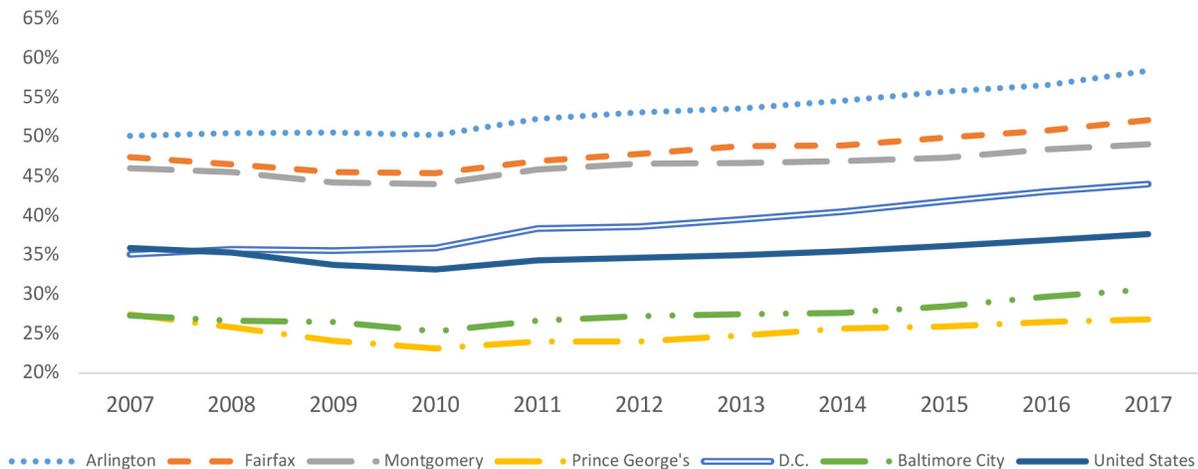
Legend: Arlington, Fairfax, Montgomery, Prince George's, D.C., Baltimore City, United States

Note: Vertical axis does not start at 0%.
Source: FRBNY Consumer Credit Panel / Equifax
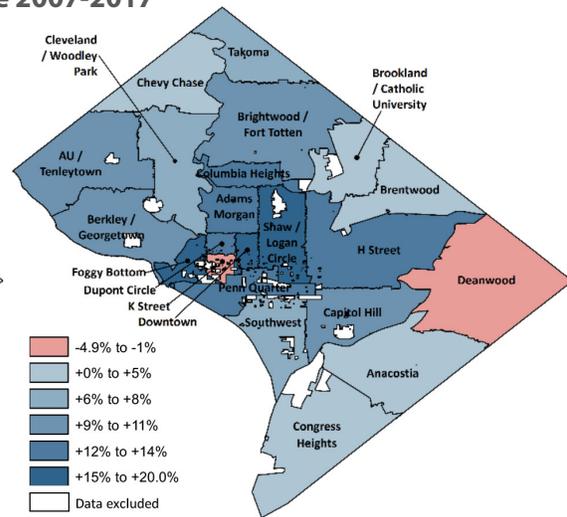
Low Credit Utilization, continued

Despite topline increases in the portion of consumers with low credit utilization, there are significant, persistent differences between communities (see Map 14). In 2017, more than half of consumers in high-income and mid-income communities had low credit utilization, compared with just 17% of consumers in low-income communities (see Figure 19). The largest increases in the portion of consumers with low utilization occurred in mid-income/high-growth communities, though moderate-income communities also experienced a relatively large 8 percentage point increase (see Map 15).
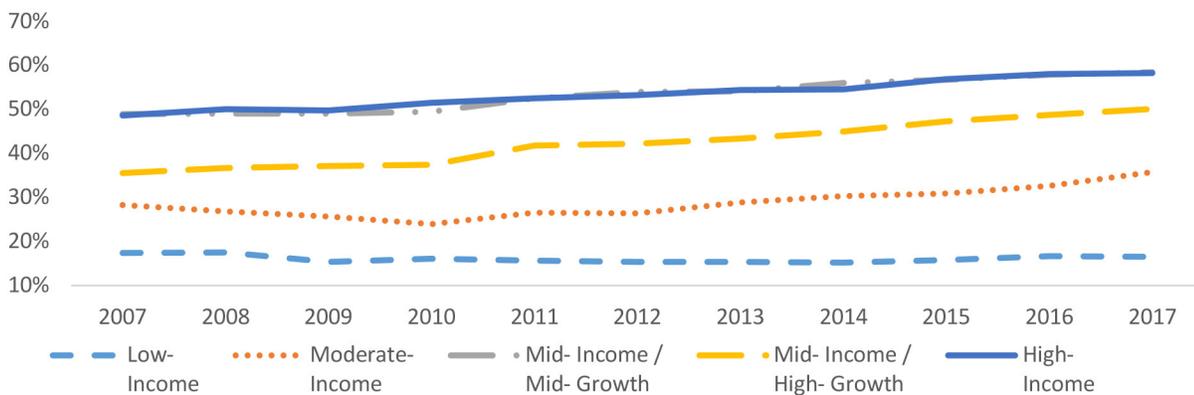
Map 14: D.C. Low Credit Utilization, 2017

Map 15: D.C. Low Credit Utilization, Change 2007-2017

Map 14 legend:
- 15.7% to 30%
- 31% to 42%
- 43% to 48%
- 49% to 58%
- 59% to 60%
- 61% to 69.2%
- Data excluded

Map 15 legend:
- -4.9% to -1%
- +0% to +5%
- +6% to +8%
- +9% to +11%
- +12% to +14%
- +15% to +20.0%
- Data excluded

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax

Figure 19: D.C. Low Credit Utilization by Segmentation, 2007-2017

Legend: Low-Income, Moderate-Income, Mid-Income / Mid-Growth, Mid-Income / High-Growth, High-Income

Note: Vertical axis does not start at 0%.
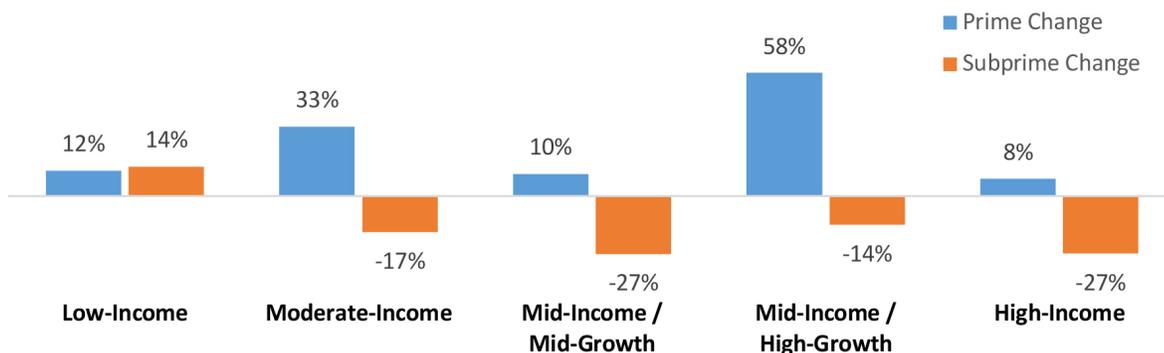**Source**: FRBNY Consumer Credit Panel / Equifax

Discussion

Results from an analysis of D.C. residents' credit health and utilization levels reveal the following insights about economic inequities in the city.

1. **Consumers in low-income communities are more likely to have subprime credit and high credit utilization than those in other communities, and the trend is staying negative.**

Forty-six percent of consumers in low-income communities in D.C. had subprime credit in 2017, and 36% had debt loads that were at least 75% of their overall debt limit. Even though health improved between 2007 and 2011 in all parts of the city, in the following years all of these gains were erased in low-income communities. Indeed, as shown in Figure 20, low-income areas were the only parts of the city that experienced net increases in the number of subprime consumers between 2007 and 2017.

Figure 20: D.C. Change in Number of Consumers by Segmentation and Credit Score

Source: FRBNY Consumer Credit Panel / Equifax

Since 2011, there has been a particularly acute worsening of credit health in low-income communities, and in 2017, it showed no signs of slowing down. Between 2011 and 2017, the portion of these consumers with subprime credit increased by 3 percentage points, and the portion with constrained credit increased by 5 percentage points. These recent increases occurred as both health indicators improved in all other segmentation groups (see Figures 13 and 16).

One explanation for this recent change could be a downtick in income. Between 2011 and 2016, real median income increased by 11% throughout D.C., but it actually decreased in the low-income communities of Deanwood (-4%), Anacostia (-14%) and Congress Heights (-2%).[44] For low-income consumers, decreasing median incomes coupled with increased auto and mortgage debt loads (see Figures 23 and 35 below, in *Debt and Payment History*) are resulting in increasing rates of constrained credit, especially among those who do not pay their bills in full.

2. **Consumers in moderate-income communities have undergone some of the most rapid improvements in their credit health and capacity for future debt.**

Home to large working-class African-American and Hispanic communities, moderate-income areas of Brightwood/ Fort Totten, Brookland/Catholic University and Brentwood not only have relatively lower incomes and levels of educational attainment compared with higher-income communities, but also have low unemployment rates and high rates of homeownership. In addition, even though the portion of consumers in these areas with subprime or constrained credit was higher than that in mid-income or high-income areas, moderate-income consumers experienced the biggest improvements after the recession ended (see Figures 13 and 16). For example, while the share of consumers with prime credit scores dropped by 3 percentage points in low-income communities over this time, it increased by 6 percentage points in moderate-income communities (see Figure 10). This was the largest

percentage point increase out of all segments. Similarly, the portion of consumers with low credit utilization increased by 9 percentage points between 2011 and 2017 (see Figure 19).

3. High-growth communities still maintain large populations of subprime consumers.

Although indicators in mid-income/high-growth communities have improved rapidly, much of these improvements were caused by new prime consumers rather than legacy residents (see Figure 20). A significant portion of consumers in these communities continue to have subprime or constrained credit. Indeed, while 45% of all subprime consumers in the District of Columbia lived in low-income areas in 2017, 29% lived in mid-income/ high-growth communities. Because these areas include communities that historically struggled with poverty, such as Columbia Heights, these statistics underscore how improvements to topline indicators can mask notable differences within communities.

Debt & Payment History
Introduction

Economists frequently look at debt levels and delinquency rates to predict economic trends. Delinquency rates are typically countercyclical, sharply increasing during economic downturns as consumers skip payments to avoid sudden declines in consumption. Athreya et al. (2014) showed the rise in the credit card delinquency rate in the United States from 2007 to 2009 was linked to the Great Recession and the increase in unemployment.[45] However, it is also true that increases in delinquency rates do not always coincide with a recession. Consumer delinquency rates rose in the United States during the economic expansion of the mid-1990s, but per capita income also steadily increased during this time. This led to unsustainable debt loads for some but not systemic failure.[46] In this way, delinquency rates and other measures of consumer credit stress can be a precursor to economic problems but must be considered alongside other economic indicators.

Debt is both a leading indicator of economic downturns and closely connected to individual well-being. At the personal level, it is clear that debt loads can become personally damaging. Turunen and Hiilamo (2014) conducted a literature review of 33 peer-reviewed studies related to the health impact of debt and found that maintaining problem debt is intricately tied to mental and physical health outcomes.[47] Among other findings, the study revealed that heavy debt loads can worsen consumers' tpsychological health by exacerbating depression, severe anxiety and even the tendency to self-harm.[48]

At the macroeconomic level, consumer debt levels can also be prescient indicators of economic downturns. Schularick and Taylor (2012) found that high household debt levels both are effective predictors of economic crises and indicators of the depth of the crises.[49] Similarly, Mian et al. (2015) found that an increase in the household-debt-to-GDP ratio predicted lower economic growth and higher unemployment in 30 countries from 1960 to 2012.[50] Further, Drehmann and Juselius (2014) found that in the short term, debt service ratio, or the ratio of debt payments and taxes to income, is the best early warning economic indicator for countries.[51]

In particular, trends in specific kinds of debt can speak to various vulnerabilities in the economy, particularly when considered in relation to consumers' income. Mortgage debt is especially relevant to the economic recovery since unsustainable debt loads relative to decreasing home values was a factor in the economic downturn in 2007. Mian and Sufi (2014) found that in addition to signaling persistent vulnerability to economic downturn, maintaining high mortgage debt can limit mobility, entrepreneurship and personal consumption of durable goods.[52] Similarly, Calem et al. (2011) found that home equity line of credit (HELOC) borrowing, which is drawn from homes' equity growth, is also related to economic progress.[53] As unemployment increases, the authors found that riskier households tend to borrow more, resulting in increased debt levels.

Auto financing is another kind of debt that is relevant to economic growth and consumer financial security. For one, as Benmelech et al. (2016) found, liquidity in the auto loan market is closely connected to the success of

the automobile industry, a key contributor to employment and economic growth in the U.S.[54] Further, auto loan performance and terms have been shown to be linked to various consumer characteristics. According to the Federal Reserve's *Report on the Economic Well-Being of U.S. Households* in 2015, families with incomes over $100,000 were significantly more likely to use car loans to purchase auto sales (versus cash or other kinds of loans), compared with low-income buyers.[55] Further, the survey found that lower-income auto loan borrowers were more likely to accept a longer term on their loan to decrease monthly payments and were additionally more likely to miss one or more monthly payments, compared with upper-income borrowers.

Much attention has been paid to subprime auto lending as a specific vulnerability in the American economy, since subprime auto lending was spared the restrictions the Dodd-Frank Act of 2009 imposed on the mortgage industry. Heitfield and Sabarwal (2004) found that defaults are closely connected to shocks in liquidity, such as from an unemployment spell, but that there is a large amount of diversity in subprime lenders' terms and borrower characteristics.[56] Similarly, Cash (2017) argued that increases in unregulated auto loan securitization and subprime lending could have dramatic implications for the economy's future.[57] However, Cutts and Carlson (2015) posited that controlled growth in subprime auto lending could actually benefit consumers, showing that credit scores for subprime borrowers increased more quickly after borrowing for a car purchase, compared with those that did not purchase a car.[58]

Finally, credit card debt is closely connected to consumer spending. Over three-quarters of U.S. households have at least one credit card, and the majority carry a balance.[59] Previous research has found that credit card debt increases consumers' chance of default and bankruptcy and that increased debt decreases consumption growth.[60] However, results differ on this point: Other studies have found that increased debt may actually increase consumption of durable goods (Carroll and Dunn, 1997; McCarthy, 1997; Dunn et al., 2006).[61] Whatever the long-term impact, it is clear that credit card usage is an essential component of Americans' consumption habits, and stress in this debt category could translate into lower consumption.

The following section discusses trends for indicators related to consumer debt levels and payment history in the District of Columbia, specifically pertaining to auto, credit card, mortgage and HELOC debt. These results reveal the following findings:

1. **Auto debt is higher in low-income communities than in any other part of the city.**

2. **Credit card debt is lowest in low-income communities, but these consumers nevertheless may face continued difficulties managing this debt.**

3. **Mortgage debt increased most quickly in moderate-income communities – not in high-growth communities.**

4. **Mortgage borrowers in low-income communities experienced the hardships of the mortgage crisis more acutely than other consumers, though they have mostly recovered.**

5. **Although HELOC debt increased throughout most of the city, the number of borrowers fell, indicating fewer investors are leading D.C.'s housing rehabilitation.**

Auto Debt

The Auto Debt consumer credit indicators measure auto loan debt from both monoline automobile finance companies and multipurpose lenders, both in terms of median debt for consumers with non-zero balances and as a portion of aggregate debt.

As shown in Figure 21, auto debt decreased in the District of Columbia between 2007 and 2011, and while it has increased again in the years since, it has not reached pre-recession levels and appears to be decreasing again. Additionally, low-income communities in D.C. have the highest auto debt burdens, even as the number of borrowers increased more in other parts of the city (see Figure 23 and Map 17).

**Figure 21: D.C. Median Auto Debt, 2007-2017**
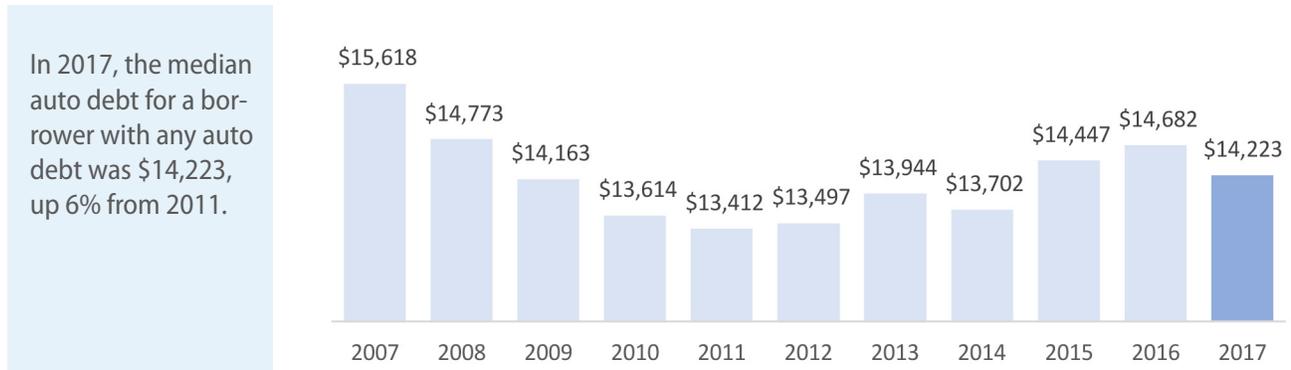
In 2017, the median auto debt for a borrower with any auto debt was $14,223, up 6% from 2011.

Note: Values adjusted to 2017 Dollars.
Source: FRBNY Consumer Credit Panel / Equifax

As shown in Figure 22, among analyzed counties, in 2017 median auto debt was highest in Prince George's County, Maryland, ($16,782) and lowest in Arlington County, Virginia, ($12,837). Every county experienced a trend similar to D.C.'s: a temporary decrease in consumers' median auto debt after 2007, followed by a short increase between 2012 and 2015 and another more recent downtick.

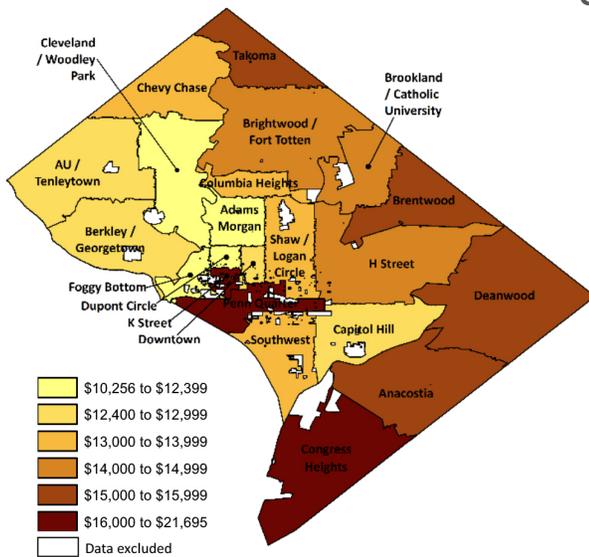**Figure 22: Washington MSA Median Auto Debt, 2007-2017**
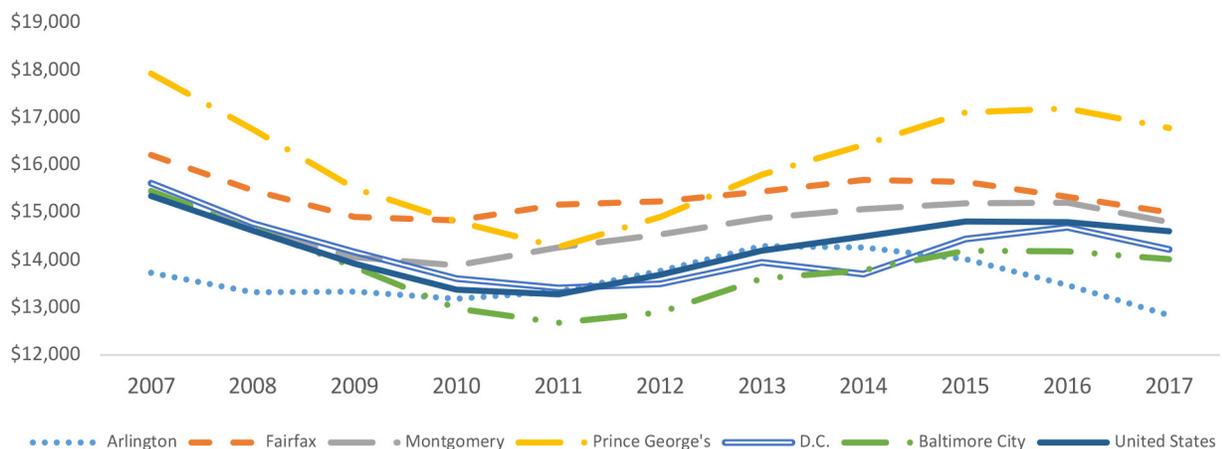
Note: Vertical axis does not start at $0. Values adjusted to 2017 Dollars.
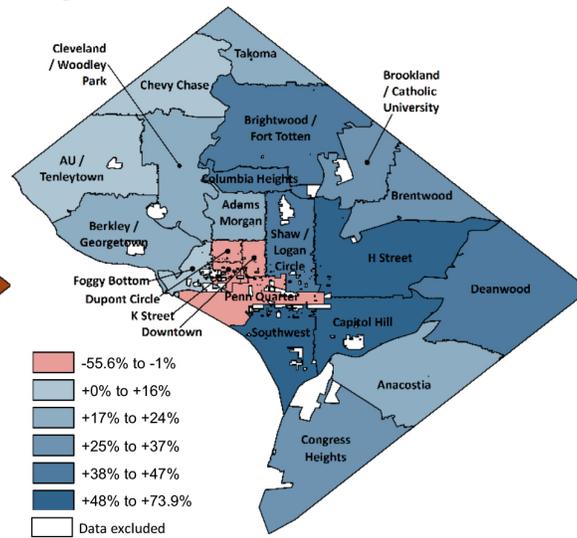**Source:** FRBNY Consumer Credit Panel / Equifax

Auto Debt, continued

As shown in Map 16, median auto debt was highest in two very different communities: Congress Heights ($16,057), one of poorest ZIP codes in D.C., and Penn Quarter ($19,019), one of the wealthiest. Overall, median debt levels were higher in low-income communities than in other areas. Median auto debt in these four ZIP codes was $15,622 in 2017, compared with $12,781 in high-income areas (see Figure 23). Finally, even though median debt loads were relatively high in Penn Quarter, it is one of only four areas to have fewer auto borrowers in 2017 than in 2007 (see Map 17).

Map 16: D.C. Median Auto Debt, 2017

	$10,256 to $12,399
	$12,400 to $12,999
	$13,000 to $13,999
	$14,000 to $14,999
	$15,000 to $15,999
	$16,000 to $21,695
	Data excluded

Map 17: D.C. Auto Debt (# of Borrowers), Change 2007-2017

	-55.6% to -1%
	+0% to +16%
	+17% to +24%
	+25% to +37%
	+38% to +47%
	+48% to +73.9%
	Data excluded

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps
Source: FRBNY Consumer Credit Panel / Equifax

Figure 23: D.C. Median Auto Debt by Segmentation, 2007-2017
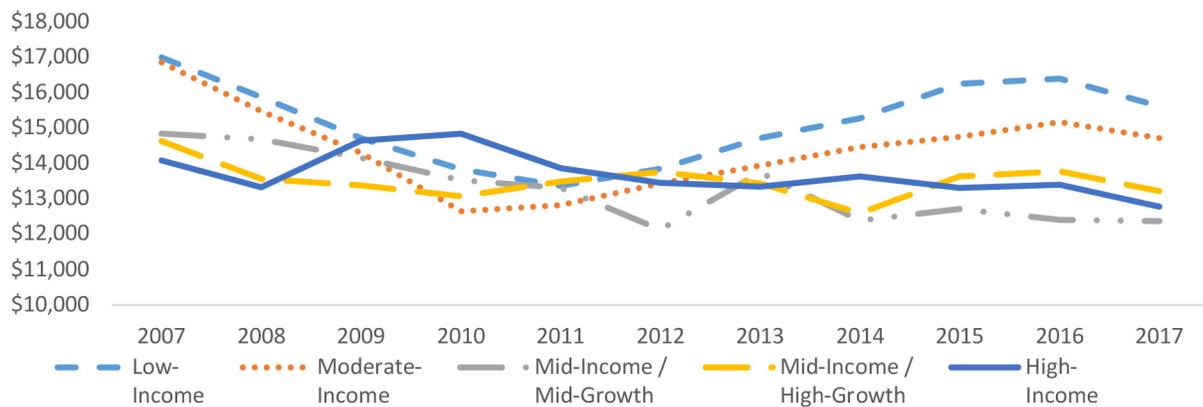
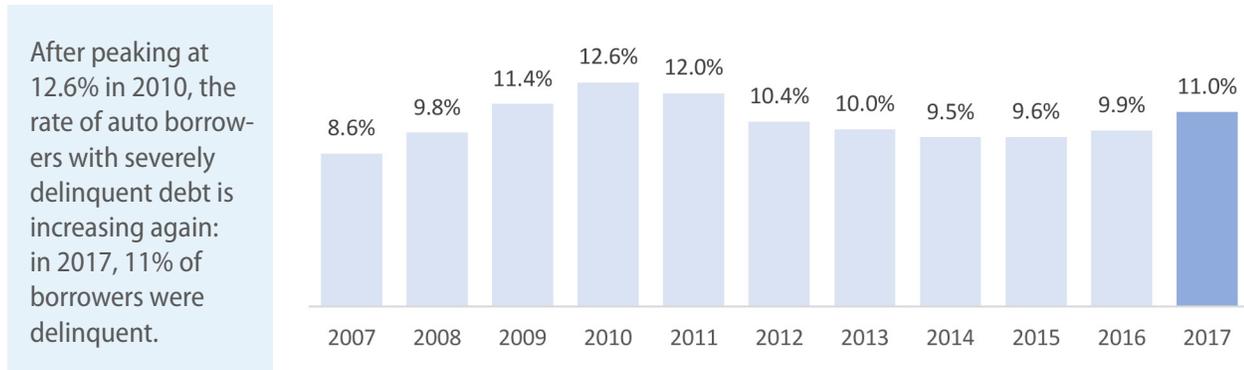**Note:** Vertical axis does not start at $0. Values adjusted to 2017 Dollars.
Source: FRBNY Consumer Credit Panel / Equifax

Severely Delinquent Auto Debt

The Severely Delinquent Auto Debt consumer credit indicator measures the portion of borrowers with auto loan debt from both monoline automobile finance companies and multipurpose lenders that have debt at least 90 days past due.

As shown in Figure 24, the portion of auto borrowers with severely delinquent debt has been steadily rising since 2014 and remains above the level from 2007. The bulk of this increase has been borne out by borrowers in low-income communities, 21% of whom had severely delinquent auto debt in 2017 (see Figure 26). Indeed, auto borrowers in D.C. resemble those in Prince George's County and Baltimore City, Maryland, more so than those in wealthier adjacent counties.
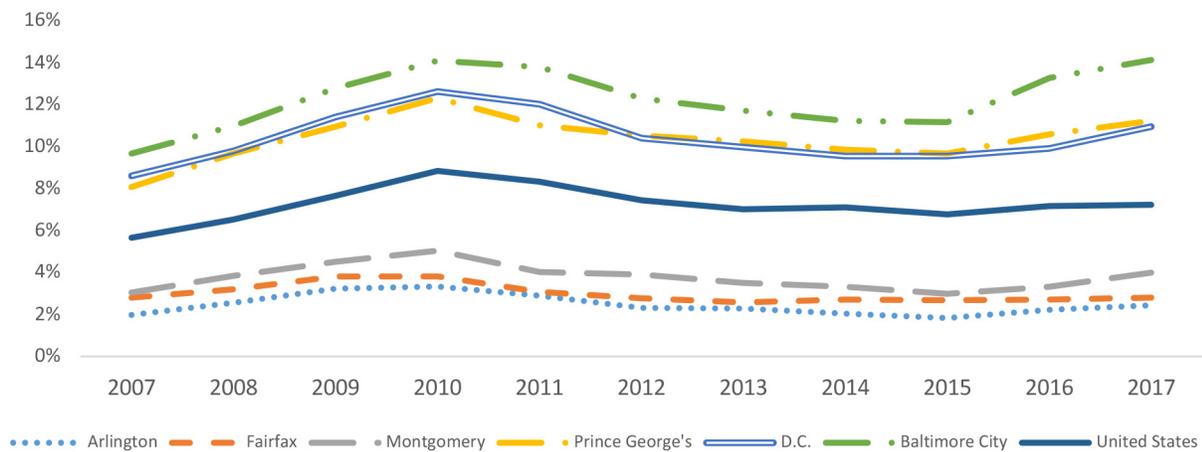
Figure 24: D.C. Severely Delinquent Auto Debt, 2007-2017

After peaking at 12.6% in 2010, the rate of auto borrowers with severely delinquent debt is increasing again: in 2017, 11% of borrowers were delinquent.

Source: FRBNY Consumer Credit Panel / Equifax

Fourteen percent of auto borrowers in Baltimore City, Maryland, had severely delinquent auto debt in 2017, while only 2% of borrowers in Arlington County, Virginia, did (see Figure 25). Although borrowers in all counties under analysis experienced similar trends in the auto delinquency rate as those in D.C., D.C. consumers resemble those in Baltimore and Prince George's County, Maryland, more, with over one in 10 borrowers currently severely delinquent.

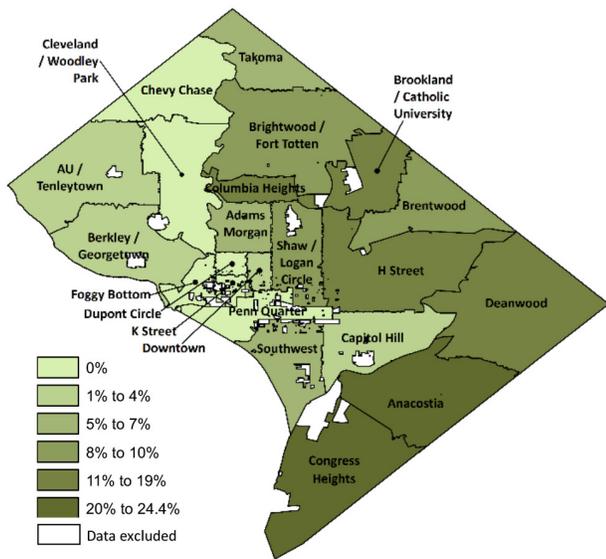**Figure 25: Washington MSA Severely Delinquent Auto Debt, 2007-2017**

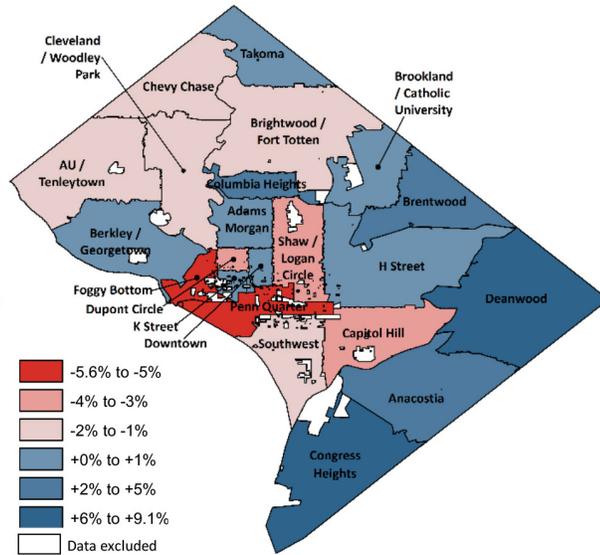**Source**: FRBNY Consumer Credit Panel / Equifax

Severely Delinquent Auto Debt, continued

As shown in Map 18, auto borrowers in Congress Heights and Anacostia were more likely to have severely delinquent debt in 2017 than other consumers. Further, borrowers in low-income communities experienced the greatest increase in delinquency, although borrowers in moderate-income and high-growth areas also experienced increases (see Map 19). Borrowers in low-income areas were 7 percentage points more likely to have severely delinquent debt than in 2007, and those in high-growth and moderate-income areas were 1 point more likely (see Figure 26).

Map 18: D.C. Severely Delinquent Auto Debt, 2017

Legend:
- 0%
- 1% to 4%
- 5% to 7%
- 8% to 10%
- 11% to 19%
- 20% to 24.4%
- Data excluded

Map 19: D.C. Severely Delinquent Auto Debt, Change 2007-2017

Legend:
- -5.6% to -5%
- -4% to -3%
- -2% to -1%
- +0% to +1%
- +2% to +5%
- +6% to +9.1%
- Data excluded

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax

Figure 26: D.C. Severely Delinquent Auto Debt by Segmentation, 2007-2017

Legend:
- Low-Income
- Moderate-Income
- Mid-Income / Mid-Growth
- Mid-Income / High-Growth
- High-Income
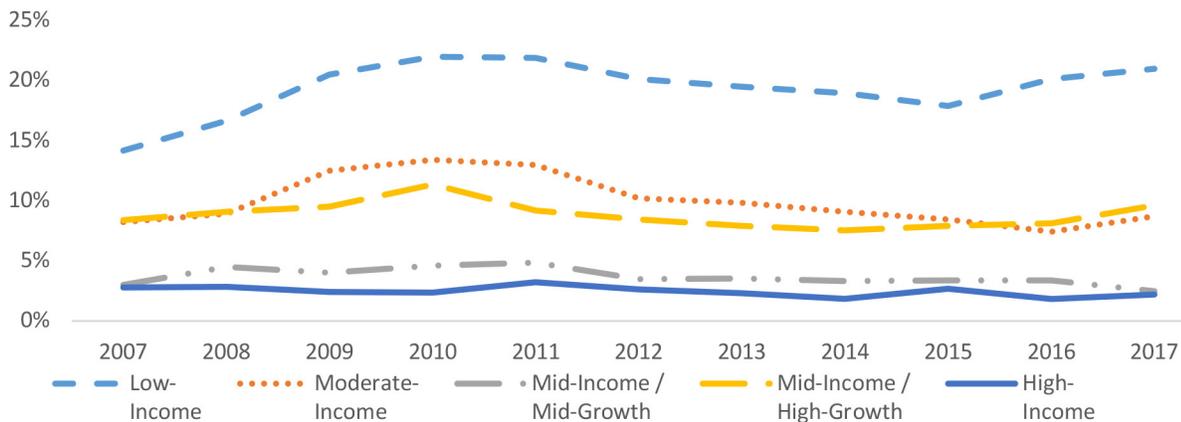
Source: FRBNY Consumer Credit Panel / Equifax

Credit Card Debt

The Credit Card Debt consumer credit indicators measure debt from general-purpose credit cards (excluding debit cards and credit cards for use at specific retailers), both in terms of median debt for consumers with non-zero balances and as a portion of aggregate debt.

Credit card usage is linked to consumer confidence, and in the years after the Great Recession, median card debt gradually decreased before beginning to increase again in 2014 (see Figure 27). 2017 credit card debt levels indicate debt may have stabilized or is slightly decreasing again.

**Figure 27: D.C. Median Credit Card Debt, 2007-2017**

In 2017, median credit card debt in D.C. was $2,867, down 11% from 2007.

Year	Median
2007	$3,235
2008	$3,144
2009	$3,019
2010	$2,907
2011	$2,834
2012	$2,748
2013	$2,706
2014	$2,796
2015	$2,888
2016	$2,876
2017	$2,867

Note: Values adjusted to 2017 Dollars.
Source: FRBNY Consumer Credit Panel / Equifax

Among adjacent counties in the Washington MSA and Baltimore City, Maryland, median credit card debt does not appear closely correlated with median income: Prince George's County, Maryland, and Fairfax County, Virginia, had the highest levels of median credit card debt in 2017, at $3,039 and $3,170, respectively (see Figure 28). Baltimore City, Maryland, had the lowest median debt, at $2,318. Prince George's County, Maryland, experienced the largest recent increase in median credit card debt, up 14% since 2013.

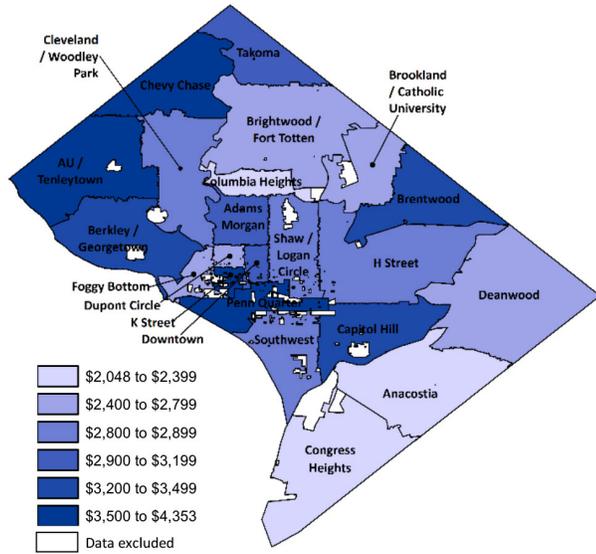**Figure 28: Washington MSA Median Credit Card Debt, 2007-2017**
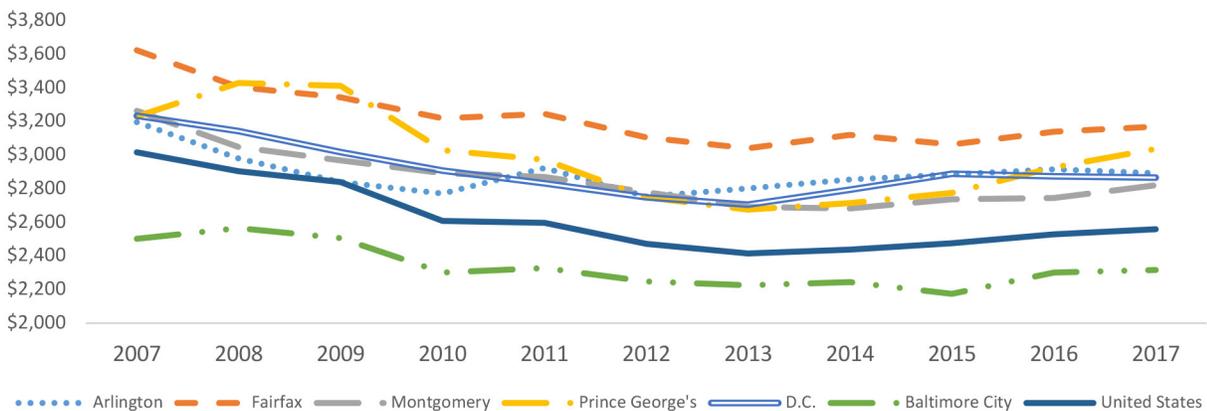
Legend: Arlington, Fairfax, Montgomery, Prince George's, D.C., Baltimore City, United States

Note: Vertical axis does not start at $0. Values adjusted to 2017 Dollars.
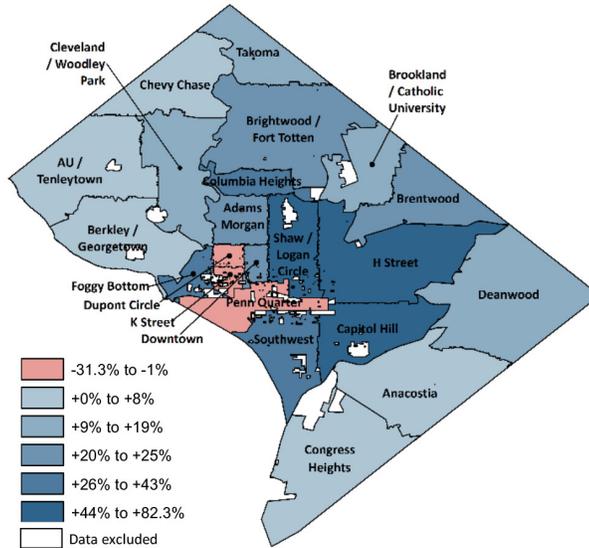**Source**: FRBNY Consumer Credit Panel / Equifax

Credit Card Debt, continued

Median debt loads were higher in higher-income communities in D.C. (see Map 20). Specifically, among the five ZIP codes in the high-income segmentation group, median credit card debt was $3,589 in 2017, down from $4,182 in 2007; in contrast, low-income communities had median debt of $2,266 in 2017, down from $2,476 in 2007 (see Figure 29). The number of borrowers has also increased in the majority of communities in D.C. and has increased quickest in high-growth communities. For example, since 2007, the number of credit card borrowers increased 87% in the Shaw/Logan Circle area and by 49% in the H Street community (see Map 21). However, the number of credit card borrowers has actually decreased in the wealthy areas of Penn Quarter and Dupont Circle.
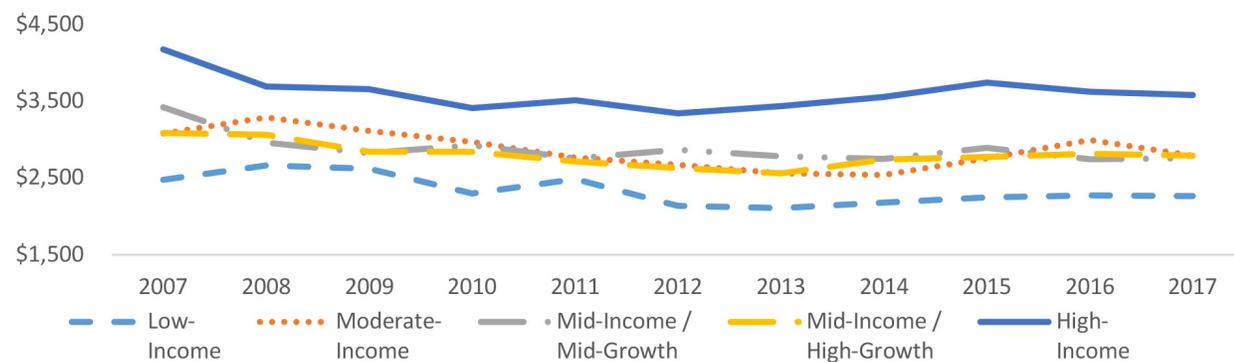
Map 20: D.C. Credit Card Debt, 2017

$2,048 to $2,399
$2,400 to $2,799
$2,800 to $2,899
$2,900 to $3,199
$3,200 to $3,499
$3,500 to $4,353
Data excluded

Map 21: D.C. Credit Card Debt (# of Borrowers), Change 2007-2017

-31.3% to -1%
+0% to +8%
+9% to +19%
+20% to +25%
+26% to +43%
+44% to +82.3%
Data excluded

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax

Figure 29: D.C. Median Credit Card Debt by ZIP Segmentation, 2007-2017

Low-Income · · · · · · Moderate-Income — · Mid-Income / Mid-Growth — · Mid-Income / High-Growth — High-Income

Note: Vertical axis does not start at $0. Values adjusted to 2017 Dollars.
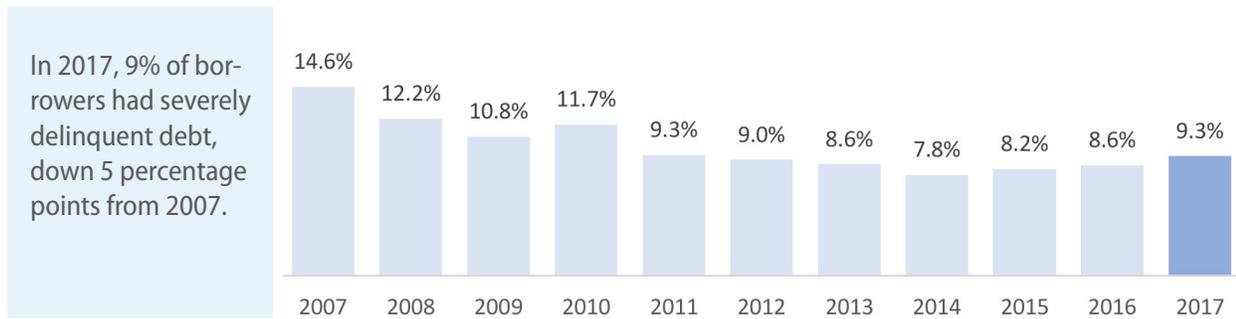**Source:** FRBNY Consumer Credit Panel / Equifax

Severely Delinquent Credit Card Debt

The Severely Delinquent Credit Card Debt consumer credit indicator measures the portion of borrowers with debt from general-purpose credit cards (excluding debit cards and credit cards for use at specific retailers) that have debt 90 days or more past due.

In 2017, the portion of credit card borrowers with severely delinquent debt was down from 2007 but was 1.5 percentage points higher than in 2014 (see Figure 30). The bulk of this recent rise again appears driven by increases in low-income communities, where rates of delinquency were up 4 percentage points from 2014.

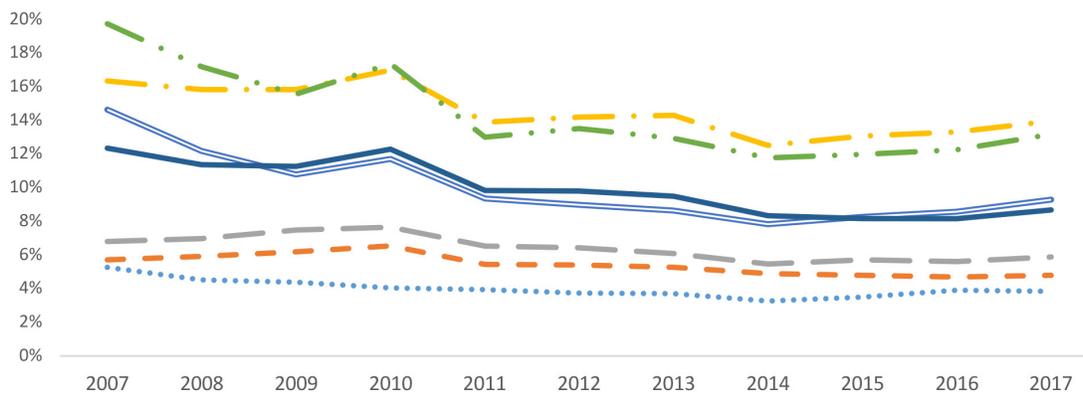**Figure 30: D.C. Severely Delinquent Credit Card Debt, 2007-2017**

In 2017, 9% of borrowers had severely delinquent debt, down 5 percentage points from 2007.

Year	Value
2007	14.6%
2008	12.2%
2009	10.8%
2010	11.7%
2011	9.3%
2012	9.0%
2013	8.6%
2014	7.8%
2015	8.2%
2016	8.6%
2017	9.3%

Note: Values adjusted to 2017 Dollars.
Source: FRBNY Consumer Credit Panel / Equifax

By 2017, the portion of credit card borrowers with severely delinquent debt was down from 2007 in every analyzed jurisdiction, with the biggest percentage point decrease occurring among borrowers in Baltimore City, Maryland (see Figure 31). The portion of borrowers with severely delinquent debt ranged from 4% in Arlington County, Virginia, to 14% in Prince George's County, Maryland, with D.C. falling in the middle.

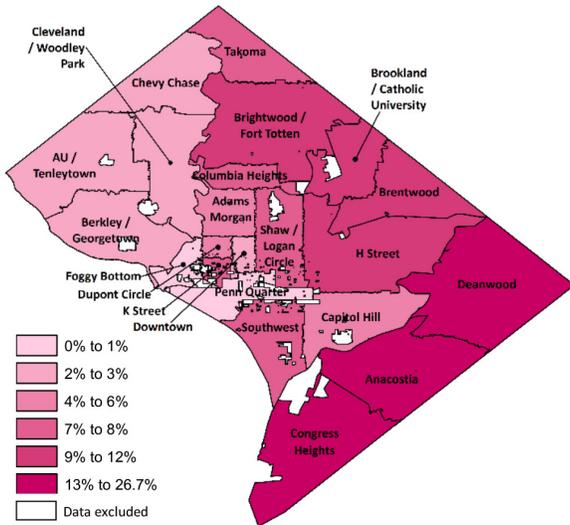**Figure 31: Washington MSA Severely Delinquent Credit Card Debt, 2007-2017**

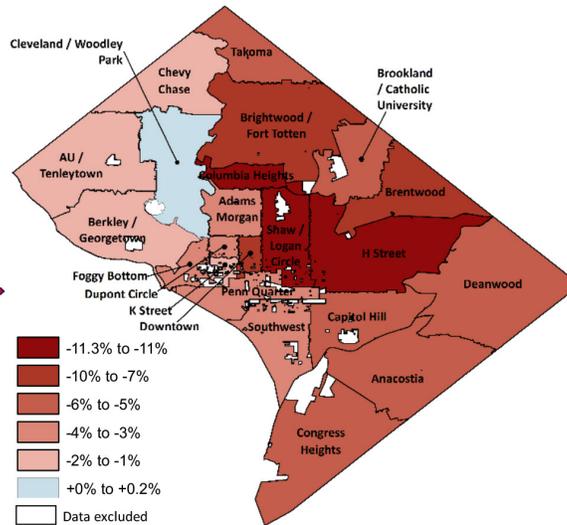**Source:** FRBNY Consumer Credit Panel / Equifax

Severely Delinquent Credit Card Debt, continued

The portion of credit card borrowers with severely delinquent debt varied significantly between communities in 2017, ranging from zero borrowers in Penn Quarter to more than a quarter (27%) of borrowers in Congress Heights (see Map 22). After 2007, delinquency rates fell quickest (by 11%) in high-growth areas of H Street, Shaw/Logan Circle and Columbia Heights (see Map 23). Borrowers in all segmentation groups experienced increases in the portion of borrowers with severely delinquent debt since 2014; however, while this increase was by less than 1 percentage point among those in moderate-income, mid-income and high-income areas, in low-income communities, delinquency rates increased by 4 percentage points after 2014, to 25% in 2017 (see Figure 32).

Map 22: D.C. Severely Delinquent Credtit Card Debt, 2017

Legend:
- 0% to 1%
- 2% to 3%
- 4% to 6%
- 7% to 8%
- 9% to 12%
- 13% to 26.7%
- Data excluded

Map 23: D.C. Severely Delinquent Credit Card Debt, Change 2007-2017

Legend:
- -11.3% to -11%
- -10% to -7%
- -6% to -5%
- -4% to -3%
- -2% to -1%
- +0% to +0.2%
- Data excluded

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax

Figure 32: D.C. Severely Delinquent Credit Card Debt by Segmentation, 2007-2017
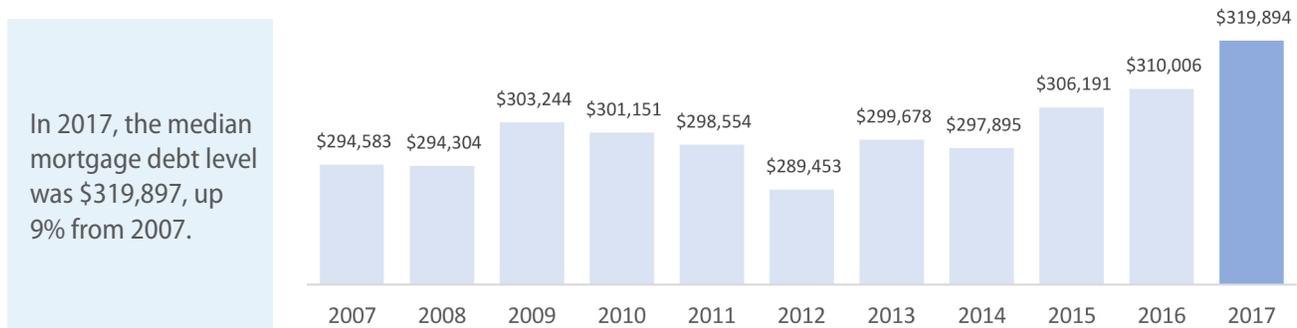

Legend:
- Low-Income
- Moderate-Income
- Mid-Income / Mid-Growth
- Mid-Income / High-Growth
- High-Income

Source: FRBNY Consumer Credit Panel / Equifax

Mortgage Debt

The Mortgage Debt consumer credit indicator measures debt from first- and junior-lien mortgages and home equity installment loans, both in terms of median debt for consumers with non-zero balances and as a portion of aggregate debt.

The trend in D.C. borrowers' median mortgage debt load mirrors that of home prices: After fluctuating between 2007 and 2012, debt has quickly increased, and in 2017, it was above the 2007 level (see Figure 33). Further, areas with the highest home prices have greater debt, while those with the weakest housing markets have the lowest mortgage debt.

Figure 33: D.C. Median Mortgage Debt, 2007-2017

In 2017, the median mortgage debt level was $319,897, up 9% from 2007.

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
$294,583	$294,304	$303,244	$301,151	$298,554	$289,453	$299,678	$297,895	$306,191	$310,006	$319,894

Note: Values adjusted to 2017 Dollars.
Source: FRBNY Consumer Credit Panel / Equifax

In 2017, median mortgage debt loads remained below pre-Great Recession levels in Fairfax County, Virginia, as well as Montgomery County and Prince George's County, Maryland (see Figure 34). By 2017, borrowers in D.C. had the second-highest median mortgage debt level among analyzed jurisdictions, after Arlington County, Virginia.

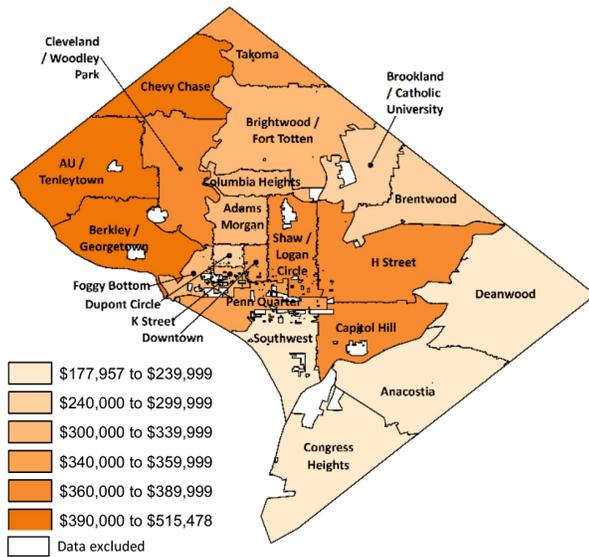**Figure 34: Washington MSA Median Mortgage Debt, 2007-2017**

Arlington • • • • • • Fairfax ━ ━ ━ Montgomery ━━━ Prince George's ━ • ━ D.C. ━━━ Baltimore City ━ • ━ United States ━━━

Note: Vertical axis does not start at $0. Values adjusted to 2017 Dollars.
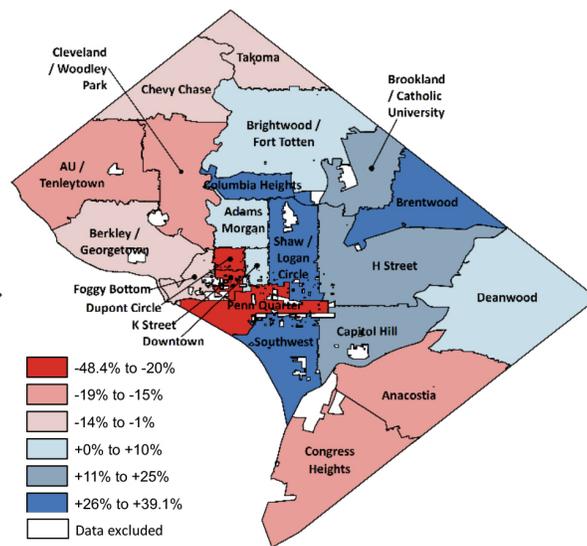**Source:** FRBNY Consumer Credit Panel / Equifax

Mortgage Debt, continued

Within D.C. ZIP codes, comparative mortgage debt levels generally align with home price differences between communities. While consumers in every income segmentation saw increases in their median mortgage debt (see Figure 35), debt increased most quickly among those in moderate-income communities (see Map 24). As of 2017, median mortgage debt in these communities increased 31% over 2007. Some of this growth may be driven by new consumers. In Brentwood, for example, the number of mortgage borrowers increased by 31% between 2007 and 2017 as aggregate mortgage debt increased 30% (see Map 25). Surprisingly, even though median debt increased most quickly in high-income areas, the number of borrowers decreased throughout. Penn Quarter, for example, had 21% fewer mortgage borrowers in 2017 than in 2007.

Map 24: D.C. Median Mortgage Debt, 2017

Legend:
- $177,957 to $239,999
- $240,000 to $299,999
- $300,000 to $339,999
- $340,000 to $359,999
- $360,000 to $389,999
- $390,000 to $515,478
- Data excluded

Map 25: D.C. Mortgage Debt (# of Borrowers), Change 2007-2017

Legend:
- -48.4% to -20%
- -19% to -15%
- -14% to -1%
- +0% to +10%
- +11% to +25%
- +26% to +39.1%
- Data excluded

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax

**Figure 35: D.C. Median Mortgage Debt by Segmentation, 2007-2017**

Legend: Low-Income / Moderate-Income / Mid-Income / Mid-Growth / Mid-Income / High-Growth / High-Income

Note: Vertical axis does not start at $0. Values adjusted to 2017 Dollars.
Source: FRBNY Consumer Credit Panel / Equifax

Severely Delinquent Mortgage Debt

The Severely Delinquent Mortgage Debt consumer credit indicator measures the portion of borrowers of first- and junior-lien mortgages and home equity installment loans with debt 90 days or more past due.

Although borrowers in the District of Columbia experienced a sharp increase in delinquency rates during the mortgage crisis (see Figure 36), the increase was significantly less than those experienced by borrowers in Prince George's County and Baltimore City, Maryland (see Figure 37). Borrowers in low- and moderate-income communities experienced the bulk of these delinquencies and not all of these consumers had recovered by 2017.

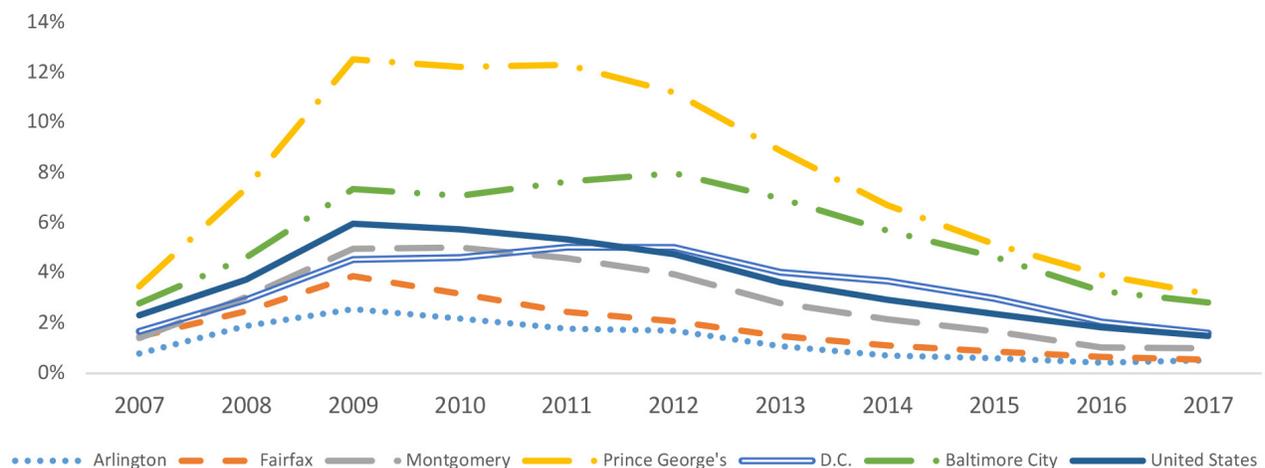**Figure 36: D.C. Severely Delinquent Mortgage Debt, 2007-2017**
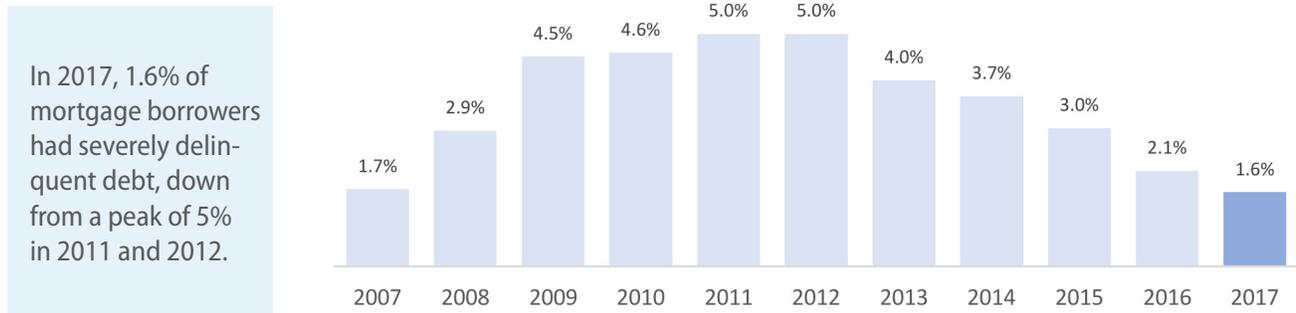
In 2017, 1.6% of mortgage borrowers had severely delinquent debt, down from a peak of 5% in 2011 and 2012.

Source: FRBNY Consumer Credit Panel / Equifax

The mortgage crisis impacted Prince George's County and Baltimore City, Maryland, harder than other analyzed counties in the Washington MSA. Delinquency rates there increased from 3% to 12% and 8%, respectively, in 2011 before declining again to pre-Great Recession levels (see Figure 37). Other counties experienced a short-term increase in delinquency similar to D.C.'s, although D.C. borrowers' rate has remained slightly more elevated.

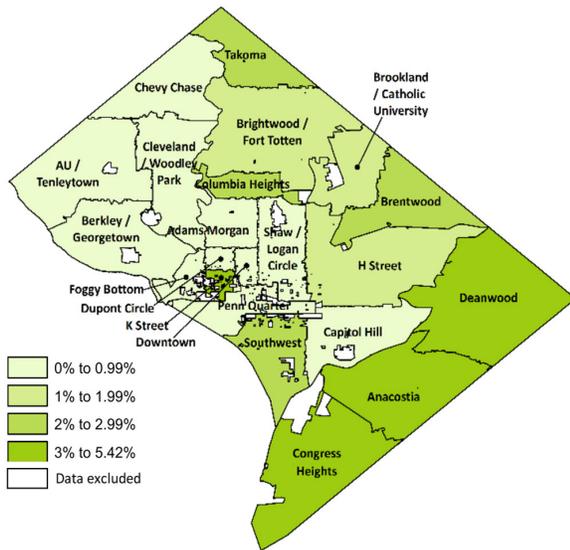**Figure 37: Washington MSA Severely Delinquent Mortgage Debt, 2007-2017**

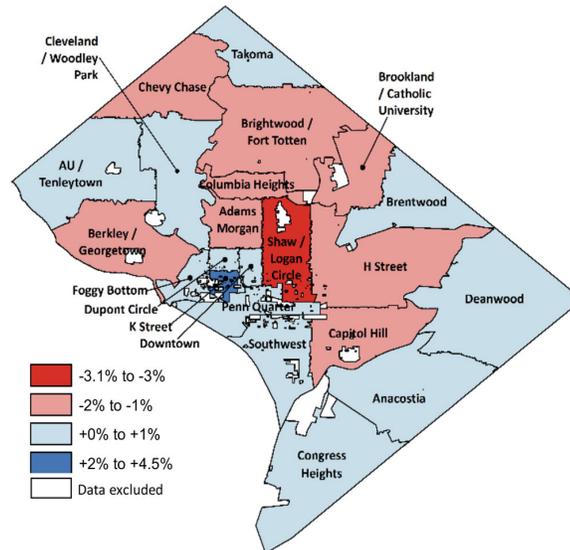**Source**: FRBNY Consumer Credit Panel / Equifax

Severely Delinquent Mortgage Debt, continued

Borrowers in low- and moderate-income communities experienced the largest increases in mortgage delinquency between 2007 and 2012. Delinquency rates among low-income borrowers increased to 11%, and among moderate-income borrowers they increased to 9% (see Figure 38). By 2017, delinquency rates had decreased again throughout most of the city but remained above 5% in communities east of the Anacostia River (see Map 26). In contrast, within five ZIP codes in mid- and high-income communities, there were no severely delinquent mortgage borrowers in the sample. Since 2007, mortgage delinquency decreased most in mid-income/high-growth communities, such as Shaw/Logan Circle, which had a 3 percentage point reduction in the portion of severely delinquent borrowers (see Map 27).

Map 26: D.C. Severely Delinquent Mortgage Debt, 2017

Map 27: D.C. Severely Delinquent Mortgage Debt, Change 2007-2017

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax

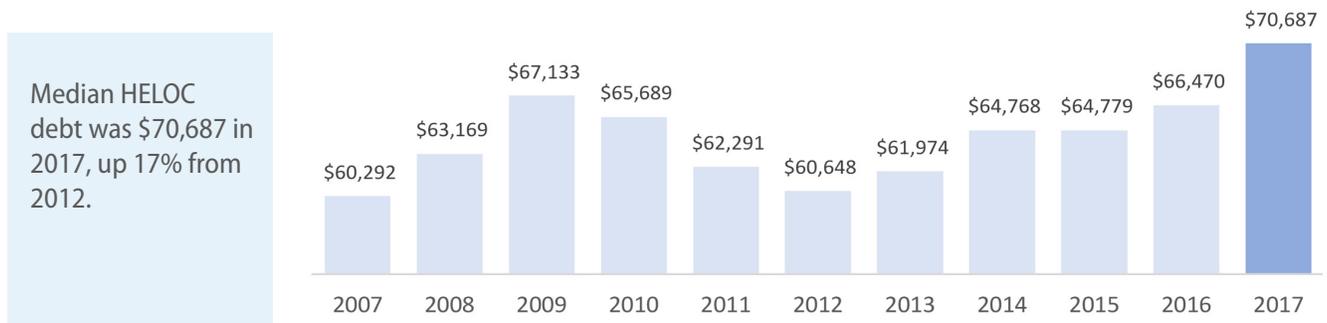**Figure 38: D.C. Severely Delinquent Mortgage Debt by Segmentation, 2007-2017**

Source: FRBNY Consumer Credit Panel / Equifax

Home Equity Line of Credit (HELOC) Debt

The Home Equity Line of Credit (HELOC) Debt consumer credit indicators measure debt from revolving home equity (also known as a "second mortgage"), both in terms of median debt for consumers with non-zero balances and as a portion of aggregate debt.

HELOC capital is most frequently used to make repairs on homes, so increases in debt levels could indicate positive improvements in homeowners' ability to invest in their assets. In the District of Columbia, median HELOC debt increased above pre-Great Recession levels after decreasing between 2009 and 2012 (see Figure 39). Still, median HELOC debt decreased in low-income ZIP codes, and aggregate HELOC debt also decreased in the vast majority of ZIP Codes.

**Figure 39: D.C. Median HELOC Debt, 2007-2017**

Median HELOC debt was $70,687 in 2017, up 17% from 2012.

$60,292	$63,169	$67,133	$65,689	$62,291	$60,648	$61,974	$64,768	$64,779	$66,470	$70,687
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017

Note: Values adjusted to 2017 Dollars.
Source: FRBNY Consumer Credit Panel / Equifax

As of 2017, median HELOC debt in D.C. was higher than in any other adjacent county in the Washington MSA (see Figure 40). Prince George's County and Baltimore City, Maryland, each had the lowest levels of median HELOC debt, at $36,511 and $29,694, respectively.

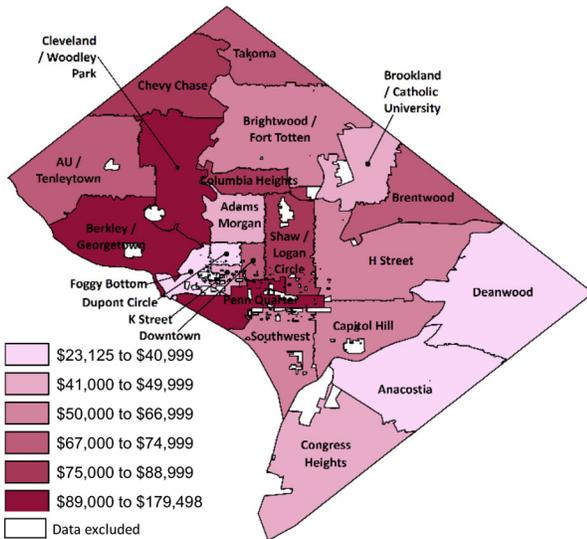**Figure 40: Washington MSA Median HELOC Debt, 2007-2017**
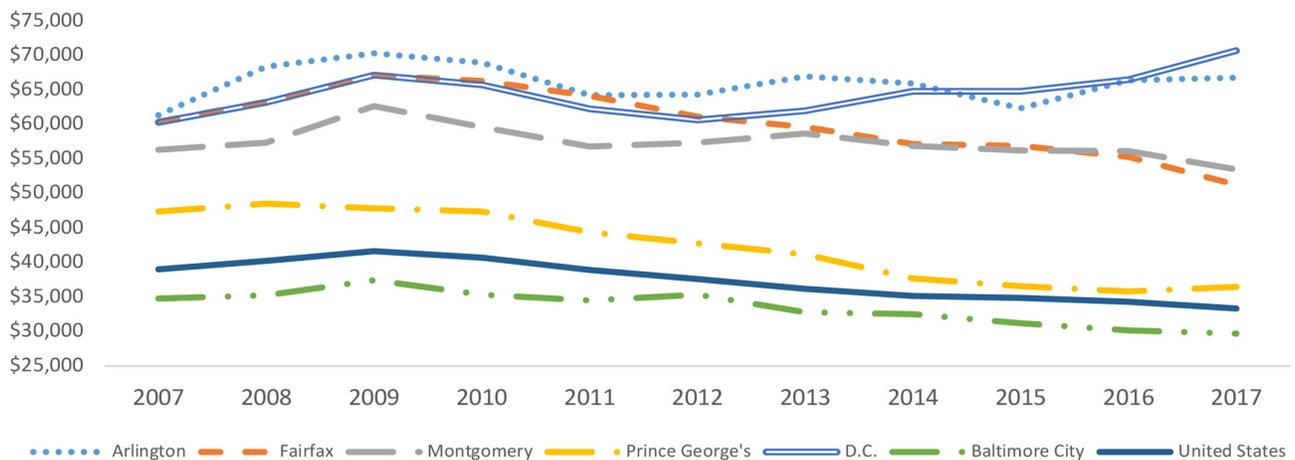
Legend: Arlington, Fairfax, Montgomery, Prince George's, D.C., Baltimore City, United States

Note: Vertical axis does not start at $0. Values adjusted to 2017 Dollars.
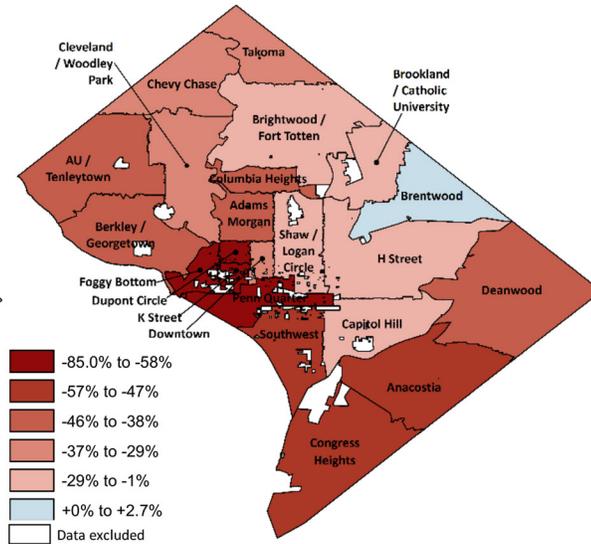**Source:** FRBNY Consumer Credit Panel / Equifax

Home Equity Line of Credit (HELOC) Debt, continued

Since 2007, the number of HELOC borrowers has decreased throughout the city, except in Brentwood, which also had one of the largest increases in mortgage borrowers (see Maps 28 and 29). Nevertheless, median HELOC debt has increased in every segmentation group except the low-income group, within which median HELOC debt decreased 13% from 2007 (see Figure 41). However, HELOC debt actually remains lowest in the mid-income/mid-growth communities of Dupont Circle and Foggy Bottom, where median debt is below $30,000 (see Map 28). Since the Great Recession began, median HELOC debt increased most quickly (28%) among borrowers in mid-income/mid-growth communities.

Map 28: Median D.C. HELOC Debt, 2017

$23,125 to $40,999
$41,000 to $49,999
$50,000 to $66,999
$67,000 to $74,999
$75,000 to $88,999
$89,000 to $179,498
Data excluded

Map 29: D.C. HELOC Debt (# of Consumers), Change 2007-2017

-85.0% to -58%
-57% to -47%
-46% to -38%
-37% to -29%
-29% to -1%
+0% to +2.7%
Data excluded

Note: ZIP codes with fewer than 50 files in data sample have been excluded from maps.
Source: FRBNY Consumer Credit Panel / Equifax

Figure 41: D.C. Median HELOC Debt by ZIP Segmentation, 2007-2017

Low-Income | Moderate-Income | Mid-Income / Mid-Growth | Mid-Income / High-Growth | High-Income

Note: Vertical axis does not start at $0. Values adjusted to 2017 Dollars.
**Source:** FRBNY Consumer Credit Panel / Equifax

Discussion

Results from D.C. residents' debt levels and payment history reveal the following insights about economic inequities in the city.

1. **Auto debt is higher in low-income communities than in any other part of the city and may be a drag on consumers' credit health.**

Auto borrowers in low- and moderate-income communities in the District of Columbia had the highest median auto debt loads out of all the segmentation groups. Specifically, in 2017, the median debt level for low-income consumers was $15,622 and for moderate-income consumers was $14,714 (see Figure 23). Furthermore, low-income auto borrowers were the most likely to have severely delinquent auto debt: 21% of these consumers had severely delinquent debt in 2017, 7 percentage points higher than in 2007 and nearly double the citywide rate (see Figure 26).

What explains these stark divides in auto debt levels and payment histories between low-income and upper-income borrowers? Part of the reason auto debt remains higher in areas with lower incomes may be that residents in these areas rely more on cars to get around. Residents in some areas with high median auto debt levels, such as Anacostia and Brentwood, are more likely to drive alone to work every day than other residents in the city (see Map 30). If residents are more likely to require cars to make a living and support their families, then perhaps they would be more willing to take out larger amounts of debt to finance the purchase. Similarly, access to public transportation may be limited in these areas. As shown in Map 31, over half of residents in Congress Heights, Anacostia and Brentwood who take public transportation to work have a commute time of over 45 minutes. If borrowers feel that they have few other transportation options, they may be more likely to accept relatively high rates on their auto loans, which would inflate their debt levels over time.

Map 30: D.C. Drive Alone to Work (% of All Workers), 2016
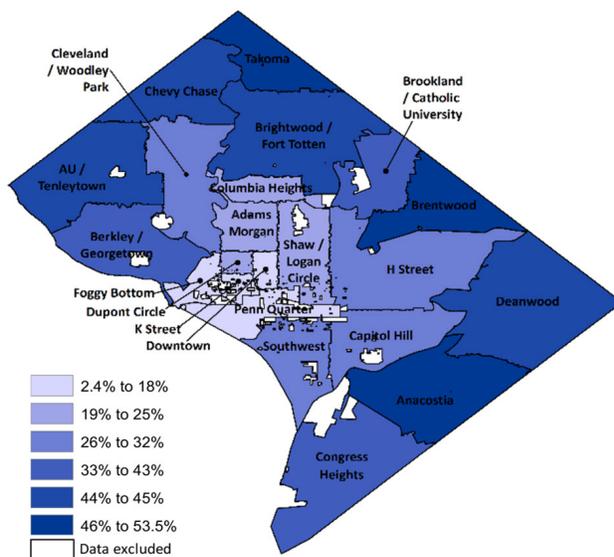
Map 31: D.C. 45+ min Commute (% of Workers who take Public Transportation), 2016
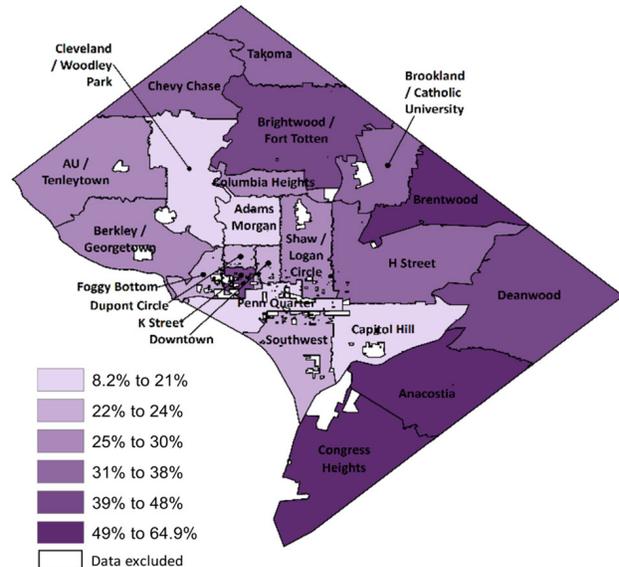
Note: ZIP codes with fewer than 50 files in Equifax data sample have been excluded from maps.
Source: American Community Survey 5-Year Estimates, 2012-2016

A possible explanation for why auto delinquencies are increasing in low-income areas is that lending to subprime borrowers has increased there, even though it has declined throughout the rest of the city. As shown in Figure 42, the number of subprime auto borrowers is up 28% from 2007 in low-income communities but down in every other segmentation group. Given that lending to borrowers with poor credit health has increased, it would make sense that delinquencies may also increase.

**Figure 42: D.C. # of Subprime Auto Borrowers, by Segmentation, 2007-2017**

2. **Credit card debt is lowest in low-income communities, but these consumers nevertheless may face continued difficulties managing this debt.**

Credit card debt is down in D.C. in every income segmentation group (see Figure 29). Further, the number of credit card borrowers is up throughout the city in the vast majority of ZIP codes, so more consumers now have access to revolving credit (see Map 21). However, there is evidence that some low- and moderate-income communities may be struggling to maintain that debt. First, even though median debt loads are lowest in low-income areas, a quarter of these borrowers are over 90 days past due, nearly three times the citywide rate (see Figure 32). Furthermore, even though debt is lower in areas with smaller incomes, as a portion of aggregate income, credit card debt is actually a disproportionately large burden. As shown in Map 32, the moderate-income communities of Brentwood and Brookland/Catholic University have the largest debt-to-income ratios in the city, whereas high-income communities like Penn Quarter and Cleveland/Woodley Park have some of the lowest debt-to-income ratios – even though the amount of debt is highest there.

Map 32: D.C. Aggregate Credit Card Debt / Aggregate Household Income, 2017
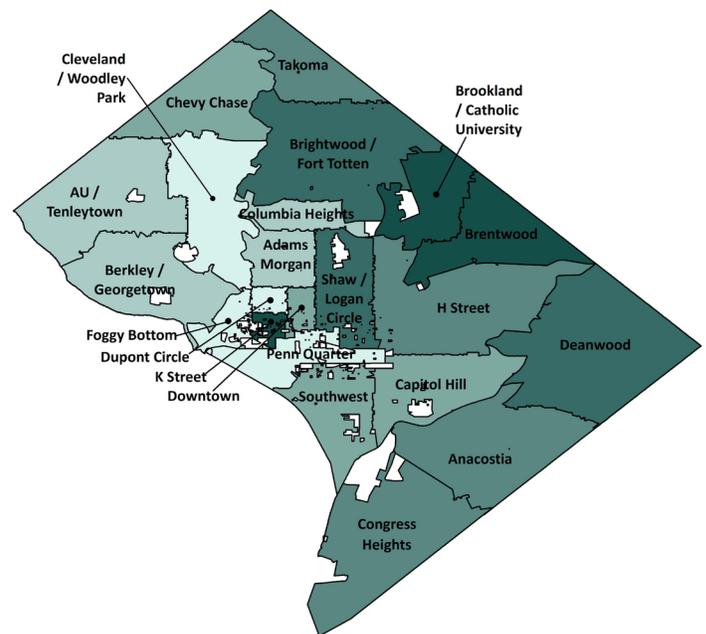
Note: ZIP codes with fewer than 50 files in data sample have been excluded from map.

3. Mortgage debt increased quickest in moderate-income communities – not in high-growth communities.

Perhaps unsurprisingly, the number of mortgage borrowers increased most rapidly in some high-growth communities like Columbia Heights and Shaw/Logan Circle, which recently have been locations of rapid development and income growth. However, it is also notable that another site of rapid growth in mortgage borrowers was Brentwood, where property values have increased over the past 10 years but not as quickly as in adjacent communities (see Map 2). Indeed, compared to 2007, by 2017, mortgage borrowing increased more quickly in moderate-income communities like Brentwood than in higher-income areas. An increase in borrowers in moderate-income areas accompanied a 31% increase in real median debt levels among moderate-income borrowers between 2007 and 2017, the fastest growth among any segmentation group (see Figure 35). Still, this rapid increase in median debt has not been accompanied by a sustained increase in delinquency – in 2017, only 2% of mortgage borrowers in moderate-income communities had mortgage debt that was 90 days or more past due.

4. Mortgage borrowers in low- and moderate-income communities experienced the hardships of the mortgage crisis more acutely than other consumers, though they have mostly recovered.

Even though borrowers in moderate-income communities had some of the lowest rates of debt delinquency in the city in 2017, many in those and in low-income communities were also acutely impacted by the mortgage crisis that began in 2007. Specifically, between 2007 and 2012, the portion of mortgage borrowers that were severely delinquent increased from 4% to 11% in low-income areas and from 3% to 9% in moderate-income areas (see Figure 38). In 2017, while the rate of severely delinquent debt fell below pre-Great Recession levels among moderate-income borrowers overall, they still remained 1 percentage point higher among low-income borrowers. While it is a positive sign that most lending markets generally recovered from the mortgage crisis, these data points may also indicate that some consumers in areas most affected by the downturn have not yet fully recovered.

5. Although HELOC debt increased throughout most of the city, the number of borrowers fell, indicating fewer investors are contributing to D.C.'s housing rehabilitation.

In 2017, median HELOC debt levels were significantly above 2007 levels in all segmentation groups except the low-income group (see Figure 41). Specifically, median HELOC debt was 28% higher in mid-income/mid-growth communities, 23% higher in high-income communities, 21% higher in mid-income/high-growth communities, 14% higher in moderate-income communities and 13% lower in low-income communities. Nevertheless, as shown in Map 29, despite this increase in debt levels throughout most of the city, in nearly every ZIP code, the number of HELOC borrowers fell (the one exception being the moderate-income community of Brentwood, where the number of HELOC borrowers increased by 3%). In fact, the decrease in some of these areas was dramatic – in Dupont Circle, for example, the number of HELOC borrowers decreased by 85% over the 10-year stretch. The explanation for these declines is unclear but points to a concentration of rehabilitation investments in the hands of fewer individuals.

Conclusion

In the years following the Great Recession, topline metrics of income, employment and economic growth suggested that the District of Columbia experienced a rapid economic expansion. However, this improved prosperity was not shared among all D.C. residents. The consumer credit indicators in this report underscore that while many residents in D.C. today are in a better financial standing than before the Great Recession, in some communities high debt levels and economic instability persist.

The data presented in this report show that low-income communities in the District of Columbia experience unique credit problems. While consumers in most upper-income areas are more likely to have prime credit scores and less likely to have severely delinquent debt compared with before the Great Recession, the same is not true in low-income areas, particularly those east of the Anacostia River. Further, things are getting worse. The portion of consumers in low-income communities that have reached 75% of their credit limit is at the highest level since 2008 and is continuing to rise, while the portion of similarly constrained consumers remains flat or is decreasing in other ZIP codes. This indicates that consumers in these areas are more vulnerable than before the Great Recession hit.

Further, the types of debt low-income consumers incur have changed over time. Median auto debt for consumers in the lowest-income ZIP codes is increasing and is higher than among other consumers, even as mortgage and HELOC debt levels remain stagnant in low-income areas. Credit card debt remains low in most low- and moderate-income areas, but as a portion of income it is comparably higher than it was prior to the recession.

At the same time, communities such as Shaw, H Street and Logan Circle have undergone rapid changes since 2007, indicating that a growing portion of consumers there are able to safely access credit. In 2007, these communities looked similar to low- and moderate-income ZIPs in terms of the portion of consumers that had constrained credit; however, 10 years later, their credit usage along these and other indicators tracks more closely to wealthier areas. Still, consumers in these high-growth areas have sizeable populations of subprime borrowers that should not be overlooked, even as topline indicators have quickly improved.

Taken together, the increasing share of consumers in low-income communities that have high credit utilization and subprime credit indicates that income growth continues to fall behind spending and debt repayment patterns. Expanding opportunities and training for higher-paying jobs for workers at all skill levels may lead to improvements in this imbalance.

Finally, the data presented in this report suggest that D.C. residents could benefit from expanded opportunities for financial literacy education. Research shows that improving financial literacy leads to lower debt loads and improved credit health for consumers.[62] Programs such as BankOn D.C. have made important strides in bridging divides in financial literacy and inclusion, but significant inequities remain.[63] By improving credit health among existing consumers and increasing inclusion among those who are not currently in the credit economy, community outreach can help ensure that more local residents benefit from D.C.'s economic opportunities.

Summary Statistics

Indicator	D.C.	20001	20002	20003	20004	20005	20006	20007
Included (2016)	79%	86%	88%	78%	82%	87%	100%	91%
Revolving	81%	87%	82%	90%	88%	89%	78%	88%
Prime	71%	75%	70%	83%	95%	89%	80%	91%
Subprime	19%	15%	20%	9%	0%	6%	8%	4%
Credit Constrained	21%	20%	22%	16%	6%	14%	15%	10%
Low Credit Utilization	44%	49%	44%	55%	69%	58%	42%	61%
Median Auto Debt	$ 14,223.00	$13,177.00	$14,142.00	$12,439.50	$19,018.50	$12,745.00	$21,695.00	$12,996.00
Sev Del Auto Debt	11%	8%	12%	5%	0%	4%	0%	1%
Median Credit Card Debt	$2,866.50	$2,813.00	$2,806.00	$3,484.00	$4,353.00	$3,124.00	$3,542.50	$3,397.00
Sev Del Credit Card Debt	9%	7%	9%	4%	0%	3%	9%	3%
Median Mortgage Debt	$319,894.00	$384,965.50	$372,148.00	$380,757.00	$355,583.00	$357,674.00	$317,572.50	$422,317.00
Sev Del Mortgage Debt	2%	0%	1%	1%	0%	1%	5%	0%
Median HELOC Debt	$70,686.50	$82,436.50	$62,120.00	$66,384.00	$179,498.00	$69,985.00	$44,443.50	$114,381.00

Indicator	20008	20009	20010	20011	20012	20015	20016	20017
Included (2016)	100%	86%	80%	80%	85%	99%	90%	79%
Revolving	88%	86%	82%	79%	81%	87%	85%	78%
Prime	92%	85%	75%	67%	73%	93%	92%	66%
Subprime	3%	9%	14%	19%	17%	4%	4%	22%
Credit Constrained	10%	13%	16%	23%	23%	10%	10%	27%
Low Credit Utilization	63%	58%	48%	38%	42%	59%	59%	33%
Median Auto Debt	$10,358.00	$12,108.00	$13,819.00	$14,326.00	$15,002.00	$13,240.00	$12,781.00	$14,641.00
Sev Del Auto Debt	1%	7%	12%	8%	6%	1%	1%	12%
Median Credit Card Debt	$2,820.00	$2,910.00	$2,299.00	$2,717.00	$2,948.00	$4,288.50	$3,522.00	$2,763.00
Sev Del Credit Card Debt	4%	5%	7%	12%	7%	2%	2%	11%
Median Mortgage Debt	$360,160.50	$335,145.00	$339,726.50	$301,778.00	$344,260.00	$515,478.00	$448,209.50	$261,882.00
Sev Del Mortgage Debt	0%	0%	3%	2%	2%	0%	0%	2%
Median HELOC Debt	$99,133.00	$48,551.00	$77,057.00	$59,977.00	$74,687.50	$88,945.00	$73,750.00	$49,601.00

Source: FRBNY Consumer Credit Panel / Equifax

Summary Statistics, continued

Indicator	20018	20019	20020	20024	20032	20036	20037
Included (2016)	77%	74%	73%	90%	67%	100%	89%
Revolving	79%	69%	66%	85%	67%	84%	86%
Prime	60%	37%	37%	73%	34%	90%	93%
Subprime	26%	47%	45%	18%	50%	2%	3%
Credit Constrained	30%	38%	34%	20%	37%	7%	7%
Low Credit Utilization	31%	16%	17%	47%	16%	60%	65%
Median Auto Debt	$15,516.50	$15,685.00	$15,080.00	$13,080.00	$16,057.00	$10,255.50	$12,377.00
Sev Del Auto Debt	8%	19%	21%	6%	24%	0%	0%
Median Credit Card Debt	$3,223.50	$2,429.00	$2,048.00	$2,803.00	$2,145.00	$2,672.00	$2,458.00
Sev Del Credit Card Debt	13%	24%	25%	9%	27%	4%	1%
Median Mortgage Debt	$272,862.00	$190,534.50	$183,902.50	$235,410.00	$177,956.50	$297,080.00	$339,165.50
Sev Del Mortgage Debt	3%	5%	5%	3%	5%	0%	0%
Median HELOC Debt	$71,103.50	$39,531.00	$40,753.00	$66,377.00	$42,316.50	$29,185.00	$23,125.00

Source: FRBNY Consumer Credit Panel / Equifax

About the Data

Data Sources

The consumer credit data in this report originate from the Federal Reserve Bank of New York's Consumer Credit Panel/Equifax (CCP). In this panel, the credit bureau Equifax provides quarterly credit report data for a unique, 5 percent nationally representative sample of individuals in the United States with a Social Security number and credit report. All data are anonymous, but each file contains information on the consumer's census tract, ZIP code and age. All values utilized are for the fourth quarter of the given year.[64]

The CCP provides data for consumers as young as 18 years old as well as for student loans. However, this report does not include that data due to concerns about its reliability. Specifically, other Fed researchers discovered inconsistencies in student loan data providers' reporting regularity and observed sudden, unexplained and large increases throughout the panel in the sample of consumers 18 to 24 years old. To reconcile these sample concerns, the dataset only includes debt information for auto, credit card, mortgage and HELOC debt and only among consumers aged 25 or older.

Demographic and socioeconomic data originate from two sources. Population estimates are obtained from the U.S. Census Bureau's 1-year and 5-year American Community Survey (ACS) estimates. The report also draws on demographic data from GeoLytics' Population Estimates for ZIP-code-level analyses. To construct these small geography estimates, GeoLytics utilizes 2010 Census Redistricting data, yearly Census county- and state-level estimates, local actuarial tables and local immigration trends to estimate housing and income data at the ZIP-code level. These data are used in the report to compare how changes in consumer credit indicators align with changes in other economic and social neighborhood indicators.

Geographic Scope

The report compares indicators in the District of Columbia to large counties in the surrounding region. Specifically, the report includes comparisons for four counties in the DC-VA-MD-WV metropolitan statistical area (MSA) that border the District of Columbia, plus the city of Baltimore. The counties were selected due to their comparable sizes, economic characteristics and proximity to the District of Columbia, while Baltimore, which is outside of the Washington MSA, was included due to its historical and demographic similarities with D.C. Map 33 below provides a map of the counties under analysis, and Table 1 shows the estimated total population for each jurisdiction.

Map 33: Consumer Credit Report Analyzed Jurisdictions

Table 1: Population Estimates of Analyzed Jurisdictions

County	Population (Est. 2017)
District of Columbia	693,972
Arlington County, VA	234,965
Fairfax County, VA	1,148,433
Montgomery County, MD	1,058,810
Prince George's County, MD	912,756
Baltimore City, MD	611,648

**Source:** American Community Survey 1-Year Estimates, 2017

Income & Growth Segmentation

In order to effectively show changes in different consumer credit indicators by community type, the report shows aggregated data for communities based on a typology of ZIP codes. This segmentation was based on an analysis of income and home price growth in the District of Columbia between 2007 and 2017. The segmentation groups are defined as follows:

- **Low-Income**: ZIP codes with 2017 median household incomes below 50% of the citywide median ($81,000).

- **Moderate-Income:** ZIP codes with 2017 median household incomes between 50% and 80% of the citywide median.

- **Mid-Income / Mid-Growth**: ZIP codes with median household incomes between 80% and 120% of city's in 2017 and income and home value growth below 150% of city's between 2007 and 2017.

- **Mid-Income / High-Growth:** ZIP codes with median household incomes between 80% and 120% of city's in 2017 and income or home value growth above 150% of the city's between 2007 and 2017.

- **High-Income:** ZIP codes with 2017 median household incomes above 120% of the citywide median.

Map 34 shows low-income ZIP codes are generally located east of the Anacostia River, moderate-income ZIP codes are located along the eastern border, high-income ZIP codes are generally located in Northwest D.C., mid-income/ mid-growth ZIP codes are located in the city center and mid-income/mid-growth ZIP codes are located in the interstitial areas.

Map 34: D.C. Segmentation Definition
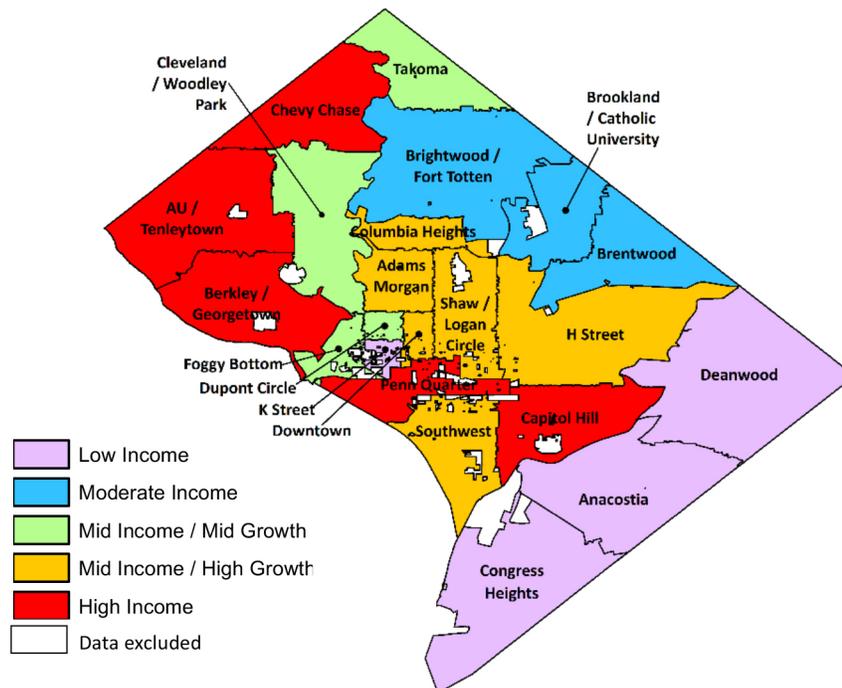
Sources: Federal Housing Finance Agency's Annual House Price Index, 2007-2017; GeoLytics Population Estimates, 2007-2017

Table 2 displays selected demographic characteristics of each ZIP code segmentation group. Generally, each group's income level is positively correlated with the portion of residents that are white and have a bachelor's degree or higher. However, there are notable differences in demographics between the mid-income/mid-growth and mid-income/high-growth ZIP code groups. Although communities in both groups had similar median household incomes in 2017, residents in the high-growth segmentation group are less likely to have a bachelor's degree and are more likely to be African-American or Hispanic. Additionally, the ZIP codes in the high-growth group have significantly higher rates of family poverty than the mid-growth group. These differences reflect the concentration of some historically low-income and African-American communities (such as Shaw and H Street) in the high-growth group, communities that are undergoing the most rapid change in D.C.'s growing economy.

ZIP code 20006, which generally includes the K Street neighborhood, is included in the low-income group even though it is located in an area that has not historically been subject to disinvestment. This is largely due to its high population of undergraduate students: According to the 2012-2016 American Community Survey, 91% of residents in 20006 are undergraduate students. Still, given that its poverty rate, median income and values for various consumer credit indicators align with ZIP codes 20019, 20020 and 20032, it is aggregated with them in the low-income segmentation group.

Table 2: 2017 Demographics of ZIP Code Segmentations

	Low-Income	Moderate-Income	Mid-Income / Mid-Growth	Mid-Income / Mid-Growth	High-Income
ZIP codes	20019, 20020, 20032, 20006	20011, 20017, 20018	20036, 20012, 20037, 20008	20005, 20001, 20002, 20010, 20024, 20009	20003, 20004, 20007, 20016, 20015
Owner	31%	56%	42%	38%	56%
Renter	69%	44%	58%	62%	44%
Unemployed	7%	3%	2%	3%	3%
Mean HH Income	$42,584	$66,209	$100,398	$82,818	$125,310
Bachelor's+	12%	26%	75%	43%	75%
Family Poverty	24%	9%	3%	17%	5%
White	4%	11%	67%	43%	78%
African-American	93%	67%	15%	37%	10%
Hispanic	4%	21%	7%	15%	5%

Source: GeoLytics Population Estimates, 2017

About the Author

Samuel Storey is a senior research analyst in the Regional and Community Analysis unit at the Federal Reserve Bank of Richmond, Baltimore Branch.

Acknowledgements

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