Chapter 2 Framework Element





Framework Element

Overview 200

HE FRAMEWORK ELEMENT OF THE COMPREHENSIVE PLAN SERVES FOUR PURPOSES. 200.1

First, it provides the context for the rest of the Plan by describing the forces driving change in the city. These forces include demographic shifts, economic change, technological change, fiscal challenges, tensions between federal and local interests, and more. Such "driving forces" define the major issues facing Washington and touch every aspect of life in the city. 200.2

Second, the Element includes a description of the District's growth forecasts and projections. The forecasts are expressed in narrative format and are also summarized in tables and charts. They show how and where the District expects to add households, people, and jobs between 2005 and 2025, and adds an extended forecast through 2045. 200.3

Third, the Framework Element ties the Comprehensive Plan to "Vision for Growing an Inclusive City." It lays out 40 principles to be followed as the District moves from "Vision to Reality." These principles, largely drawn from the Vision and from the previous Comprehensive Plan, express cross-cutting goals for the District's future that guide the Plan's policies and actions. 200.4

Finally, the Framework Element describes the Comprehensive Plan, Generalized Policy Map, and the Future Land Use Map, describes how the Comprehensive Plan guides development decisions, and describes the role of capital investments in addressing current and future challenges regarding infrastructure and facilities. The Generalized Policy Map "tells the story" of how the District is expected to change during the first quarter of the century. It highlights the places where much of the city's future growth and change is expected to occur and sets the stage for the Elements that follow. The Future Land Use Map shows the general character and distribution of recommended and planned uses across the city. Both maps carry the same legal weight as the text of the Comprehensive Plan. 200.5

Unlike the other Citywide Elements, this Element does not contain policies and actions. Its intent is to provide the foundation for the rest of the Comprehensive Plan. 200.6

The Element describes the Comprehensive Plan Generalized Policy Map and the Future Land Use Map. The Policy Map "tells the story" of how the District is expected to change during the first quarter of the century. It highlights the places where much of the city's future growth and change is expected to occur and sets the stage for the Elements that follow. 2

Our position as the nation's capital, our historic and unique neighborhoods, our cultural offerings, and the benefits of density, such as transportation and urban amenities, placed a premium on Washington and distinguished it from the surrounding suburbs, reflecting renewed interest in living and working in the city.

The Forces Driving Change 201

The sections below describe the forces driving change in the District of Columbia and outline the implications of these forces for the District's future. The Comprehensive Plan seeks to address these implications for the District to become a more inclusive city. Achieving a more inclusive city calls for public and private collaborations, among District agencies, between District and federal agencies, with the private and non-profit sectors, and with our residents, as well as our regional partners. ^{201.1}

The District and the Region 202

Since 2006, the District has re-established its position at the center of an economically dynamic metropolitan area. Rapid growth in population and jobs has made the District one of the fastest growing large cities in the United States, following prior decades of population and job loss. Now the District is regaining its share of the region's vitality. 202.1

Between 2006 and 2016, the Washington metropolitan area grew by over 19 percent, increasing from 5.2 million to 6.1 million residents. More than 260,000 jobs were added during this period, an increase of almost nine percent. Greater Washington is the fastest growing large metropolitan area in the country outside of the South and West. It is the sixth largest metropolitan area in the nation. Metropolitan Washington now sprawls across 4,500 square miles of the Middle Atlantic States. 202.2

The District has captured a greater share of regional growth than expected. In 1950, the District had 46 percent of the region's population and 83 percent of its jobs. By 2000, it had just 12 percent of the region's population and 25 percent of its jobs. In 2006, the perceived difficulties of infill development and other factors led to even the most ambitious projections showing the District with a diminishing share of the region's population and jobs in the future. 202.3

Instead, our position as the nation's capital, our historic and unique neighborhoods, our cultural offerings, and the benefits of density, such as transportation and urban amenities, placed a premium on Washington and distinguished it from the surrounding suburbs, reflecting renewed interest in living and working in the city. With this renewed interest, the District can maintain a growing share of the region's population and jobs. 202.4

There are signs the region will better balance growth between jobs and households in the future. In 2006, Montgomery, Prince George's, and Fairfax Counties planned to add 620,000 jobs during the next 25 years but only 273,000 households, with similar imbalances in other regional jurisdictions. If this regional jobs-housing imbalance had continued, more workers would have sought housing outside the region, creating more congestion and sprawl, while also raising housing costs in the region's core as people sought to reduce their commuting times by moving closer to their jobs. However, regional projections now indicate a shift toward more housing within the inner suburbs that should moderate the jobs-housing imbalance, described below in the Cooperative Forecasting section. 202.5

Demographic Changes 203

The District is an attractive place to live and work, as evidenced by recent population growth. Since 2006, the District grew by over 123,000 (21.6 percent) to an estimated population of 693,972 in 2017. This growth sharply contrasts with the loss of population that marked the decades from 1950 to 2000, when Washington went from a peak of 802,000 residents to 572,000. The current trend, if sustained, puts the District on track to bypass the 1950s peak within two decades. The main drivers of this increase are natural increase (births minus deaths), and international and domestic migration. ^{203.1}

Nine to ten percent of the population moves into, or out of, the city each year. The District has successfully sought to attract and retain both domestic and international residents. Domestic migration has shifted from negative to positive, with 2,000 people added annually since 2009. The city has also added an average of 3,000 net new international residents each year since 2006. 203.2

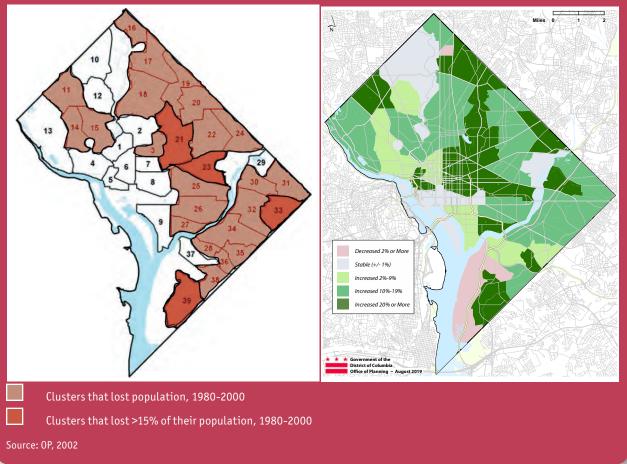
The largest component (77 percent) of in-migration from 2006 to 2017 consisted of young adults who tended to be white and college educated. These new residents shifted the demographic makeup in many neighborhoods in several ways. They held higher-wage jobs than many existing residents, and their incomes grew faster. These new residents also stayed in the District and started families. In 2006, married couples made up only 22 percent of households; since then, married couples represent almost half of the District's 31,000 new households. While fertility rates are down, including for single and teen mothers, the increase in married couples has resulted in a mini-baby boom, with the number of average births per year increasing from 7,700 in the early 2000s to over 9,500 in 2017. 203.3

Since 2006, recent migration patterns indicate the city has lost existing residents in certain types of households, including parents with children and blacks, although the overall population of Washington, DC is growing. Prince George's and Montgomery Counties in Maryland are, in order, the two largest destinations for those leaving the city. 203.4

Previous population decline, and now growth, has affected different parts of the city in different ways. Figure 2.1 illustrates changes in population by neighborhood cluster from 1980-2000 and 2000-2015. Between 1980-2000, the vast majority of population decline occurred east of 16th Street – areas east of the Anacostia River lost 44,000 residents – while many areas west of Rock Creek Park actually gained residents. As middle-income households moved away, poorer residents stayed behind, leaving the District with the largest concentration of poverty in the region and a sharper divide between rich and poor. This also resulted in a greater concentration of people with special needs, and places of disinvestment, with concomitant challenges in many communities. 203.5

Much of the population growth between 2000 and 2017 concentrated in central Washington neighborhoods, particularly those hit hard by the 1968 riots. The riots and their aftermath resulted in vacant and underutilized land in what subsequently became a desirable, central location. Accelerating demand to live in these neighborhoods has resulted in increased housing costs that threaten the ability of existing lower income households to remain. 203.6

Figure 2.1: Population Change by Neighborhood Cluster, 1980-2000 and 2000-2017 203.7

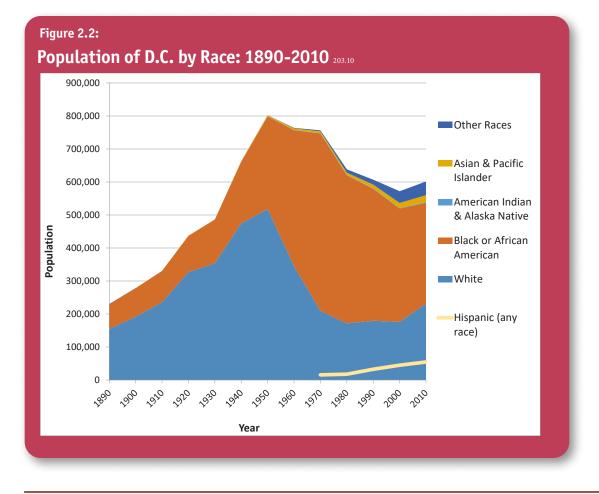


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Figure 2.2 illustrates changes to population in the District by race, over time. Unlike the experience of other major cities, the loss of population in Washington was not solely attributable to "white flight." In fact, between 1980 and 2000, black residents registered the largest decrease among the city's racial groups, dropping in population by almost 100,000, and this trend continued through 2010, with an additional decline of 38,000 to 310,379. While some black residents left the District for family ties and increased opportunities, the rising costs of living, especially housing costs, became a significant factor. Since 2010, the black population has stabilized and started to grow again, and now represents 46 percent of the total population. Compared to the rest of the District, the current black population is both younger (under 18) and older (over 64). Challenges persist, with black households, including single female household heads, on average earning 68 percent less than white households. While forecasted to increase numerically, the city's black population will remain below 50 percent of total population through 2025. 203.8

There have been steady increases in Hispanic and Asian populations in recent decades. Growth of Hispanic residents started in the 1980's with foreign migration primarily from countries like El Salvador. This has subsequently shifted to migration primarily from Mexico and Puerto Rico, along with net natural increases from residents. 203.9



While population loss after 1950 was significant, the decline in the number of households was much less dramatic. The number of households in the District declined by just 2 percent between 1980 and 2000, standing at 248,000 in 2000. Thus, population loss in the late 1900s was less a function of housing being abandoned and more a result of larger households being replaced by smaller households. In fact, the average household in Washington contained 2.16 persons in 2000, down from 2.72 in 1970. Middle-class families left the city in large numbers during this period and the number of school-aged children dropped dramatically. 203.11

The 2006 Plan accurately predicted household size falling through 2010, and then stabilizing. According to the US Census, the percentage of older residents is expected to increase as "baby-boomers" retire, and the percentage of foreign-born residents, particularly those of Hispanic origin, is expected to rise. The District is expected to continue to be a magnet for the region's young professionals and empty nesters. Its ability to attract and retain young households and families with children rests largely on improving the quality of public education and addressing basic issues like crime, provision of services, inventory of family-sized housing stock, and housing affordability. 203.12

Economic Changes 204

On the surface, Washington's economic picture is the envy of most cities. There are more jobs than residents, and nearly three times more jobs than households. Job growth, important for the city's economic vitality, has continued throughout this century, with 83,000 new jobs added since 2005 for a total of 798,000 jobs in 2015. Job growth in the professional services, education, and hospitality sectors has outpaced federal employment growth, helping diversify the city's economy beyond the federal government. Wages in the region are among the highest in the nation. ^{204.1}

Job growth has led to declining unemployment. After peaking above ten percent in 2011, unemployment dropped to 6.1 percent in 2016. The diversity of job growth has reduced unemployment across race, education levels, and geography. Yet the city's unemployment rate is relatively high, hovering between six and nine percent - consistently almost double the rate for the region. Unemployment rates in areas such as Far Southeast/Southwest are still four to five times higher than the regional rate, and disproportionately affect black residents. Yet many District residents do not have the skills to fill the white-collar jobs that drive the city's economy, and because the District is one of the region's major job centers and requires some "importing" of workers from the suburbs, more than 70 percent of the jobs in the District are filled by workers who live in Maryland and Virginia. This is essential to the District's economy: even if every DC resident in the labor force were employed in the city, we would still need almost 400,000 additional workers to fill the city's jobs. $_{\rm 204.2}$

This imbalance results in a number of problems. The most often cited problem is the District's inability to tax the incomes of the nearly 500,000 non-residents who commute to the city each day. This daily migration is also accompanied by traffic congestion, air quality problems, and millions of hours of lost productivity. 204.3

Perhaps the more profound problem is the regional income divide. As Figures 2.3 through 2.5 indicate, the District today is a city divided by income, education, and employment. The maps depict this regional pattern within the District, as well as the change the District has experienced since 2006. And, change must be carefully considered: while the neighborhoods of Central Washington have seen a recent decrease in the percentage of those without a college degree or living in poverty, this is attributed to the strong increase in a resident workforce with college degrees, not necessarily improvements for existing residents, so the regional divide persists. "Vision for Growing an Inclusive City" concluded that bridging the income divide was the single biggest challenge facing the District as it plans for its future, and now, with nearly 17 percent of residents living in poverty and the cost of living rising, that challenge remains. 204.4

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Figure 2.3: Unemployment in 2017 204.5

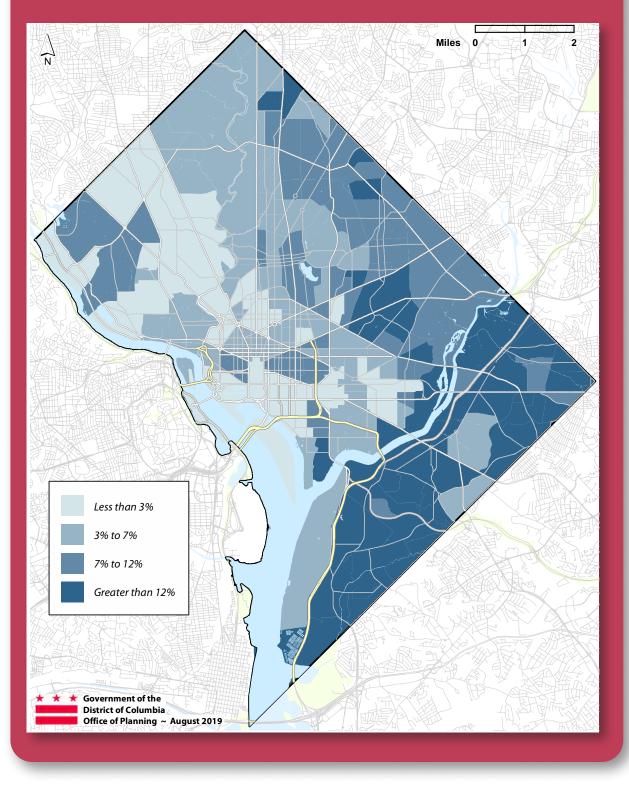


Figure 2.4: Persons 25+ Without College Degrees in 2017 204.6

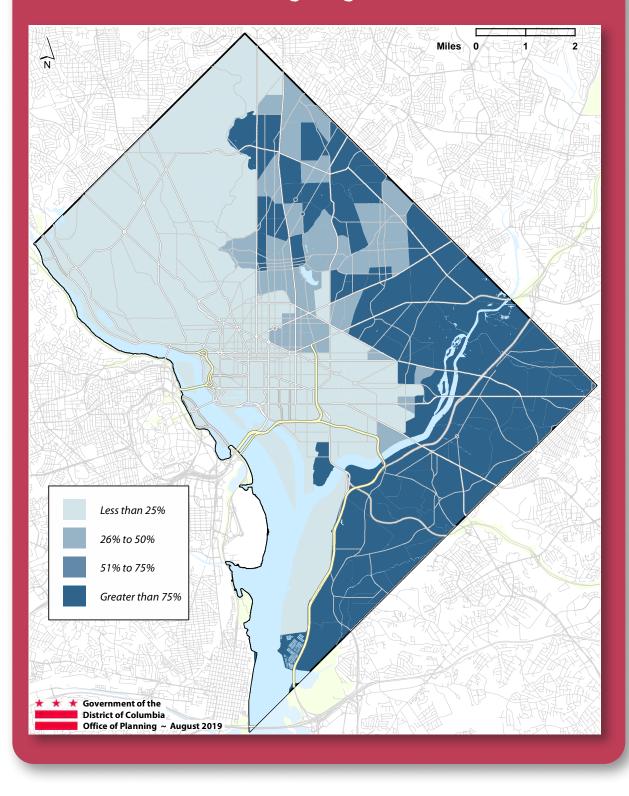
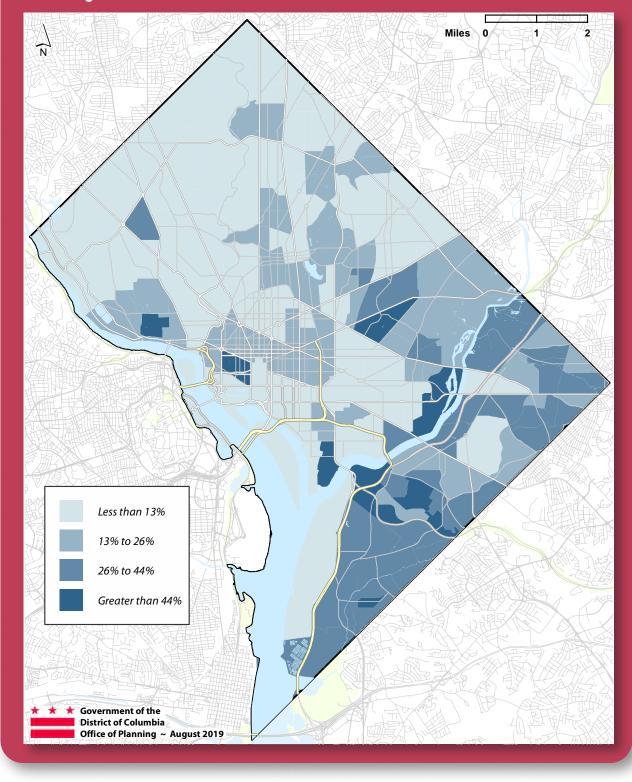


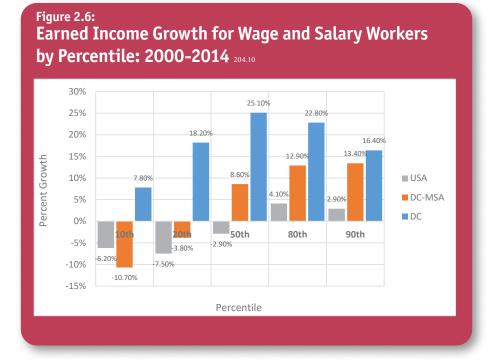
Figure 2.5: Poverty Rate in 2017 204.7



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Demographic tables throughout the Comprehensive Plan, including Figures 2.3, 2.4, and 2.5, use the most accurate, up-to-date Census and other data available. At the city-wide level, this may mean data from a single year of the American Community Survey (ACS) and the Annual Estimate of Population. Getting to a neighborhood level requires five years of ACS data. Unless otherwise stated, this data is labeled with the last year the data was collected but represents an average for the whole collection period. Readers should take this into consideration given the rapid rates of change for some neighborhoods. For the decennial census, students residing in the District on April 1, 2010 (census day) are counted as residents of the District rather than residents of their home state. Consequently, data on poverty, age, and other variables reflects student populations in census tracts containing (or adjacent to) universities. The District has accounted for these anomalies within the Comprehensive Plan, and should tailor its anti-poverty, economic development, and similar programs accordingly. ^{204.8}

While attracting residents earning higher-wage jobs reflects a strong economy, it is important to consider the resulting growth in income disparities. At the national and metropolitan levels, income from lower-wage jobs has decreased in real terms, while income for workers with higher wages has grown, as shown in Figure 2.6. In the District, the story is somewhat different: wage growth at the lower end improved but importantly has not kept pace with growth for higher wage workers. Growing income disparity is even greater when considering geographic, racial/ethnic, and gender dimensions. 204.9



From a regional perspective, the District's employment outlook is positive. Because Washington is the seat of the federal government, it has been insulated from the economic cycles that have affected other regions of the country. The city never had a large industrial base, so it was spared the largescale job losses experienced in cities like Baltimore and Philadelphia during the 1970s and 1980s. The District was not dependent on technology jobs, so it was spared the downturns affecting places like San Jose and Austin during the early 2000s. Even the downsizing of the federal government in the 1990s was accompanied by a rise in procurement spending that kept the Washington economy strong. The 2013 federal budget sequestration provides a recent example of the District's economic strength and diversity. Despite the sudden loss of 7,000 federal jobs, the city's population and total jobs continued to grow. 204.11

A factor in the city's economic growth is its taxes. During the 1980s and 1990s, the District's reputation in the region was high-taxing: the highest tax rates for sales, business franchise, and real property. Since the Control Board era, the District for the most part has resisted raising tax rates, lowered many of these rates, and from a tax perspective, become more economically competitive in the region. 204.12

Washington's economy is diversifying, which helps during slow federal growth; however, a period of significant and sustained decline in federal employment and procurement would challenge the city's ability to recover. Further diversifying the District's economy will make the city more resilient to this and other economic shocks. A key advantage to the federal presence is its highly educated and skilled workforce, which the private and non-profit sectors can tap as a mutual asset for growth. ^{204,13}

But it is hard to consider an economy truly resilient when it does not close the "skills gap" that exists between the needs of local employers and the abilities of many District residents. Future job growth is expected to be concentrated in the services sector, including the business, legal, engineering, management, educational, and social service fields. The Economic Development Element of this Plan emphasizes the importance of closing the skills gap by improving education and job training so that more District residents can fill jobs in these and all other professions and adapt to changing conditions. 204.14

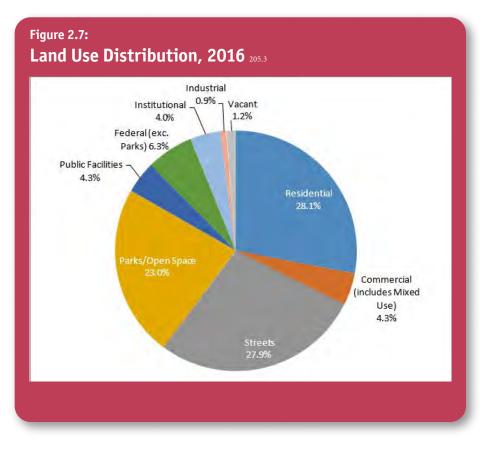
Since 2006, the increased demand and competition for housing from a growing number of higher-wage households was greater than anticipated and has made the District one of the most expensive cities to live in the country. Between 2011 and 2016, the cost of purchasing a home rose 50 percent, while renting costs rose 18 percent. Increasing rental housing costs make it difficult for lower or even moderate-income residents to live in the city. The absolute number of low-cost rental units (less than \$800/month) declined by half between 2003 and 2013, while the number of higher cost

units increased. Units with rents of \$1000 or less made up 59 percent of the total rental stock in 2002; in 2013 those units comprised only 34 percent of the total stock. The District now has a large percentage of high- and low-income households, with relatively few in the middle-income range – the "missing middle." Housing costs, along with income inequality, are perhaps the central challenges to maintain and grow an inclusive city ^{204,15}

Land Use Changes 205

In terms of land area, at 61 square miles Washington is not a large city. It is half the size of Denver or Philadelphia, and one-fifth the size of Dallas or San Diego. It is hemmed in by adjacent cities and states and cannot grow through annexation. In 2017, it had over 11,000 people per square mile. Moreover, federal lands comprise almost 40 percent of the land in the District, making land a precious and limited resource. ^{205,1}

Figure 2.7 shows how land in the District (including federal land), is currently used. About 28 percent of the city is developed with housing, and more than one quarter is developed with street rights-of-way. About 20 percent of the city's land area consists of permanent open space, including federally managed sites such as Rock Creek Park and the National Mall. About 465 acres of the city – or 1.2 percent of its land area – consists of vacant land. ^{205,2}



These statistics do not tell the full story of land use in the District. For over a century, building height has been regulated by the federal Height of Buildings Act of 1910 (Height Act). The Height Act limits building height through a street-width-to-height ratio, restricting the construction of buildings to a maximum height of 130 feet in most of the downtown areas and along major avenues. The Height Act gives the city a distinctive low visual profile. In 2014, following a joint federal-District study of the Height Act, Congress made modest amendments to address penthouse height and use. In addition, there are dozens of federal and local historic districts where capacity for growth is additionally governed. Development proposals must complement the historic district in context-sensitive ways. Many areas that are not "officially" historic also require careful consideration of development proposals to ensure compatibility. 205.4

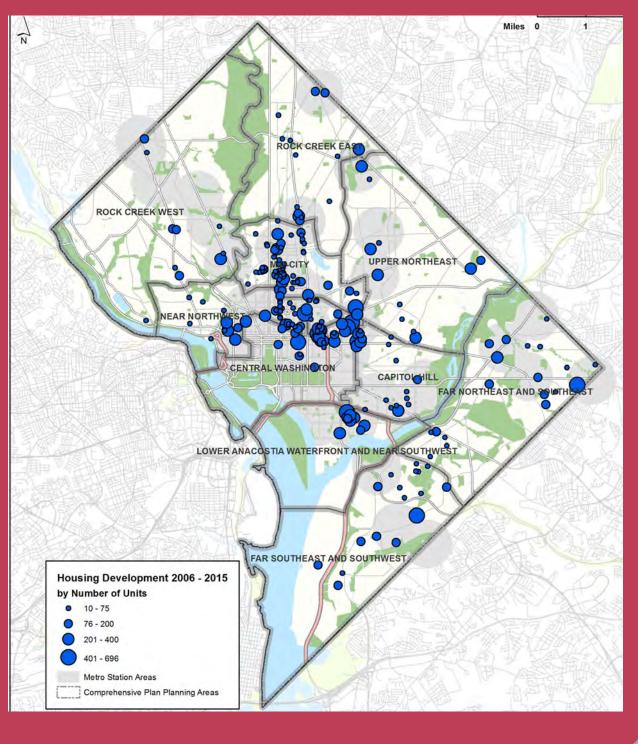
These regulations guide development, with substantial room for growth in the District of Columbia. Key opportunities include government lands, underused commercial and industrial sites, and vacant buildings that can be repurposed and/or redeveloped. Sites vary in scale from areas with significant acreage to smaller infill lots. Many opportunities for growth are located east of the Anacostia River. Together, these areas hold the potential for thousands of new units of housing and millions of square feet of office and retail space. 205.5

While there is substantial room for growth under current zoning, various non-regulatory factors restrict this capacity. In some areas, a real or perceived lack of services, amenities, and assets, such as transit, libraries, quality schools, grocery stores, or retail, discourages investment. In other areas, opportunities to develop above existing buildings, such as adding several stories of housing above an existing office or retail building along a commercial corridor, are intentionally deferred. In these cases, property owners wait until market conditions make redevelopment more financially lucrative. And, there are sites potentially suitable for additional development through an entitlements process (a Planned Unit Development) that instead are developed "matter-of-right" (to existing zoning standards), forgoing additional capacity. These factors, particularly to the extent they limit housing and affordable housing production or other desired uses, represent missed opportunities for the District to grow inclusively. ^{205,6}

Fitting such development into the fabric of a mature city creates a number of challenges. One is displacement, a threat that has become more real in the District as the cost of housing and other real estate has increased due to rising demand that has not been met with proportional supply. Displacement not only affects District residents – particularly those of lower income – it also affects businesses, non-profits, and municipal operations that may be displaced by rising rents and land prices. 205.7 Whether the issue is displacement, the siting of locally undesirable but necessary uses, parking impacts, or threats to neighborhood character and stability, the development or redevelopment of land creates tension in the District of Columbia. This tension will only mount as growth pressures increase, making it even more important to have sound land use policies, urban design processes, and development review procedures that mitigate the effects of the District's competing and conflicting goals. 205.8

Figure 2.8 depicts the location of residential development in the city between 2006 and 2015. Of the 28,955 units of housing added, 88 percent were within a half mile of a Metro station area, about 25 percent were located in Central Washington, and 15 percent were located in Near Northwest. The Mid-City and Rock Creek Park West areas each absorbed about 18 and three percent, respectively, of the District's housing growth. About 12 percent of the new housing units were located east of the Anacostia River in the Far Southeast/ Southwest and Far Northeast Southeast Planning Areas. However, some of this housing replaced units that were demolished, resulting in a smaller net increase. ^{205,9}

Figure 2.8: Housing Development Activity, 2006-2015 205.10



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Housing Cost Changes 206

The rising cost of housing is one of the most pressing and critical issues facing the District and the region. To achieve our goal of an inclusive city, we must meet the challenge of providing housing for a variety of household types, including families, the elderly, and the homeless; housing for owners and renters; housing for existing and new residents; workforce housing; and housing affordable at all income levels. Tied in with housing cost issues are deeper concerns about displacement, the impacts of gentrification, and long-term competitiveness. ^{206.1}

In the District, market rate housing costs have steadily climbed as demand has increased with population growth. Since the economic recovery began in 2010 through 2017, the median sales price of single-family homes and condominiums have increased 7.3 and 2.8 percent per year, respectively. Average rents have increased 3.8 percent per year. Cost increases are driven by several factors, including: the strong and growing economy; migration into the city; increasing length of residency; growth of high paying jobs; increasing educational attainment levels among newer residents (which correlates to income); and an increase in higher-income families having and raising children in the District. These factors have produced particularly strong demand for housing near Metro stations and for family housing with three or more bedrooms. 206.2

In general, increased demand has prompted rising rents for older housing units, conversions of rental units to ownership units, and demolition of older buildings for redevelopment. The result has been a reduced supply of less expensive housing and a lower availability of lower cost market rate, or "naturally occurring" affordable housing. The District's public housing stock is in a state of serious disrepair, and addressing these needs is further hampered by diminished federal funding. In addition, workforce housing to serve the needs of the District's teachers, nurses, police and fire personnel, and other essential workers must also be considered. 206.3

For many lower income households, increasing housing costs have become difficult to afford, in part because their income growth has not kept pace with increased costs. Most lower income residents are financially burdened by housing costs, which can lead to displacement from their neighborhood, or even the District. In addition, housing insecurity has negative impacts on household health, school performance, job access, and other indicators of wellbeing. Residents of color are a majority of lower-income households in the District and, therefore, face a disproportionate share of the problems caused by housing insecurity and displacement. ^{206,4}

Between 2006 and 2017, the supply of rental housing units expanded dramatically, while the supply of affordable units declined. Most of the new units were higher-cost, studio, one-, and two-bedroom apartments affordable

to households earning at and above median income. During this period, due to new construction and rising rents of existing supply, the total supply of rental units affordable only to those households earning more than 60 percent of the Median Family Income (MFI) increased by almost 44,765. In contrast, the total supply of rental units affordable to households earning less than 50 percent of the MFI declined by approximately 22,000 units, from 72,000 units in 2006 to 50,000 in 2017. At the same time, there was a modest gain of 2,500 units affordable to households with incomes between 50 percent and 60 percent of the MFI. Almost 7,000 of the District's roughly 8,000 public housing units are currently in critical condition or worse, which may lead to a reduction in affordable housing stock for lower-income households. 206.5

Rising housing costs and decreasing availability of affordable housing are causing more households to be severely burdened, which means their housing costs consume more than 50 percent of household income. In 2017, more than 42,800 households were severely burdened by rental housing costs, while another 32,600 rental households were burdened by housing costs consuming 30 to 50 percent of their income. These households must reduce expenditures on other necessities, such as food and health care. Further, households that are severely burdened by housing costs must often choose between a home that is in a desirable location – close to their community, jobs and/or services – and a home that is more affordable. 206.6

By comparison, the number of households burdened by ownership costs significantly decreased between 2006 and 2017. This decline is attributable to several factors, including older, lower-income households selling their homes to the growing number of younger households starting families, as well as high rates of foreclosure during the financial crisis that started in 2008. Lower- and middle-income households wishing to buy a home now have fewer options. This phenomenon may reinforce racial patterns of settlement in the District and/or create additional market pressure on the housing prices in eastern neighborhoods. ^{206,7}

Increasing costs and a decreasing supply of naturally occurring affordable housing are affecting the types of households that are staying in the District. Figure 2.9 illustrates the change in households by income in the District between 2006 and 2017. The number of extremely low-income households increased by less than 500 households even as more of these households became severely burdened by rental housing costs. There was a notable decline in low- and moderate-income households as many residents sold or lost their homes, resulting in a decrease of more than 15,600 households in this income range. Finally, Figure 2.9 shows that the number of higher-income households increased by almost 37,600. This data highlights the importance of preserving and developing housing affordable to low- and extremely low-income households. ^{206.8}

Figure 2.9: Net Change in the Number of District Households by MFI: 2006-2017 206.9

MFI	≤30%	30%-50%	50%-80%	80%-100%	100%-120%	>120%	Total		
Households	447*	(7,695)	(7,919)	5,436	3,145*	37,608	31,022		
Source: US Census ACS PUMS 1-Year Data, DC Office of Planning.									
*Change not statistically significant at the 90 percent confidence interval.									

These patterns of household change have affected the District's neighborhoods in varied ways. For example, the greatest decline in the number of lower income households was in Capitol Hill and Upper Northeast, whereas the greatest increase in higher income households was in Central Washington. Affordable housing is unevenly distributed across the District. The Rock Creek West area has fewer than 500 subsidized affordable units, while areas east of the Anacostia River provide over 25,000. While the need for affordable housing, particularly deeply affordable housing for low- and extremely low-income households, affects the city, discrete challenges vary at the neighborhood level. 206.10

The District has taken enormous strides toward strengthening its affordable housing infrastructure. The city has some of the strongest tenant protection provisions in the country; the highest level, per capita, for affordable housing investment; the lowest residential real property tax rate in the region; and provides additional discounts for seniors and renters. It has innovative programs such as tax abatements to stimulate the development of workforce housing. From 2015 to 2018, the District of Columbia has successfully delivered, through subsidy or inclusionary zoning, 5352 new or preserved affordable housing units. The District is also committed to addressing temporary or permanent displacement of residents with programs and policies tailored to community needs. For example, the principles for the District's New Communities Initiative include one-to-one replacement of existing affordable housing, Build First, mixed-income housing, and opportunities for residents to return and/or stay in the community. Still, more systemic work is needed to address the impacts of rapid population growth in the District and across a region that is broadly lacking sufficient affordable housing. 206.11

Mobility and Access Changes 207

The Washington region faces significant transportation challenges. While road congestion remains a top issue for many in the region, District residents, commuters, and visitors also experience issues with transit capacity and reliability, as buses, railcars, and station platforms are crowded at peak use. The safety and reliability of the region's transportation system – from Metrorail to pedestrian and cyclist networks – are continuing



Parts of the Metrorail system are approaching capacity.

concerns. Funding to maintain the existing transportation system, let alone expand the system to meet increased demand, is severely constrained. 207.1

Regionally, areas close to transit have become highly desirable as households and employers attempt to reduce travel time and costs. Between 2015 and 2030, approximately 78 percent of all development in the District will be within a half mile of a Metro station. Regional and District efforts support directing growth toward transit-rich locations, taking advantage of existing infrastructure and maximizing transportation efficiencies. Looking forward, increased investment in bus and rail transit, pedestrian and bicycle facilities, and other modes of travel, will be needed to sustain population and economic growth and ensure a resilient, robust network increasing accessibility for all. 207.2

The District already has one of the most extensive transit systems in the country and ranks second only to New York in the percentage of residents using transit to go to work. The Metrorail and bus systems complement the city's radial roadway system and maximize the movement of people across the city. While Metro remains one of the safest and cost-effective means of travel in the region, years of deferred maintenance have led to problems with safety and reliability requiring sustained investment and new regional approaches to funding. In addition, parts of the Metrorail system are approaching capacity. Many of those who need transit the most, including low-income households and those with special needs, do not have equitable access to transportation options. Transit often does not connect District residents to jobs in the suburbs, and it may be expensive or difficult to access. 207.3

At the same time, the District's multi-modal transportation network has diversified and seen significant improvement, such as protected bicycle lanes, wider sidewalks, signalized crosswalks, the DC Circulator system, the streetcar, and prioritized bus corridors. A good example is the Capital Bikeshare system. Since its creation in 2010, the bikeshare system has grown to almost 450 stations and 3,700 bikes across the District and the region. The District also supported infrastructure changes and other strategies to make pedestrian and bicycle environments safer and more accessible. For example, District residents commuting to work by biking or walking increased by 70 percent to over 66,400 commuters from 2006 to 2017. Car-sharing, ridehailing, and other new approaches provide additional travel options but also present challenges. 207.4

The District's Sustainable DC goals have set targets to reduce the share of commuter trips made by car to 25 percent by 2032, while increasing transit mode share to 50 percent and walking and cycling to 25 percent. To further these goals, additional investments will have to be made in high capacity transit improvements, an expanded network of bicycle and pedestrian

infrastructure, and rethinking of road and curb space. Access to the multimodal transportation network must be equitable across the District. 207.5

Technological innovations will continue to disrupt how we get around and receive goods and services. Increasingly, people have the technology and services to work from multiple locations, changing commute patterns and workspaces. Private sector firms offering transportation services such as car-sharing, ride-hailing, or scooters have proliferated in the District. Delivery firms are exploring new ways to deliver goods, including sidewalk drones. While new technology platforms can increase convenience for some, research suggests a correlation between ride-hailing and reduced public transit use, increased vehicle miles travelled, and increase traffic injuries and fatalities. Serious questions remain about the impact of widespread adoption of autonomous vehicles. These changes result from a demand for alternative transportation modalities to improve mobility, and public policy and regulation are necessary to ensure their implementation is safe, inclusive, accessible, and sustainable. 207.6

Environmental Changes 208

The District of Columbia was sited to take advantage of the unique environment and landscape at the confluence of the Anacostia and Potomac Rivers. Urbanization over the last 200 years has compromised almost every aspect of this environment, leaving our rivers and streams polluted, air quality that struggles to meet federal standards, and a city where heavy tree cover remains inadequate. On a global level, issues such as greenhouse gas emissions, climate change, sea-level rise, and deforestation may have even more far-reaching impacts on the way we live and work in the future. There is a greater potential for increased rainfall and flooding from more damaging storms in the District. Extreme heat conditions are more likely, exacerbated by the city's urban heat-island effect, that disproportionately affect vulnerable residents. ^{208.1}

This Plan incorporates and builds upon the 2018 Sustainable DC 2.0 plan and 2016 Climate Ready DC plan. Sustainable DC makes a conscious effort to promote natural resource conservation and environmental sustainability. It incorporates measurable goals such as reducing citywide energy consumption by 50 percent, sending zero solid waste to landfills, reducing total waste generation by 15 percent, and making the Anacostia River fishable and swimmable by 2025. These goals can only be achieved through fundamental changes in the way we live and the way we build. Green building and "low impact development" must be the norm rather than the exception. The concept of sustainability is an important theme for the Comprehensive Plan, including the renewal of brownfield sites, stormwater runoff mitigation, increased use of distributed energy resources like residential solar, and a renewed commitment to environmental justice in all neighborhoods of the city. Doing so requires a racially equitable approach that ensures the District's ecosystems are inclusive and interconnected, and strives to evenly distribute opportunities, benefits, and safeguards throughout the city. More specifically, this means ensuring that communities of color are not saturated with landfills, hazardous waste sites, and other industrial facilities. Climate Ready DC identifies the impacts a changing climate will have upon the District; the risks to infrastructure, public facilities, and neighborhoods; and the actions to take now and in the future to prepare. ^{208,2}

The challenge and opportunity going forward is to identify and implement new technologies, designs, and urban development that accommodate population and economic growth, better protect natural resources, minimize future environmental degradation, reduce greenhouse gases, and prepare the city for a changing climate. 208.3

Technology Changes 209

Technology is rapidly changing how we live, work, and travel and it will continue to shape the District in unexpected ways. Since the 1980s, telecommuting has changed travel patterns, on-line purchases have changed retailing, and e-mail has changed the way business and government operate. For instance, working from home is one of the fastest growing ways employees "commute" to work. Mobile computing, self-driving cars, new construction methods, green technology and other advances will have new and unexpected impacts on our lifestyles, how the city makes development decisions, and the shape of future growth. ^{209,1}

It is hard to fathom how advancements yet to be made will affect us in the future. The only thing that is certain is that technology will change our lives, with potentially profound spatial impacts. Such change may have more of an impact on Washington than it might on other cities, given the city's role as a global and intellectual capital. The city is already a center of the information economy and has demonstrated a strong pull for innovators from around the country and the world. In Washington, economic activity is becoming less reliant on a place-based office, with implications for the social spaces where people meet. In addition, the potential decline in demand for high-value office space has fiscal implications for commercial real estate. 209.2

The District should also ensure its plan for preserving and improving its neighborhoods is evidence-based and data-driven. The District should take advantage of any technologies it possesses that inform public policy. Risk terrain modeling, for example, is a predictive tool that explores the relationship between public safety and certain environmental features, including parks, transportation infrastructure, vacant or blighted properties, and businesses. The model allows the District to identify environmental features that impact public safety, coordinate a targeted response to address those features, and evaluate the success of that response. 209.3

One aspect of technological change is its potential to deepen economic divides in the city. In 2004, the National Poverty Center reported that 85 percent of the nation's white children had access to a home computer, compared to just 40 percent of black and Latino children. Recent Census data suggests the District has made significant progress in this area, but gaps remain as effectively 100 percent of white children and 89 percent of black children have access to a computer. Access to technology will be an important part of improving the well-being of District residents in the future. This will place a premium on education and training, and an emphasis on providing residents with the skills to use technology and access information. 209.4

Finally, rapid advances in technology present new opportunities for how the District identifies problems and tests solutions. The ability to collect and analyze large amounts of data from a variety of sources goes well beyond traditional Census data. Many aspects of urban life are now tracked by public or private entities. From bike-share station usage to the deployment of health inspectors based on environmental conditions, a new era of "smart cities" is rising. With it comes an opportunity to monitor, predict, and respond quickly to new problems, but it also presents new challenges to information security and maintaining the privacy of our citizenry. A key challenge is to adapt technology to our historic urban city rather than force the city to adapt to technology. 209.5

Security Changes 210

Security is not a new concern or challenge in the District of Columbia. As a capital city, we are used to a heightened level of risk and the visibility of extra security personnel. The city's public spaces, such as the National Mall, routinely attract large crowds for events and First Amendment gatherings that require support. As an urban center, we also face daily concerns about personal safety and crime. But security concerns have taken on a new meaning since 9/11. The attacks on Washington and New York changed the psyche of our city and ushered in an uncertainty about the future that still persists. 210.1

Since 9/11, we have sought to balance beauty, access, and openness with the need to protect our landmarks, government buildings, officials, workers, residents, and visitors from danger. The federal government has strived to discourage acts of terrorism through the design and management of public spaces and buildings, including the closing of some District streets and retrofitting of major landmarks. Security issues have been cited in decisions to shift the federal workforce to more remote locations. They also have resulted in design standards for federally leased space that will reverberate through the regional office market for many years to come. ^{210.2}

Washington's security issues are ongoing and evolving. Indeed, cyberattacks affecting critical infrastructure and services have emerged as a new threat. As more of the population moves close to our waterways, there are particular security concerns, including access for first responders in areas where public infrastructure is still being improved. The need to balance our desire for safety, accessibility, and aesthetics, while maintaining an open, democratic, and resilient society is one of the important challenges that this plan seeks to address by introducing approaches to prepare for, and recover from, events regardless of cause. 210.3

Fiscal Changes 211

When the District received limited Home Rule in 1973, it incurred a variety of cost burdens, including the responsibility for providing many services that are typically provided by states. Revenue restrictions also were imposed, including the inability to impose a "commuter tax" on income earned in the city by non-residents. Moreover, a large amount of land in the city is owned by the federal government and therefore not subject to property tax. Indeed, 61 percent of all property in the District is non-taxable, and more than two-thirds of the income earned in the District cannot be locally taxed. These burdens and restrictions are estimated to cost the District well over \$1 billion per year. 211.1

A well-publicized target of adding 100,000 residents to the city's population, set in 2003 as a way to boost the number of taxpaying residents, has been largely successful. Economic and population growth has dramatically expanded our tax revenues, and fiscal discipline has improved the District's credit rating and funded a \$1.3 billion reserve. Growth and an expanded tax base have enabled the District to direct additional resources toward vulnerable populations in need of affordable housing, workforce development, and human services. The District has also worked to increase the income of current residents, which can in turn lift families out of poverty, generate tax revenues, and reduce social-service costs. A key component of improving the city's fiscal health as well as the economic prosperity of its residents, is to increase the number of employed residents and thus the economic and tax base of the city. 211.2

Fortunately, economic growth in the city has helped improve the District's fiscal standing. In the 1990s, the District was on the brink of bankruptcy. The situation has improved markedly, as a result of actions taken by the Government of the District of Columbia. Despite the optimistic forecasts of the Comprehensive Plan, there is no guarantee that this good fortune will last. Prudent action and fiscal responsibility are needed to avoid problems should future downturns take place. 211.3

The District's fiscal situation will continue to influence land-use and economic-development choices. It is currently driving the redevelopment of large former federal sites with tax-generating uses, creation of new retail centers that reduce the "leakage" of sales-tax dollars to the suburbs, and mixed-use development downtown and elsewhere. Such efforts mitigate fiscal challenges, but do not eliminate them. The most effective strategies will combine revenue-raising strategies like population and job growth with strategies investing in people – like breaking the cycle of poverty in District neighborhoods. 211.4

A key consideration is that the city has benefitted from increasing revenues as a result of growth, while not experiencing increasing costs to the same degree. Between 2006 and 2016, the city had the ability to grow into its under-utilized infrastructure, such as schools, transit and electrical networks, that had largely been developed and paid for prior to the 1980s. The same cannot necessarily be counted on going forward. Already, significant reinvestment was required to resolve long-deferred maintenance and create high-value assets such as DC Public Schools and DC Public Libraries. These investments have left the District with a relatively high debt-per-capita level. Moving forward, the District must creatively address infrastructure financing to maintain and build capacity for anticipated future growth. 211.5

Global City, Local City 212

One of the most obvious forces influencing planning in the District is the city's dual role as a world capital and a residential community. There is the Washington of lore, the city of inaugural parades, museums, and monuments – the place that school textbooks describe as "belonging to all of America." And there is the city most of us know, comprised of neighborhoods, shopping districts, schools, corner stores, churches, and parks. Even the Comprehensive Plan itself is divided into District and Federal Elements, suggesting that federal interests may not always align with the goals of the city's residents and businesses. ^{212,1}

The tension between Washington's global and local roles plays out in a number of ways. Foremost, our citizenry seeks an equal voice in the federal system through statehood, supported by 86 percent of the District's voters in 2016. Conflicts around fiscal issues and security have already been noted. Issues such as embassy siting, plans for federal lands, funding for Metrorail, and Congressional oversight on local land-use and public-facility decisions have been the focus of much debate and discussion in the past. The District itself seems partitioned at times, with the federal government functioning as a "city within the city." ^{212.2}

Yet in spite of these conflicts, the "federal presence" remains Washington's most prominent and visible asset. It provides tens of thousands of jobs



The "federal presence" remains Washington's most prominent and visible asset.

for District residents, attracts millions of visitors to the city, and sustains cultural institutions that would not otherwise be possible. This influx of workers and visitors contributes to a doubling of the District's daytime population. It makes Washington an international and multi-cultural center, second only to New York on the eastern seaboard. The federal presence requires that our plans take a broader perspective than the metropolitan region and approach these tensions between global and local functions with a sense of shared stewardship that benefits all. 212.3

The District's role in the world economy has become increasingly important during the past 60 years. In the early 2000s, the Association of Foreign Investors in Real Estate ranked Washington as the top city in the world for foreign investment for three consecutive years. Foreign investment still plays an important role in many of the District's revitalization projects. In addition, the Washington region is one of the leading gateways for immigration into the United States. We are home to such institutions as the World Bank and International Monetary Fund. Our emergence as a global center has implications for our communication systems, our transportation and infrastructure needs, our cultural life, and our real estate and development markets. ^{212.4}

These changes create vast potential for increased prosperity. But they also create the threat of disruption and a changing identity for many parts of the city. City plans must clearly articulate the values to be preserved and the people and places to be protected as we contemplate where we as a city hope to be in 25 years and beyond. 212.5

The city's visibility is an opportunity to exhibit global leadership. The District has already established its leadership in resilience, sustainability, and inclusion through partnerships and participation in initiatives such as the Paris Climate Agreement and the Compact of Mayors, and as the first global city to achieve Leadership in Energy and Environmental Design (LEED) Platinum status. 212.6

Planning for Resilience and Equity 213

The second Plan amendment cycle incorporates resilience and equity as new cross-cutting themes through which to plan for the District's future, referencing the 2019 Resilient DC plan and other related documents. ^{213,1}

Resilience in the District is defined as the capacity to thrive amidst challenging conditions by preparing and planning to absorb, recover, and more successfully adapt to adverse events. Resilience planning recognizes the volatility of the forces driving change. Ideally, we want to capitalize on positive impacts, and diminish negative impacts of the forces driving change. ^{213,2}

Considering shocks and stresses helps one to understand the District's vulnerabilities. Shocks are sudden, acute disasters like storms, flooding, cyber-attacks, or economic crises, such as the 2008 Great Recession. Stresses are "slow-burning disasters" that weaken the city every day and are magnified by shocks: these include poverty, trauma, housing insecurity, and stressed transportation systems. ^{213,3}

The District's resilience goals focus on inclusive growth that benefits all residents, preparing for the impacts of climate change, and embracing advances in technology while minimizing the negative impacts of change. Ensuring that every neighborhood is safe and our residents are healthy is one way to have a more resilient city. Being more resilient strengthens our collective capacity to thrive in the face of shocks and stresses. Building resilience is about addressing everyday stresses, which not only makes our city more inclusive, but enables the District to recover more quickly from catastrophic events. Incorporating resilience into the Comprehensive Plan is critical to achieve our goals. ²¹³⁴

As an example, the stress of poverty, combined with substantial population growth, has created a housing affordability crisis that must be addressed. The need for more housing, and more affordable housing, has become an important policy goal that, if addressed and achieved, will help the city be more resilient. ^{213.5}

The District seeks to create and support an equitable and inclusive city. Like resilience, equity is both an outcome and a process. Equity exists where all people share equal rights, access, choice, opportunities, and outcomes, regardless of characteristics such as race, class, or gender. Equity is achieved by targeted actions and investments to meet residents where they are, to create equitable opportunities. Equity is not the same as equality. ^{213.6}

Equitable development is a participatory approach for meeting the needs of underserved communities through policies, programs and/or practices that reduce and ultimately eliminate disparities while fostering places that are healthy and vibrant. Equitable development holistically considers land-use, transportation, housing, environmental, and cultural conditions, and creates access to education, services, health care, technology, workforce development, and employment opportunities. As the District grows and changes, it must do so in a way that encourages choice, not displacement, and builds the capacity of vulnerable, marginalized, and low-income communities to fully and substantively participate in decision-making processes and share in the benefits of the growth, while not unduly bearing its negative impacts. 213.7

The District must also commit to normalizing conversations about race and operationalizing strategies for advancing racial equity. Racial equity is defined as the moment when "race can no longer be used to predict life outcomes and outcomes for all groups are improved." ^{213.8} Today, the continued strength of the Washington economy, coupled with transportation and environmental limits to regional expansion, suggest that the city will continue to grow and capture a larger share of the region's growth in the future than it has in the past. As an outcome, the District achieves racial equity when race no longer determines one's socioeconomic outcomes; when everyone has what they need to thrive, no matter where they live or their socioeconomic status; and when racial divides no longer exist between people of color and their white counterparts. As a process, we apply a racial equity lens when those most impacted by structural racism are meaningfully involved in the creation and implementation of the institutional policies and practices that impact their lives, particularly people of color. Applying this lens also reflects the targeted support to communities of color through policies and programs that are aimed at centering – focusing on their needs and barriers to participate and make informed decisions – and eliminating racial divides, all while taking into account historical trauma and racism. ^{213,9}

The District's policies and investments should reflect a commitment to eliminating racial inequities. Addressing issues of equity in transportation, housing, employment, income, asset building, geographical change, and socioeconomic outcomes through a racial equity lens will allow the District to address systemic and underlying drivers of racial inequities. ^{213,10}

Looking Forward: Growth Forecasts 214

The forces driving change described in the previous sections suggest a different future for the District of Columbia than was imagined when the 1984 Comprehensive Plan was drafted. The 1984 Plan sought to prepare the city and neighborhoods for a period of long-term population and economic decline. Even the Ward Plans prepared during the early 1990s focused on preventing neighborhood decline and unwanted intrusions. In 2006, the new Comprehensive Plan responded to a different outlook: it anticipated growth. Since then, the District has experienced rapid growth, even as the nation recovered from a major recession. Today, the continued strength of the Washington economy, coupled with transportation and environmental limits to regional expansion, suggest that the city will continue to grow and capture a larger share of the region's growth in the future than it has in the past. This assumption is bolstered by an unprecedented amount of development in the "pipeline" and joint federal/District proposals for federal land transfers. 214.1

Unlike revenue forecasts that often have conservative growth estimates to ensure fiscal responsibility, more optimistic growth assumptions are appropriate in the context of the Comprehensive Plan to ensure adequate provision for future infrastructure, housing, and other development needs. At the same time, a wide array of risk factors is considered that could affect future growth. ^{214,2}

The growth forecasts used in this Comprehensive Plan are driven by three factors: land supply, demand, and regional growth projections. Unless

otherwise noted, values were prepared in 2015-16 by the Office of Planning. Each of these is described below. 214.3

Land Supply 215

Land supply in the District of Columbia includes "pipeline" sites, vacant infill sites, underutilized sites, large sites, and other sites. These categories are mutually exclusive, meaning there is no double counting between them. ^{215.1}

Pipeline sites are sites where specific development projects are already planned or under construction. Such sites comprise over 1,300 acres in the District. They represent 60,000 housing units and about 42 million square feet of non-residential space. The degree of certainty that these projects will be built by 2030 is relatively high. ^{215.2}

In 2013, the District undertook a comprehensive analysis of land-use capacity as part of its joint study of the Height of Buildings Act with the National Capital Planning Commission. The analysis looked at the unused potential capacity from the development of privately owned vacant and underutilized sites. Vacant infill sites comprise about 505 acres in the District and are not associated with any particular project or proposal. They are generally less than ten acres and include a mix of privately-owned properties and publicly owned sites. Some 426 acres of this land are residentially zoned, including about 121 acres of multi-family zoned land, and 306 acres of land zoned for single family and rowhouses. About 53 vacant acres are commercially zoned and 23 vacant acres are industrially zoned. While vacant lots occur in all parts of the city, about 30 percent of the city's vacant land is located east of the Anacostia River. ^{215,3}

Underutilized sites comprise about 849 acres. For the purposes of the Comprehensive Plan, these are defined as privately owned properties zoned for either multi-family residential, commercial, or industrial uses where the property improvements represent less than 30 percent of the potential built capacity under the Comprehensive Plan's land-use designations and zoning. An example is a one-story storefront on a property where four or more stories are permitted. This does not necessarily mean these uses should be displaced – it simply means the private market will create pressure to replace them over time. The underutilized sites tend to be clustered along mixed-use corridor streets such as Wisconsin, Connecticut, Georgia, Martin Luther King Jr, Nannie Helen Burroughs, and New York Avenues, and Benning Road. 215.4

Large sites in the District include about a dozen properties or clusters of adjoining properties, with the potential for reuse during the next 20 years. They range in size from 25 acres to over 300 acres. They include sites that already contain extensive development, like DC Village and Reservation 13, and sites that are largely vacant, such as Poplar Point and the McMillan



Parks, Recreation and Open Space

Reservoir Sand Filtration site. These sites hold many possibilities for the future, from large mixed-use communities to new parks and open spaces, public facilities, and infrastructure. In total, the large sites represent about 1,500 acres. Some have already been master-planned for new uses; the future of other sites has yet to be determined. Some are federally owned, and some are owned by the District. The Office of Planning estimates that federally owned sites will account for less than 10 percent of the District's job and household growth through 2025. ^{215.5}

There are many other sites in the District where development could occur. Despite an overall decrease in the number of vacant buildings, some of these buildings can be renovated and others are likely to be demolished and replaced. There are also freeways and railyards where development could occur in the air rights above the existing uses. There are at least four aging housing projects that have been identified as possible "new communities." ^{215.6}

Table 2.1 summarizes vacant and underutilized commercial land within the District and provides an estimate of potential additional development that these lands could accommodate based on existing zoning. ^{215.7}

Table 2.1:

Potential Additional Development on Vacant and Underutilized Lands Citywide 215.8

			l			
Land Use	Acres	Residential Units	Units	Non-Residential*	PDR Non- Residential*	
Vacant Sites	505	9,100	4,200	9	4	
Underutilized Sites	849	14,400	33,100	25	23	
Sub-Total	1,354	23,500	37,300	34	27	
Total			60,800		61	
* Millions of Square Feet Source: Office of Planning, 2017						

The Cooperative Forecasts 216

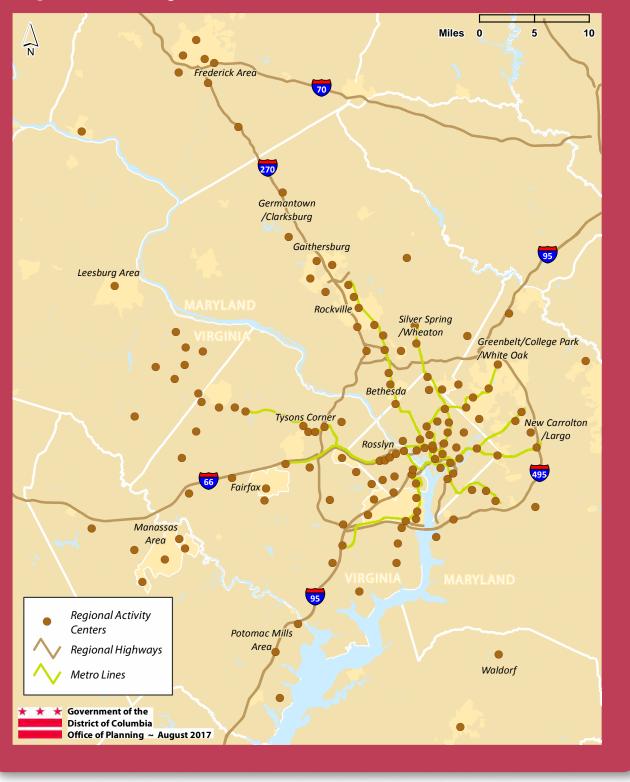
The Metropolitan Washington Council of Governments (MWCOG) coordinates socio-economic projections for the Washington region. These projections include households, population, and jobs and are expressed in five-year intervals, currently to 2045. Projections are made for the region as a whole and for each of its 23 jurisdictions. They take into account national economic trends, local demographics, and the local plans and policies of the region's cities and counties. As part of this effort, the District develops a jurisdiction-level forecast and works with MWCOG to reconcile and balance the forecast with other jurisdictions. 216.1

At the regional level, the projections have been relatively accurate since the forecasting program began in 1975. Actual growth during the last 40 years has tracked closely with what the forecasts predicted. ^{216,2}

In 2016, the MWCOG board approved projections showing the region would add 1.4 million jobs between 2015 and 2045. The projections further show an addition of 640,000 households and 1.5 million residents during this time period. About 29 percent of this growth is expected to occur in "outer" suburbs such as Loudoun, Frederick, and Prince William Counties, a significant decrease from the 43 percent share that was forecasted in 2005. The "inner" suburbs of Fairfax, Montgomery, and Prince George's Counties are expected to maintain their share of growth at about 41 percent. The most significant change between the 2006 and 2015 MWCOG forecast is the share of growth in the central jurisdictions of the District, Arlington County, and Alexandria, which has doubled from 15 to 30 percent. The shift in growth from the outer suburbs to the region's core is healthy land use. ^{216.3}

Figure 2.10 indicates the location of regional activity centers in the Washington Metropolitan Area. Updated centers were identified cooperatively by jurisdictions in the MWCOG area in 2012. They are intended to provide an organizing framework for directing regional job and housing growth, as articulated in Region Forward, MWCOG's planning compact. This compact sets goals to guide growth toward the centers, including 75 percent of commercial construction and 50 percent of new households. As Figure 2.10 indicates, some of the clusters are more than 40 miles from the District and are larger in land area than all of Central Washington. Since 2006, progress has been made toward these goals. MWCOG estimates that 76 percent of job growth and 65 percent of household growth will occur in the centers. This suggests that urban sprawl and related congestion can be minimized. Expanded coordination in land use and transportation planning among the region's cities and counties will be essential to keep the region sustainable. ^{216,4}

Figure 2.10: Regional Activity Clusters 216.5



THE COMPREHENSIVE PLAN FOR THE NATIONAL CAPITAL DISTRICT ELEMENTS EFFECTIVE FROM AUGUST 21, 2021

Projected Growth, 2015-2045 217

The District's growth projections are based on a combination of the regional forecasts, approved and planned development, and land supply estimates. These projections anticipate a greater pace of growth and increased household size than was used in 2006. While many factors may influence these projections, particularly in the out-years, they are intended to ensure that the District, through the Comprehensive Plan, is adequately preparing today for future growth. Table 2.2 provides a summary. 217.1



The District's growth projections are based on a combination of the regional forecasts, approved and planned development, and land supply estimates.

Table 2.2:

Population, Household and Job Forecasts, 2015-2045 217.2

	2015	2020	2025	2030	2035	2040	2045
Households	297,100	319,300	341,000	362,500	380,600	396,200	411,900
Population	672,200	729,500	787,100	842,200	893,900	940,700	987,200
Employment	798,300	846,300	895,100	937,900	978,200	1,011,800	1,045,400
Jobs/Housing Ratio	2.69	2.65	2.62	2.59	2.57	2.55	2.54
Avg DC Household Size	2.11	2.13	2.16	2.18	2.21	2.24	2.27

Because the Census is only taken every 10 years, estimates of population and household growth begin with the 2010 Census as the base, then adjust this using the Census's Annual Estimates of Population and the American Community Survey. Since 2005, these sources have closely matched the District's own population forecasts. 217.3

The Comprehensive Plan's household and population forecasts use a supply-side method, which relies on the construction of new square footage of non-residential space and residential units. This newly built space reflects the capacity to absorb net new job and household demand. The Plan's forecasts begin by tracking the number of housing units in larger new developments as they progress from conceptual plan to completion. Occupancy rates and average household size by building type are applied to each development to estimate the increase in households and the population increase from migration. Net natural increase (births minus deaths) is then added to the population numbers to reflect growth from within the District. Using this method, recent growth is reviewed and five-year growth forecasts through 2030 are provided, as noted in Table 2.2 and described below. 217.4

2

Between 2010 and 2015, the District added approximately 30,000 households and the population increased by 70,000. This matched changes in the housing supply from new construction, subdivision of larger units into a greater number of smaller units, and decreases in vacancy to historic lows. 217.5

The 2015-2020 growth increment consists of actual projects that are now under construction plus a portion of planned projects expected to start construction and reach completion by 2020. The largest share of these projects are rental buildings that will increase the percentage of rental households as a share of the District's overall households. Rental buildings are the largest share of these projects, and that will increase rental households as a share of the District's overall households. This growth will result in a net gain of about 22,000 households and is expected to increase the city's population to almost 730,000 by the 2020 census. This assumes that household size will start to increase from 2.11 to 2.13. 217.6

Growth forecasts for 2020-2025 are based on specific projects that have received a pre-development approval and portions of projects still in more conceptual stages. About 22,000 households are expected to be added during this period, bringing the city's population to 787,00 by 2025. 217.7

From 2025 to 2030, the remaining projects that today are in the early conceptual stages of pre-development are expected to deliver and be occupied. During this interval the forecast expects the city to grow by over 21,000 households and 55,000 residents for a total of over 362,000 households and 842,000 residents. ^{217.8}

From 2020 to 2035, a significant portion of the District's growth is expected to occur on the large sites described earlier in this Element, contributing 14,000 households and 23,000 people. These large sites have significant capacity, but also significant planning and infrastructure needs. Growth from these sites is spread across several time intervals due to site complexity and where they are in the development process. Beyond the large sites, growth is expected to continue on the remaining smaller vacant and underutilized sites, until the District's population approaches 990,000 and 412,000 households by 2045. ^{217,9}

A forecast of age growth in the population growth, from 2006 to 2025, is now included. Figure 2.11 shows several trends in how the city's population is anticipated to change by age. First, the large influx of younger, 20-30-yearold individuals who arrived between 2006 and 2016 will age, and as they start families an increase in children is anticipated. In addition, the number of older residents will increase. This age forecast has important implications for how the District will respond to:

- Increasing demand for pre-school, daycare, and public schools as well as playgrounds and parks from a growing population of children;
- Rising housing costs as recent residents enter their prime incomeearning years; and
- Rising demand for senior services as the baby boom generation retires and grows older. 217.10

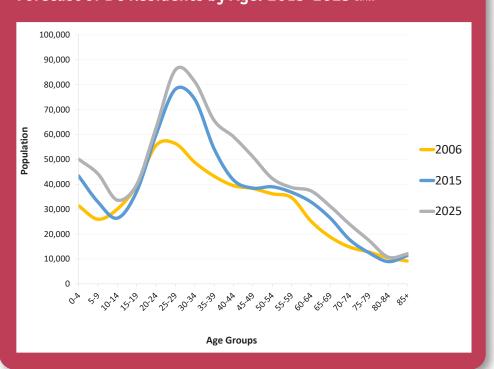


Figure 2.11: Forecast of DC Residents by Age: 2015-2025 217.11

In 2006 the biggest unknown in the forecasts was how the types of households and household size would change. If the District were to lose families and attract only small one- and two-person households, the 2006 plan recognized that the city could add 57,000 households with no gain in population. By incorporating the age forecast with the long-term population forecast in Table 2.2, household size is anticipated to increase from 2.11 to 2.27 from 2015 to 2045. However, this increase will occur only if the District retains its families, keeping both young professionals in the city as they form families, as well as single- or elder-parent led households, and provides a healthy environment for all families in its neighborhoods. Indeed, from 1990 to 2000, the number of families with children in the District declined by 11,000, with an attendant drop in citywide household size. 217.12

Related factors affecting population forecasts are housing costs, immigration, the cost of daycare, and K-12 school quality. Higher housing costs have already caused families to "double up" in some parts of the city or leave the city for less expensive housing. It may result in adult children returning home or living at home longer. Immigration also may drive increases in household size, as it has in New York, San Francisco, and other gateway cities. Improvement in the District's public schools and the shift toward universal pre-school has made the city a more attractive place for families with young children. 217.13

Unlike the 2006 household and population forecasts, which suggested that the District of Columbia would capture ten percent of the region's growth during 2005-2025, the Plan now expects the District to gain an increasing share of the region's population. By 2045, the District will represent as much as 14 percent of the region's population. ^{217,14}

Employment Growth 217.15

Employment forecasts track new capacity in proposed development and estimate the number of jobs each project could contain. The 2010 baseline estimates build on monthly data reported from the U.S. Bureau of Labor Statistics, InfoUSA, the District Department of Employment Services, and other sources, with adjustments for self-employment and military personnel. The forecasts from 2015 to 2030 are largely based on actual projects under construction in the city, as well as office, retail, hotel, industrial, and institutional development that is currently planned and in conceptual stages. These estimates are then compared to forecasts made by the District Department of Employment Services and other sources. ^{217,16}

Beyond 2030, the projections presume a continuation of 2010-2020 trends, but at a slowing rate. Continued growth in the professional, health, and education sectors is expected, as is growth in the eating- and drinking-establishment sector, as the District's population increases. Between 2010 and 2045, the District is expected to add 300,000 new jobs, bringing the citywide total to over a million jobs. ^{217,17}

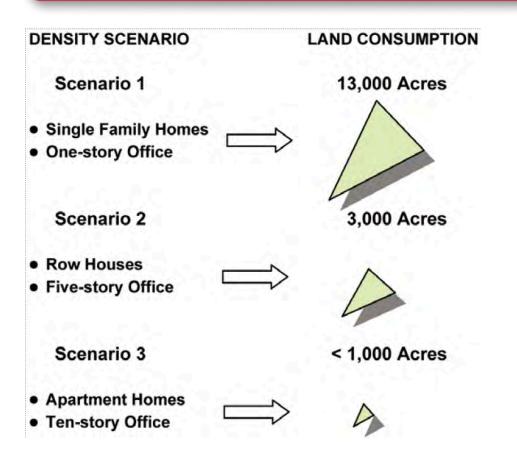
The employment forecasts suggest that the District of Columbia will capture 22 percent of the region's job growth during 2010-2045. By 2045, the District will have essentially retained its share of the region's jobs, as it drops slightly from 25 to 24 percent, a significantly higher share than forecast in 2005. ^{217,18}

Translating the Forecasts into Demand for Land 217.19

How much land does it take to accommodate 145,000 housing units and 300,000 jobs? The answer depends on the density of new development. Other factors, such as the size of housing units, the types of jobs being created, and the amount of land set aside for parking and open space also weigh in. The accompanying diagram shows three scenarios. ^{217,20}

The first illustrates the land that would be required for single family homes (at six units per acre) and one-story campus-style office buildings. About 33,000 acres would be necessary. The second scenario shows land requirements for housing built at row-house densities (25 units per acre), with the jobs housed in five-story office buildings. About 7,000 acres would be required. The third scenario shows land requirements for housing built at apartment densities of about 125 units per acre, with the jobs housed in ten-story office buildings. Land consumption drops to under 2,000 acres. 217,21

Of course, the diagram simplifies the actual dynamics of how land is used and developed. It also leaves out land that must be set aside for parks, public facilities, and infrastructure. The District expects some combination of high-, medium-, and low-density development during the next 30 years. However, high land costs and the scarcity of land in the city make denser development more likely and even appropriate. ^{217,22}



Growth by Planning Area 217.23

Tables 2.3 and 2.4 show where household and job growth is expected to take place within the city through 2045. The estimates reflect the location of planned development projects, vacant and underutilized sites, and Comprehensive Plan land-use designations and policies. 217.24

Table 2.3:

Projected Distribution of Household Growth by Planning

Area 217.25

Planning Area	2015 Households	2045 Projected Households	Net Increase	% of District's Total Growth
CAPITOL HILL	24,107	37,207	13,100	5.3%
CENTRAL WASHINGTON	469,636	567,025	97,389	39.4%
FAR NORTHEAST AND CAPITOL HILL	7,575	19,698	12,123	4.9%
FAR SOUTHEAST AND SOUTHWEST	15,156	37,158	22,002	8.9%
LOWER ANACOSTIA WATERFRONT AND NEAR SOUTHWEST	49,511	02 21/	43 903	17.3%
MID CITY	,	92,314	42,803	
MID-CITY	30,116	37,517	7,401	3.0%
NEAR NORTHWEST	88,950	101,257	12,307	5.0%
ROCK CREEK EAST	35,141	44,924	9,783	4.0%
ROCK CREEK WEST	48,684	55,444	6,760	2.7%
UPPER NORTHEAST	29,395	52,846	23,451	<u>9.5%</u>
CITYWIDE	798,271	1,045,390	247,119	100.0%

Table 2.4:

Projected Distribution of Job Growth by Planning Area 217.26

Planning Area	2015 Employment	2045 Projected Employment	Net Increase	% of District's Total Growth
CAPITOL HILL	25,082	33,387	8,305	7.2%
CENTRAL WASHINGTON	13,970	23,986	10,016	8.7%
FAR NORTHEAST AND CAPITOL HILL	33,802	45,933	12,131	10.6%
FAR SOUTHEAST AND SOUTHWEST	26,592	36,681	10,089	8.8%
LOWER ANACOSTIA WATERFRONT AND NEAR SOUTHWEST	11.054	22.015	21.061	19.1%
MID-CITY	11,954	33,915	21,961	
	42,442	52,466	10,024	8.7%
NEAR NORTHWEST	42,237	48,551	6,314	5.5%
ROCK CREEK EAST	29,064	37,638	8,574	7.5%
ROCK CREEK WEST	44,033	48,814	4,781	4.2%
UPPER NORTHEAST	27,936	50,501	22,565	<u>19.7%</u>
CITYWIDE	297,112	411,872	114,760	100.0%

The tables indicate that about 28 percent of the city's future household growth will occur in Central Washington and along the Lower Anacostia Waterfront. This reflects current and expected development in and around Downtown, the North of Massachusetts Avenue (NoMA) area, the Southwest Waterfront, the Near Southeast, and on large sites such as Poplar Point. Other areas east of the Anacostia River represent about 18 percent of the projected total. The Mid-City and Near Northwest areas also represent a combined total of 14.2 percent, with most of the gain expected east of 14th Street N.W., especially around Howard University, Columbia Heights, and Shaw. The biggest shift since the 2006 forecast is that the Upper Northeast area is now expected to accommodate 19.7 percent of the District's household growth. This is a result of major land use changes around Union Market, McMillan Reservoir, Rhode Island Avenue Metro station, and the large number of vacant and underutilized properties in the Upper Northeast area. Additional data and guidance for each of these areas is provided in the Area Elements of the Comprehensive Plan. 217.27

Employment growth will continue to be concentrated in Central Washington and along the Anacostia River. These two areas were expected to absorb three-quarters of the city's job growth by 2025, principally in places like the South Capitol Street Corridor, the Southeast Federal Center, and the New York Avenue Metro Station area. The updated forecast suggests that job growth will be slightly more distributed. Central Washington and the Anacostia River Waterfront areas are now expected to absorb 57 percent of job growth. Upper Northeast, especially along the New York Avenue corridor, is now expected to absorb about ten percent of the city's job growth. Another 14 percent is expected east of the Anacostia River on sites such as St. Elizabeths and the Minnesota Avenue Metro Station Area. The remaining six planning areas represent less than 20 percent of the city's job growth, most associated with institutional uses and infill office and retail development along corridor streets. ^{217,28}

As time unfolds, departures from the District's forecasts are likely. Future amendments to the Comprehensive Plan may be considered in response to changing trends, new projections, and shifting expectations for the future. ^{217,29}

From Vision to Reality: Guiding Principles 218

The earlier sections of this Element provided the context for the Comprehensive Plan. This section establishes 40 underlying principles for the future that reflect this context. Most of these principles are based on "A Vision for Growing an Inclusive City," the policy framework for the Comprehensive Plan Revision endorsed by the Council of the District of Central Washington and the Anacostia River Waterfront areas are now expected to absorb 57 percent of job growth. Upper Northeast, especially along the New York Avenue corridor, is now expected to absorb about ten percent of the city's job growth. Columbia in 2004. However, statements from the previous Comprehensive Plan and other documents that set the frame for more detailed planning in the District also are incorporated. Policies in each Element of the Comprehensive Plan elaborate on the city's commitment to following these principles. 218.1

The principles are grouped into five sections:

- Managing Growth and Change
- Creating Successful Neighborhoods
- Increasing Access to Education and Employment
- Connecting the City
- Building Green and Healthy Communities. 218.2

The principles acknowledge that the benefits and opportunities of living in the District are not available to everyone equally and that divisions in the city - physical, social and economic - must be overcome to move from vision to reality. To grow equitably and achieve racial equity, equitycentered approaches that address the needs of underserved communities are necessary. 218.3

Managing Growth and Change: Guiding Principles 219

1. The District seeks to create and support an equitable and inclusive city. Growth must be managed equitably to support all District residents, including vulnerable communities and District protected classes. We must recognize that managing growth and change includes addressing the historic, structural, and systemic racial inequities and disenfranchisement of many District residents. And, we must recognize the importance of longtime businesses, as well as educational and cultural institutions. An equitable and inclusive city includes access to housing that is healthy, safe, and affordable for a range of household types, sizes, and incomes in all neighborhoods. A citywide problem requires citywide solutions – ones that overcome the legacy of segregation, avoid concentrating poverty, and afford the opportunity to stay in one's home and not be displaced. ^{219,1}

2. Change in the District of Columbia is both inevitable and desirable. The key is to manage change in ways that protect the positive aspects of life in the city, such as local cultural heritage, and reduce negatives such as poverty, crime, food deserts, displacement, and homelessness. ^{219,2}

3. A city must be diverse to thrive, and the District cannot sustain itself by only attracting small, affluent households. To retain residents and attract a diverse population, the city should provide services that support families. A priority must be placed on sustaining and promoting safe neighborhoods offering health care, quality education, transportation, childcare, parks, libraries, arts and cultural facilities, and housing for families. 219.3

4. Diversity also means maintaining and enhancing the District's mix of housing types. Housing should be developed for households of different sizes, including growing families as well as singles and couples, and for all income levels. ^{219,4}

5. The District needs both residential and non-residential growth to survive. Nonresidential growth benefits residents by creating jobs and opportunities for less affluent households to increase their income. 219.5

6. A large component of current and forecasted growth in the next decade is expected to occur on large sites that are currently isolated from the rest of the city. Rather than letting these sites develop as gated or self-contained communities, they should be integrated into the city's urban fabric through the continuation of street patterns, open-space corridors and compatible development patterns where they meet existing neighborhoods. Since the District is landlocked, its large sites must be viewed as extraordinarily valuable assets. Not all should be used right away – some should be "banked" for the future. 219.6

7. Redevelopment and infill opportunities along corridors and near transit stations will be an important component of reinvigorating and enhancing our neighborhoods. Development on such sites must be designed to respect the integrity of stable neighborhoods and the broader community context, and encourage housing and amenities for low-income households, who rely more on transit. Adequate infrastructure capacity should be ensured as growth occurs. ^{219,7}

8. Growth in the District benefits not only District residents, but the region as well. By accommodating a larger number of jobs and residents, we can create the critical mass needed to support new services, sustain public transit, and improve regional environmental quality. ^{219,8}

Creating Successful Neighborhoods: Guiding Principles 220

9. The District prioritizes equitable participation that enfranchises everyone and builds people's long-term capacity to organize to improve their lives and neighborhoods. Residents and communities should have meaningful opportunities to participate in all stages of planning, policy, public investment, and development decision-making. The District has a special responsibility to identify, engage, and build capacity for greater participation among traditionally underrepresented communities, and will make additional, targeted efforts to improve services for these communities and promote their ability to participate on an equal basis with other communities. 220.1

10. To participate effectively and represent community interests in public processes, the District should support and build the capacity of civic organizations, Advisory Neighborhood Commissions, residents, businesses and other stakeholders. We should encourage collaborative, community-led processes that bring together diverse perspectives. These processes should be clear, open and transparent. Notification procedures should be timely, provide appropriate information, and allow adequate, but not unnecessarily prolonged, time to respond. 220.2

11. The residential character of neighborhoods must be protected, maintained and improved. Many District neighborhoods possess social, economic, historic, and physical qualities that make them unique and desirable places in which to live. As the District continues to grow, more residents, and those of varied socio-economic backgrounds, should be accommodated, including the production and preservation of affordable housing, while using zoning, design, and other means to retain the qualities that physically characterize these neighborhoods and make them attractive. Zoning and other means should be used to attract neighborhood serving retail that, in turn, enhances the surrounding residential neighborhood. 220.3

12. Many neighborhoods include commercial and institutional uses that contribute to their character. Neighborhood businesses, retail districts, schools, parks, recreational facilities, houses of worship and other public facilities all make our communities more livable. These uses provide strong centers that reinforce neighborhood identity and provide destinations and services for residents. They too must be protected and stabilized. 220.4

13. The recent population boom has triggered a crisis of affordability in the city, creating a hardship for many District residents and changing the character of neighborhoods. The preservation of existing affordable housing and the production of new affordable housing, especially for low-income and workforce households, are essential to avoid a deepening of racial and economic divides in the city, and must occur city-wide to achieve fair housing objectives. Affordable renter-and owner-occupied housing production and preservation is central to the idea of growing more inclusively, as is the utilization of tools such as public housing, community land trusts, and limited equity cooperatives that help keep the costs of land affordable, particularly in areas with low homeownership rates and those at risk of cost increases due to housing speculation. ^{220.5}

14. The District of Columbia contains many buildings and sites that contribute to its identity. Protecting historic resources through preservation laws and other programs is essential to retain the heritage that defines and distinguishes the city. Special efforts should be made to conserve row houses as the defining element of many District neighborhoods, and to restore neighborhood "main streets" through sensitive renovation and updating. The District's music, art, narratives, institutions, and other cultural assets are also integral to create a community's identity and sense of place. Efforts should also be made to support, enhance, and protect these cultural assets. ^{220.6}

15. Each neighborhood is an integral part of a diverse larger community that contributes to the District's identity. Growing an inclusive city means that all neighborhoods should share in the overall social responsibilities of the community, including accommodating the overall growth in new residents, housing the homeless, feeding the hungry, and accommodating the disabled. ^{220.7}

16. Enhanced public safety is one of the District's highest priorities and is vital to the health of our neighborhoods. The District must continue to improve safety and security, and ensure timely and high-quality emergency police, fire, and medical assistance. This will maintain established neighborhoods, enable the most vulnerable residents to sustain their communities, and decrease exposure to collective trauma. Moreover, the District must engage in appropriate planning and capital investments to reduce the likelihood and severity of future emergencies. ^{220.8}

17. Confidence in government begins at the neighborhood level. It is built block-by-block, based on day-to-day relationships and experiences. Meaningful participation and responsive neighborhood services are essential to sustain successful neighborhoods. 220.9

18. Public input in decisions about land use and development is an essential part of creating successful neighborhoods, from development of the Comprehensive Plan to every facet of its implementation. 220.10

Policies and actions to support neighborhoods cut across many Comprehensive Plan topics and appear throughout this document. Wherever they may appear, these policies are underpinned by the common goal of conserving functioning, stable neighborhoods and improving those that need redirection or enhancement. 220.11

Increasing Access to Education and Employment: Guiding Principles 221

19. Increasing access to jobs and education by District residents is fundamental to improving the lives and economic well-being of District residents. Quality education equips students with the skills and tools to succeed. 221.1

20. An economically strong and viable District of Columbia is essential to the economic health and well-being of the region. Thus, a broad spectrum of private and public growth (with an appropriate level of supporting infrastructure) should be encouraged. The District's economic development strategies must capitalize on the city's location at the center of the region's transportation and communication systems. 221.2

21. Increasing access to education is linked to broader social goals such as increasing access to employment, strengthening families, creating a better future for the city's youth, and reducing chronic and concentrated poverty. Therefore, physical plans for the city must be accompanied by plans and programs to improve our educational system, improve literacy and job training, ensure access to high-quality public primary and secondary education in all neighborhoods, and link residents to quality jobs. 221.3

22. The overarching goals of the Comprehensive Plan cannot be achieved without sustained investment in public school and library facilities. The physical condition of these facilities must be of good quality before the vision of a more inclusive city can be truly achieved. ^{221,4}

23. Colleges and universities make the District an intellectual capital as well as a political capital. They are an essential part of the District's plans to grow its "knowledge based" economy, improve access to learning, and broaden economic prosperity for all District residents. Sustaining our colleges and universities is important, as is protecting the integrity of the communities of which they are a part. Encouraging access to higher education for all residents is vitally important, as is locating higher education facilities in neighborhoods currently underserved by such facilities. 221.5

24. Land-development policies should be focused to create job opportunities for District residents. This means that sufficient land should be planned and zoned for new job centers in areas with high unemployment and underemployment. A mix of employment opportunities to meet the needs of residents with varied job skills should be provided. 221.6

25. Providing more efficient, convenient, and affordable transportation for residents to access jobs in the District and in the surrounding region is critical to achieve the goal of increasing District residents' access to employment. ^{221.7}

26. Downtown should be strengthened as the region's major employment center, as its cultural center, as a center for government, tourism and international business, and as an exciting urban mixed-use neighborhood. Policies should strive to increase the number of jobs for District residents, enhance retail opportunities, increase the number of residential units, promote access to Downtown from across the District and the region, and ensure Downtown's prominence as the heart of the city. ^{221.8}

27. Despite the recent economic resurgence in the city, the District has yet to reach its full economic potential. Expanding the economy means increasing shopping and services for many District neighborhoods, particularly east of the Anacostia River, bringing tourists beyond the National Mall and into the city's business districts, and creating more opportunities for local entrepreneurs and small businesses. The District's economic development expenditures should help support local businesses and provide economic benefits to the community. ^{221.9}

Connecting the City: Guiding Principles 222

28. Increased mobility can no longer be achieved simply by building more roads. Priority must be on investment in other forms of transportation, particularly transit. Mobility can be enhanced further by improving the connections between different transportation modes, improving safety and security of users of all transportation modes, and increasing system efficiency. 222.1

29. Transportation facilities, including streets, bridges, transit, sidewalks, and paths, provide access to land and they provide mobility for residents and others. Investments in the transportation network must be equitably distributed, prioritize safety, access and sustainable transportation, and balance the needs of pedestrians, bicyclists, transit users, autos and delivery vehicles, as well as the needs of residents and others to move around and through the city. 222.2

30. Washington's wide avenues are a lasting legacy of the 1791 L'Enfant Plan and are still one of the city's most distinctive features. The "great streets" of the city should be reinforced as an element of Washington's design through transportation, streetscape, and economic development programs. 222.3

31. Connections to and between the city's celebrated open spaces, such as Rock Creek Park and the National Mall, should be improved. At the same time, creation of new parks along the Anacostia River and enhancement of the federal Fort Circle Parks, should be supported to connect communities and enhance "green infrastructure" in the city. 222.4

32. The District continues to grow in reputation as an international cultural center. To sustain this growth, it must continue to support a healthy arts and cultural community through its land use, housing, and economic development policies. The power of the arts to express the identity of each community while connecting neighborhoods and residents must be recognized. 222.5

33. Residents are connected by places of "common ground," such as Union Station and Eastern Market. Such public gathering places should be protected and should be created in all parts of the city as development and change occurs. 222.6

34. The District's communities are connected by a shared heritage of urban design, reflecting the legacy of the L'Enfant Plan, the McMillan Plan, the Height Act of 1910, and preservation of much of the historic urban fabric. After more than two centuries of building, the nation's capital is still a remarkable place. Urban design and streetscape policies must retain the historic, majestic, and beautiful qualities that make Washington unique among American cities. 222.7

Building Green and Healthy Communities: Guiding Principles 223

35. Focus the city's resilience goals on supporting inclusive growth for all residents, preparing the city for the impacts of climate change, and embracing advances in technology, while minimizing the negative impacts of change. 223.1

36. The site selected for the national capital was characterized by a very special topography, including hills interlaced with broad rivers and streams. The topography allowed for the construction of a special collection of buildings that gives the District a unique profile. This profile has been further protected by local and national ordinances and must continue to be protected in the future. This should include the protection of views and vistas and the enhancement of city gateways. ^{223.2}

37. The earth, water, air, and biotic resources of the District must be protected. Furthermore, such resources should be restored and enhanced where they have been degraded by past human activities. In particular, reforestation of the District and maintenance of its tree cover should

be emphasized to sustain the District's reputation as one of America's "greenest" cities. 223.3

38. As the nation's capital, the District should be a role model for environmental sustainability. Building construction and renovation should minimize the use of non-renewable resources, promote energy and water conservation, encourage the use of distributed energy resources like rooftop solar, and reduce harmful effects on the natural environment. 223.4

39. Planning decisions should improve the health of District residents by reducing exposure to hazardous materials, improving the quality of surface and groundwater, and encouraging land-use patterns and land uses that reduce air pollution and facilitate pedestrian and bicycle travel. 223.5

40. The District's parks and open spaces provide health, recreational, psychological, aesthetic, and ecological benefits that contribute to the quality of life. Maintenance and improvement of existing parks and increased access to open space and recreation across the city are basic elements of the city's vision. The District's public open spaces should be protected against exploitation, and their recreational and environmental values should be conserved. 223.6

Putting It All Together 224

Taken together, the forces driving change, growth projections, and guiding principles in the Framework Element provide a foundation for planning the future of the District of Columbia. The subsequent elements of the Comprehensive Plan following this Framework Element examine these conditions in much more detail and outline the journey from vision to reality. 224.1

The Comprehensive Plan provides direction to many District agencies in several important ways. One way is its role in careful land-use decisions that accommodate growth and ensure that the city is an inclusive and desirable place to live and work. Another is through continuing consideration of the plan's infrastructure priorities to inform the District's Capital Improvement Plan. 224.2

The Comprehensive Plan and Zoning Regulations are linked in law, and subsequently in application. A Congressional Act of June 20, 1938 established that zoning "regulations shall be made in accordance with a comprehensive plan...". In 1973, the District of Columbia Home Rule charter included changes to the 1938 Act, as follows: "Zoning maps and regulations, and amendments thereto, shall not be inconsistent with the comprehensive plan for the national capital" (emphasis added). The relationship between the Comprehensive Plan and the District's Zoning Regulations, and how these are used in the city's development review process, is described below. 224.3

The Comprehensive Plan, which includes a Generalized Policy Map and a Future Land Use Map, provides generalized guidance. The Generalized Policy Map provides guidance on whether areas are designated for conservation, enhancement, or change, as explained in Section 225. The Future Land Use Map shows anticipated future land uses, which may be the same, or different than, the current land uses. Both maps are part of the adopted Comprehensive Plan and the categories used for each map are described later in this Framework. 224.4

Small Area Plans are prepared with community input, to provide more detailed planning guidance, and typically are approved by resolution of the Council. Unless a Small Area Plan has been made binding on the Zoning Commission through its enactment as part of a Comprehensive Plan amendment, a Small Area Plan provides only supplemental guidance to the Zoning Commission and it does so only to the extent it does not conflict with the Comprehensive Plan. ^{224,5}

The Zoning Commission is required to use the Comprehensive Plan in its land use decision-making. The Zoning Commission may amend the District of Columbia zoning map in two ways, both requiring a finding of "not inconsistent with the Comprehensive Plan." The first way is to establish a zone district for a specific parcel or an area of land. A zone district specifies uses allowed as a matter-of-right or through a special exception, and development standards such as maximum density, height, and lot occupancy. 224.6

The second way is through a Planned Unit Development (PUD), often for sites that have more than one parcel or building. The goal of a PUD is to permit development flexibility greater than specified by matterof-right zoning, such as increased building height or density, provided that the project offers a commendable number or quality of public benefits, and protects and advances the public health, safety, welfare, and convenience. These public benefits should be lasting and are developed through discussions between developers, District representatives, Advisory Neighborhood Commissions, civic organizations, and the community. As part of the PUD process, the Zoning Commission may include a zoning map amendment for the purpose of the PUD, which is applicable only for the duration of the PUD, and subject to PUD conditions. The PUD process is not to be used to circumvent the intent and purposes of the Zoning Regulations or result in an action inconsistent with the Comprehensive Plan. In considering whether a PUD is "not inconsistent" with the Comprehensive Plan, it is appropriate to consider the context of the entire site, such as

aggregating density on one portion so as to increase open space on another portion – achieving an overall density that is consistent with the Plan. 224.7

In its decision-making, the Zoning Commission must make a finding of "not inconsistent with the Comprehensive Plan." To do so, the Zoning Commission must consider the many competing, and sometimes conflicting, policies of the Comprehensive Plan, along with the various uses, development standards and requirements of the zone districts. It is the responsibility of the Zoning Commission to consider and balance those policies relevant and material to the individual case before it in its decisionmaking, and clearly explain its decision-making rationale. ^{224.8}

Specific public benefits are determined through each PUD application and should respond to critical issues facing the District as identified in the Comprehensive Plan and through the PUD process itself. In light of the acute need to preserve and build affordable housing, described in Section 206, and to prevent displacement of on-site residents, the following should be considered as high-priority public benefits in the evaluation of residential PUDs:

- The production of new affordable housing units above and beyond existing legal requirements or a net increase in the number of affordable units that exist on-site;
- The preservation of housing units made affordable through subsidy, covenant, or rent control, or replacement of such units at the same affordability level and similar household size;
- The minimizing of unnecessary off-site relocation through the construction of new units before the demolition of existing occupied units; and
- The right of existing residents of a redevelopment site to return to new on-site units at affordability levels similar to or greater than existing units. 224.9

Generalized Policy Map 225

Purpose of the Policy Map

The purpose of the Generalized Policy Map is to categorize how different parts of the District may change between 2005 and 2025. It highlights areas where more detailed policies are necessary, both within the Comprehensive Plan and in follow-up plans, to manage this change. 225.1

The map should be used to guide land-use decision-making in conjunction with the Comprehensive Plan text, the Future Land Use Map, and other

Comprehensive Plan maps. Boundaries on the map are to be interpreted in concert with these other sources, as well as the context of each location. 225.2

Categories

The Generalized Policy Map identifies the following four different types of areas: Neighborhood Conservation Areas, Neighborhood Enhancement Areas, Land Use Change Areas, and Commercial/Mixed Use Areas. Although each area has specific characteristics, all provide opportunities for future development that advances District goals and policies. 225.3

Neighborhood Conservation Areas

Neighborhood Conservation areas have little vacant or underutilized land. They are generally residential in character. Maintenance of existing land uses and community character is anticipated over the next 20 years. Where change occurs, it will typically be modest in scale and will consist primarily of infill housing, public facilities, and institutional uses. Major changes in density over current (2017) conditions are not expected but some new development and reuse opportunities are anticipated, and these can support conservation of neighborhood character where guided by Comprehensive Plan policies and the Future Land Use Map. Neighborhood Conservation Areas that are designated "PDR" on the Future Land Use Map are expected to be retained with the mix of industrial, office, and retail uses they have historically provided. 225.4

The guiding philosophy in Neighborhood Conservation Areas is to conserve and enhance established neighborhoods, but not preclude development, particularly to address city-wide housing needs. Limited development and redevelopment opportunities do exist within these areas. The diversity of land uses and building types in these areas should be maintained and new development, redevelopment, and alterations should be compatible with the existing scale, natural features, and character of each area. Densities in Neighborhood Conservation Areas are guided by the Future Land Use Map and Comprehensive Plan policies. Approaches to managing context-sensitive growth in Neighborhood Conservation Areas may vary based on neighborhood socio-economic and development characteristics. In areas with access to opportunities, services, and amenities, more levels of housing affordability should be accommodated. Areas facing housing insecurity (see Section 206.4) and displacement should emphasize preserving affordable housing and enhancing neighborhood services, amenities, and access to opportunities. 225.5

Neighborhood Enhancement Areas

Neighborhood Enhancement Areas are neighborhoods with substantial amounts of vacant and underutilized land. They include areas that are primarily residential in character, as well as mixed-use and industrial areas. Many of these areas are characterized by a patchwork of existing homes and individual vacant lots, some privately owned and others owned by the public sector or non-profit developers. These areas present opportunities for compatible infill development, including new single-family homes, townhomes, other density housing types, mixed-use buildings, and, where appropriate, light industrial facilities. Land uses that reflect the historical mixture and diversity of each community and promote inclusivity should be encouraged. 225.6

The guiding philosophy in Neighborhood Enhancement Areas is to ensure that new development responds to the existing character, natural features, and existing/planned infrastructure capacity. New housing should be encouraged to improve the neighborhood and must be consistent with the land-use designation on the Future Land Use Map and with Comprehensive Plan policies. The unique and special qualities of each area should be maintained and conserved, and overall neighborhood character should be protected or enhanced as development takes place. Publicly owned open space within these areas should be preserved and enhanced to make these communities more attractive and desirable. ^{225.7}

The main difference between Neighborhood Enhancement Areas and Neighborhood Conservation Areas is the large amount of vacant and underutilized land that exists in the Enhancement Areas. Neighborhood Enhancement Areas often contain many acres of undeveloped lots, whereas Neighborhood Conservation Areas appear to be mostly "built out." Existing housing should be enhanced through rehabilitation assistance. New development in these areas should support neighborhood and city-wide housing needs, reduce crime and blight, and attract complementary new uses and services that better serve the needs of existing and future residents. 225.8

Land Use Change Areas

Land Use Change Areas are areas where change to a different land use from what exists today is anticipated. In some cases, the Future Land Use Map depicts the specific mix of uses expected for these areas. In other cases, the Future Land Use Map shows these sites as "Federal," indicating the District does not currently have the authority to develop appropriate plans for these areas but expects to have this authority by 2025. ^{225,9}

There are more than two dozen Land Use Change Areas identified on the Generalized Policy Map. They include many of the city's large development opportunity sites, and other smaller sites that are undergoing redevelopment or that are anticipated to undergo redevelopment. Together, they represent much of the city's supply of vacant and underutilized land. ^{225,10}

The guiding philosophy in the Land Use Change Areas is to encourage and facilitate new development and promote the adaptive reuse of existing structures. Many of these areas have the capacity to become mixed-use communities containing housing, retail shops, services, workplaces, parks, The guiding philosophy in the Land Use Change Areas is to encourage and facilitate new development and promote the adaptive reuse of existing structures.



Barracks Row is a Main Street Mixed Use corridor.

and civic facilities. The Comprehensive Plan's Area Elements provide additional policies to guide development and redevelopment within the Land Use Change Areas, including the desired mix of uses in each area. 225.11

As Land Use Change Areas are redeveloped, the District aspires to create high quality neighborhoods that demonstrate exemplary site and architectural design and innovative environmental features, compatible with nearby neighborhoods, protect cultural and historic assets, and provide significant affordable-housing and employment opportunities. Measures to ensure that public benefits are commensurate with increased density and to avoid and mitigate undesirable impacts of development of the Land Use Change Areas upon adjacent neighborhoods should be required as necessary. Such measures should prioritize equity by accounting for the needs of underserved communities. 225.12

Commercial/Mixed Use Areas

The areas identified as commercial or mixed use correspond to the city's business districts, many of which form the heart of the city's neighborhoods. Five categories are used, defining the physical and economic character of each area along with generalized long-range conservation and development objectives. The commercial areas are: "Main Street Mixed Use Corridors," "Neighborhood Commercial Centers," "Multi-Neighborhood Centers," "Regional Centers," and the "Central Employment Area." All categories allow commercial and residential uses. ^{225,13}

Main Street Mixed Use Corridors: These are traditional commercial business corridors with a concentration of older storefronts along the street. The area served can vary from one neighborhood (e.g., 14th Street Heights or Barracks Row) to multiple neighborhoods (e.g., Dupont Circle, H Street, or Adams Morgan). Their common feature is that they have a pedestrianoriented environment with traditional storefronts. Many have upper-story residential or office uses. Some corridors are underutilized, with capacity for redevelopment. Conservation and enhancement of these corridors is desired to foster economic and housing opportunities and serve neighborhood needs. Any development or redevelopment that occurs should support transit use and enhance the pedestrian environment. 225.14

Neighborhood Commercial Centers: Neighborhood Commercial Centers meet the day-to-day needs of residents and workers in the adjacent neighborhoods. The area served by a Neighborhood Commercial Center is usually less than one mile. Typical uses include convenience stores, sundries, small food markets, supermarkets, branch banks, restaurants, and basic services such as dry cleaners, hair cutting, and childcare. Office space for small businesses, such as local real estate and insurance offices, doctors and dentists, and similar uses, also may be found in such locations. Many buildings have upper-story residential uses. 225.15 Unlike Main Street Retail Corridors, the Neighborhood Commercial Centers include both auto-oriented centers and pedestrian-oriented shopping areas. Examples include Penn Branch Shopping Center on Pennsylvania Avenue, S.E. and the Spring Valley Shopping Center on Massachusetts Avenue, N.W. New development and redevelopment within Neighborhood Commercial Centers must be managed to conserve the economic viability of these areas while allowing additional development, including residential, that complements existing uses. 225.16

Multi-Neighborhood Centers: Multi-Neighborhood Centers contain many of the same activities as Neighborhood Commercial Centers, but in greater depth and variety. The area served by a Multi-Neighborhood Center is typically one to three miles. These centers are generally found at major intersections and along key transit routes. These centers might include supermarkets, general merchandise stores, drug stores, restaurants, specialty shops, apparel stores, and a variety of service-oriented businesses. These centers also may include residential and office space for small businesses, although their primary function remains retail trade. 225.17

Examples of Multi-Neighborhood Centers include Hechinger Mall, Columbia Heights, Brentwood, and Skyland Shopping Centers. Mixeduse infill development at these centers should be encouraged to provide new retail and service uses, and additional housing and job opportunities. Infrastructure improvements to allow safe access by all transportation modes to these centers are also important for increasing equitable access. 225.18

Regional Centers: Regional Centers have the largest range of commercial functions outside the Central Employment Area and are likely to have major department stores, many specialty shops, concentrations of restaurants, movies, and other leisure or entertainment facilities. They typically draw patrons from across the city, as well as patrons from nearby suburban areas. A large office component is also associated with Regional Centers. As with Multi-Neighborhood Centers, infill development at Regional Centers should provide new retail, entertainment, service uses, additional housing, and employment opportunities. ^{225,19}

These centers are generally located along major arterials and are served by transit, but commercial parking lots and garages, while also ensuring access for other transportation modes. Regional centers are higher in density and intensity of use than other commercial areas, except downtown. Building height, massing, and density should support the role of regional centers while scaling appropriately to development in adjoining communities and should be further guided by policies in the Land Use Element and the Area Elements. Examples of regional centers include Friendship Heights and Georgetown. 225.20



Penn Branch shopping center is a neighborhood commercial center.



Brentwood Shopping Center is an example of a multi-neighborhood commercial center.



The Yards is a regional commercial center



Downtown retail in the Central Employment Area.

Central Employment Area: The Central Employment Area is the business and retail heart of the District and the metropolitan area. It has the widest variety of commercial uses, including but not limited to major government and corporate offices; retail, cultural, and entertainment uses; and hotels, restaurants, and other hospitality uses. The Central Employment Area draws patrons, workers, and visitors from across the region. The Comprehensive Plan's Land Use and Economic Development Elements, and the Central Washington Area Element and Anacostia Waterfront Element provide additional guidance, policies and actions related to the Central Employment Area. 225.21

Other Areas

The Generalized Policy Map also identifies parks and open space, land owned by or under the jurisdiction of the District or federal government, federal lands with federal buildings, Downtown Washington, and major institutional land uses. The fact that these areas are not designated as Conservation, Enhancement, or Land Use Change Areas does not mean they are exempt from the Comprehensive Plan or that their land uses will remain static. Public parks and public open space will be conserved and carefully managed in the future. Federal lands are called out to acknowledge the District's limited jurisdiction over them but are still discussed in the text of the District Elements. Downtown includes its own set of conservation, enhancement, and change areas, described in more detail in the Central Washington Area Element. Much of the land identified as institutional on the map represents colleges and universities; change and infill can be expected on each campus consistent with campus plans. Other institutional sites, including hospitals and religious orders, likewise may see new buildings or facilities added. Policies in the Land Use and the Educational Facilities Elements address the compatibility of such uses with surrounding neighborhoods. 225.22

The District's Future Land Use Map 226

Maps showing the general distribution and character of future land uses in the city have been an essential part of the Comprehensive Plan for over half a century. Both the 1950 and 1967 Comprehensive Plans for the National Capital depicted "high density," "moderate density," and "low density" residential neighborhoods. These Plans further defined "Local Commercial" areas along many corridor streets, a "Downtown Commercial" area, and a "Central Federal Employment Area." The Maps also called out hospitals, universities, industrial areas, and federal installations. ^{226.1}

The District portion of the 1984 Comprehensive Plan – the first Plan of the Home Rule era – was initially adopted without a Land Use Map. A set of four large maps was adopted in 1985, along with the Land Use Element itself. In the years that followed, the four maps were consolidated into two maps-a Generalized Land Use Map and a Generalized Land Use Policy Map. 226.2

An illustrative "paintbrush" format, reminiscent of those used in the 1950 and 1967 Plans, was initially used for the 1985 Land Use Map. This format was rejected as being too imprecise and "bloblike." In subsequent years it was replaced by a map with more clearly defined edges, although the maps continue to note that these designations are generalized. The Comprehensive Plan text stipulated that streets and street names be displayed on the map to ensure its legibility. Its 15 land use categories were defined in broad terms – typical uses were described, but no density or intensity ranges were assigned. ^{226.3}

Future Land Use Map and Categories 227

Purpose of the Land Use Map

The Future Land Use Map is part of the adopted Comprehensive Plan and carries the same legal weight as the Plan document itself. The Map uses color-coded categories to express public policy for future land uses across the city. The Future Land Use Map is intended to be used in conjunction with the Comprehensive Plan's policies and actions. Preparation of this map is explicitly required by D.C. Law; its purpose is to "represent the land use policies set forth in the proposed Land Use Element," using "standardized colors for planning maps." (D.C. Official Code § 1-306.02). 227.1

Each land use category identifies representative zoning districts and states that other zoning districts may apply. The Zoning Commission, in selecting a zone district such as through a Planned Unit Development or Zoning Map Amendment, determines if it is not inconsistent with the Comprehensive Plan. In making this determination for a selected zone district, the Zoning Commission considers and balances the competing and sometimes conflicting aspects of the Comprehensive Plan, including the policies and text; the intent of the Future Land Use Map land use category; and the Future Land Use Map and Generalized Policy Map. Under the Zoning Regulations, a proposed Planned Unit Development should not result in unacceptable project impacts on the surrounding area. 227.2

Definitions of Land Use Categories

Sections 227.4 through 227.23 describe the land use categories depicted on the Future Land Use Map. References herein to density, scale, use or other features are intended to distinguish generally between the categories. Citing Floor Area Ratios (FAR) in the land use categories does not eliminate the need for height limits and other dimensional requirements established in



Low Density Residential



Moderate Density Residential

the Zoning Regulations for a particular zone district, although the Zoning Regulations provide flexibility around such standards for Inclusionary Zoning and Planned Unit Developments. The residential and commercial land use categories run a spectrum from low to high density. It is important to consider the categories in relationship to each other. For each category, one to three zone districts are listed as illustrative. Accordingly, other zones may also apply. Some zones may straddle categories, reflecting the higher end of one category, or the lower end of another. 227.3

Definitions of Land Use Categories Residential Categories

Four residential categories appear on the Future Land Use Map. Density in the residential categories is typically calculated either as the number of dwelling units per minimum lot area, or as a FAR. FAR is a ratio between a building's total gross floor area and lot area, and is used to regulate density. Using this approach, some aspects of a building may be higher than is characteristic for the land use category, but still consistent with the category's density range. Similarly, density on a portion of a site may be greater, provided the density for the site overall is not inconsistent with the specified range. ^{227.4}

Low Density Residential: This designation is used to define neighborhoods generally, but not exclusively, suited for single family detached and semidetached housing units with front, back, and side yards. The R-1 and R-2 Zone Districts are consistent with the Low Density Residential category, and other zones may also apply. 227.5

Moderate Density Residential: This designation is used to define neighborhoods generally, but not exclusively, suited for row houses as well as low-rise garden apartment complexes. The designation also applies to areas characterized by a mix of single-family homes, two- to four-unit buildings, row houses, and low-rise apartment buildings. In some neighborhoods with this designation, there may also be existing multi-story apartments, many built decades ago when the areas were zoned for more dense uses (or were not zoned at all). Density in Moderate Density Residential areas is typically calculated either as the number of dwelling units per minimum lot area, or as a FAR up to 1.8, although greater density may be possible when complying with Inclusionary Zoning or when approved through a Planned Unit Development. The R-3, RF, and RA-2 Zone Districts are consistent with the Moderate Density Residential category, and other zones may also apply. 227.6

Medium Density Residential: This designation is used to define neighborhoods or areas generally, but not exclusively, suited for mid-rise apartment buildings. The Medium Density Residential designation also may apply to taller residential buildings surrounded by large areas of permanent open space. Pockets of low and moderate density housing may exist within these areas. Density typically ranges from 1.8 to 4.0 FAR, although greater density may be possible when complying with Inclusionary Zoning or when approved through a Planned Unit Development. The RA-3 Zone District is consistent with the Medium Density Residential category, and other zones may also apply. 227.7

High Density Residential: This designation is used to define neighborhoods and corridors generally, but not exclusively, suited for high-rise apartment buildings. Pockets of less dense housing may exist within these areas. Density is typically greater than a FAR of 4.0, and greater density may be possible when complying with Inclusionary Zoning or when approved through a Planned Unit Development. The RA-4 and RA-5 Zone Districts are consistent with the High Density Residential category, and other zones may also apply. 227.8

Commercial Categories

Four commercial categories appear on the Map. The predominant use is commercial, with housing permitted in all categories, and incentivized in all but the High Density category. Although all Commercial Categories accommodate a mix of uses, a separate category (Mixed Use, defined in Section 227.20) is used to identify areas where the mixing of commercial, residential, and sometimes industrial uses is strongly encouraged. Density is typically calculated as a FAR. Using this approach, some aspects of a building may be higher than is characteristic for the land use category, but still consistent with the category's density range. Similarly, density on a portion of a site may be greater, provided the density for the site overall is not inconsistent with the specified range. ^{227,9}

Low Density Commercial: This designation is used to define shopping and service areas that are generally lower in scale and intensity. Retail, office, and service businesses are the predominant uses. Areas with this designation range from small business districts that draw primarily from the surrounding neighborhoods to larger business districts that draw from a broader market area. Their common feature is that they are comprised primarily of commercial and mixed-use buildings that range in density generally up to a FAR of 2.5, with greater density possible when complying with Inclusionary Zoning or when approved through a Planned Unit Development. The MU-3 and MU-4 Zone Districts are consistent with the Low Density category, and other zones may also apply. 227.10

Moderate Density Commercial: This designation is used to define shopping and service areas that are somewhat greater in scale and intensity than the Low-Density Commercial areas. Retail, office, and service businesses are the predominant uses. Areas with this designation range from small business districts that draw primarily from the surrounding neighborhoods to larger business districts uses that draw from a broader market area. Buildings



Medium Density Residential



High Density Residential



Low Density Commercial



Moderate Density Commercial



Medium Density Commercial



High Density Commercial

are larger and/or taller than those in Low Density Commercial areas. Density typically ranges between a FAR of 2.5 and 4.0, with greater density possible when complying with Inclusionary Zoning or when approved through a Planned Unit Development. The MU-5 and MU-7 Zone Districts are representative of zone districts consistent with the Moderate Density Commercial category, and other zones may also apply. 227.11

Medium Density Commercial: This designation is used to define shopping and service areas that are somewhat greater in scale and intensity than the Moderate Density Commercial areas. Retail, office, and service businesses are the predominant uses, although residential uses are common. Areas with this designation generally draw from a citywide market area. Buildings are larger and/or taller than those in Moderate Density Commercial areas. Density typically ranges between a FAR of 4.0 and 6.0, with greater density possible when complying with Inclusionary Zoning or when approved through a Planned Unit Development. The MU-8 and MU-10 Zone Districts are consistent with the Medium Density category, and other zones may also apply. 227.12

High Density Commercial: This designation is used to define the central employment district, other major office centers, and other commercial areas with the greatest scale and intensity of use in the District. Office and mixed office/retail buildings with densities greater than a FAR of 6.0 are the predominant use, although high-rise residential and many lower scale buildings (including historic buildings) are interspersed. The MU-9, D-3, and D-6 Zone Districts are consistent with the High Density Commercial category, and other zones may also apply. ^{227,13}

Production, Distribution, and Repair (PDR): The Production, Distribution, and Repair (PDR) category is used to define areas characterized by manufacturing, warehousing, wholesale and distribution centers, transportation services, food services, printers and publishers, tourism support services, and commercial, municipal, and utility activities which may require substantial buffering from housing and other noise-, airpollution- and light-sensitive uses. This category is also used to denote railroad rights-of-way, switching and maintenance yards, bus garages, and uses related to the movement of freight, such as truck terminals. It is important to ensure that adequate, appropriate land is provided for these PDR uses that are critical to supporting the retail, transportation and service needs of the city. A variety of zone districts apply within PDR areas, recognizing the different intensities of use and impacts generated by various PDR activities. The corresponding zone category is PDR, and the present density and height limits set in these districts are expected to remain for the foreseeable future. Other districts may also apply where the PDR map designation is striped with other land uses. In an area striped to include PDR, development must include PDR space, and on sites containing existing PDR space the amount of PDR space on-site should be substantially preserved. 227.14

Public and Institutional Categories

Four Public and Institutional Land Use categories appear on the Map, as follows: 227.15

Federal: This designation includes land and facilities owned, occupied and used by the federal government, excluding parks and open space. Uses include military bases, federal government buildings, the International Chancery Center, federal hospitals, museums, and similar federal government activities. The "Federal" category generally denotes federal ownership and use. Land with this designation is generally not subject to zoning. In the event federal interests on any given federal site terminate, zoning for these areas should be established in a manner that is consistent with Comprehensive Plan policies. 227.16

Local Public Facilities: This designation includes land and facilities occupied and used by the District of Columbia government or other local government agencies (such as WMATA), excluding parks and open space. Uses include public schools including charter schools, public hospitals, government office complexes, and similar local government activities. Other non-governmental facilities may be co-located on site. While included in this category, local public facilities smaller than one acre – including some of the District's libraries, police and fire stations, and similar uses – may not appear on the map due to scale. Zoning designations vary depending on surrounding uses.

Institutional: This designation includes land and facilities occupied and used by colleges and universities, large private schools, hospitals, religious organizations, and similar institutions. While included in this category, smaller institutional uses such as churches are generally not mapped, unless they are located on sites that are several acres in size. Zoning designations vary depending on surrounding uses. Institutional uses are also permitted in other land use categories. 227.18

Parks, Recreation, and Open Space: This designation includes the federal and District park systems, including the National Parks, such as the National Mall; the circles and squares of the L'Enfant city and District neighborhoods; settings for significant commemorative works, certain federal buildings such as the White House and the U.S. Capitol grounds, and museums; and District-operated parks and associated recreation centers. It also includes permanent open space uses such as cemeteries, open space associated with utilities such as the Dalecarlia and McMillan Reservoirs, and open space along highways such as Suitland Parkway. This category includes a mix of passive open space (for resource conservation and habitat protection) and active open space (for recreation). While included in this



Production, Distribution, and Repair



Federal



Local Public Facilities



Institutional



Parks, Recreation, and Open Space

category, parks smaller than one acre – including many of the triangles along the city's avenues – may not appear on the map due to scale. Zoning designations for these areas vary. The federal parklands are generally unzoned, and District parklands tend to be zoned the same as surrounding land uses. 227.19

Mixed Use Categories

The Future Land Use Map indicates areas where the mixing of two or more land uses is especially encouraged. The particular combination of uses desired in a given area is depicted in striped patterns, with stripe colors corresponding to the categories defined on the previous pages. A Mixed Use Future Land Use Map designation should not be confused with the Mixed Use (MU) zoning districts, although they frequently apply to the same area or parcel of land. The Mixed Use Category generally applies in the following circumstances:

- a. Established, pedestrian-oriented commercial areas that also include substantial amounts of housing, typically on the upper stories of buildings with ground-floor retail or office uses;
- Commercial corridors or districts which may not contain substantial amounts of housing today, but where more housing is desired in the future. The pattern envisioned for such areas is typically one of pedestrian-oriented streets, with ground-floor retail or office uses and upper story housing;
- c. Large sites (generally greater than 10 acres in size), where opportunities for multiple uses exist but a plan dictating the precise location of these uses has yet to be prepared; and
- d. Development that includes residential uses, particularly affordable housing, and residentially compatible industrial uses, typically achieved through a Planned Unit Development or in a zone district that allows such a mix of uses. 227.20

The general density and intensity of development within a given Mixed Use area is determined by the specific mix of uses shown. If the desired outcome is to emphasize one use over the other (for example, ground-floor retail with three stories of housing above), the Future Land Use Map may note the dominant use by showing it at a slightly higher density than the other use in the mix (in this case, Moderate Density Residential/Low Density Commercial). The Comprehensive Plan Area Elements may also provide detail on the specific mix of uses envisioned. ^{227,21}

It should also be acknowledged that because of the scale of the Future Land Use Map and the fine-grained pattern of land use in older parts of the city, many of the areas shown purely as "Commercial" may also contain other uses, including housing. Likewise, some of the areas shown as purely "Residential" contain existing incidental commercial uses such as corner stores or gas stations, or established institutional uses, such as places of worship. The "Mixed Use" designation is intended primarily for larger areas where no single use predominates today, or areas where multiple uses are specifically encouraged in the future. 227.22

A variety of zoning designations are used in Mixed Use areas, depending on the combination of uses, densities, and intensities. All zone districts formerly identified as commercial, SP, CR and Waterfront were renamed as MU zone districts in 2016, and are considered to be mixed use. Residential uses are permitted in all of the MU zones, however, so many Mixed Use areas may have MU zoning. 227.23

Guidelines for Using the Generalized Policy Map and the Future Land Use Map 228

The Generalized Policy Map and Future Land Use Map are intended to provide generalized guidance for development and conservation decisions, and are considered in concert with other Comprehensive Plan policies. Several important parameters, defined below, apply to their use and interpretation.

a. The Future Land Use Map is not a zoning map. Whereas zoning maps are parcel-specific, and establish detailed requirements and development standards for setbacks, height, use, parking, and other attributes, the Future Land Use Map is intended to be "soft-edged" and does not follow parcel boundaries, and its categories do not specify allowable uses or development standards. By definition, the Future Land Use Map is to be interpreted broadly and the land use categories identify desired objectives.

b. The Future Land Use Map is a generalized depiction of intended uses in the horizon year of the Comprehensive Plan, roughly 20 years in the future. It is not an "existing land use map," although in many cases future uses in an area may be the same as those that exist today.

c. While the densities within any given area on the Future Land Use Map reflect all contiguous properties on a block, there may be individual buildings that are larger or smaller than these ranges within each area. Similarly, the land-use category definitions describe the general character of development in each area, citing typical Floor Area Ratios as appropriate. The granting of density bonuses (for example, through Planned Unit Developments or Inclusionary Zoning) may result in density that exceed the typical ranges cited here.

d. The zoning of any given area should be guided by the Future Land Use Map, interpreted in conjunction with the text of the Comprehensive Plan, including the Citywide Elements and the Area Elements. e. The designation of an area with a particular Future Land Use Map category does not necessarily mean that the most intense zoning district described in that category is automatically permitted. And, even if a zone is not identified in a category, it can be permitted as described in Section 227.2. A range of densities and intensities applies within each category, and the use of different zone districts within each category should reinforce this range. There are many more zone districts than there are Comprehensive Plan land-use categories. Multiple zone districts should continue to be used to distinguish the different types of low- or moderate-density residential development which may occur within each area.

f. Some zone districts may be compatible with more than one Comprehensive Plan Future Land Use Map designation. As an example, the MU-4 zone is consistent with both the Low Density Commercial and the Moderate Density Commercial designation, depending on the prevailing character of the area and the adjacent uses. g. The intent of the Future Land Use Map is to show use rather than ownership. However, in a number of cases, ownership is displayed to note the

g. The intent of the Future Land Use Map is to show use rather than ownership. However, in a number of cases, ownership is displayed to note the District's limited jurisdiction. Specifically, non-park federal facilities are shown as "Federal" even though the actual uses include housing and industry (e.g., Bolling Air Force Base), offices (e.g., the Federal Triangle), hospitals (e.g., Veteran's Administration), and other activities. Similarly, the "Local Public Facility" designation includes high-impact uses such as solid waste transfer stations and stadiums, as well as low-impact uses such as schools. Other maps in the Comprehensive Plan are used to show the specific types of public uses present in each area.

h. The Map does not show density or intensity on institutional and local public sites. If a change in use occurs on these sites in the future (for example, a school becomes surplus or is redeveloped), the new designations should be comparable in density or intensity to those in the vicinity, unless otherwise stated in the Comprehensive Plan Area Elements or an approved Campus Plan.

i. Streets and public rights-of-way are not an explicit land-use category on the Future Land Use Map. Within any given area, the streets that pass through are assigned the same designation as the adjacent uses.

j. Urban renewal plans remain in effect for parts of the District of Columbia, including Shaw, Downtown, and Fort Lincoln. These plans remain in effect and their controlling provisions must be considered as land use and zoning decisions are made. k. If a development or redevelopment requires discretionary approvals, the developer must address the permanent, offsite displacement of residents and businesses.

l. Finally, the Future Land Use Map and the Generalized Policy Map can be amended. The Comprehensive Plan is intended to be a dynamic document that is periodically updated in response to the changing needs of the city. Requests to amend the maps can be made by residents, property owners, developers, and the District itself. In all cases, such changes require formal public hearings before the Council of the District of Columbia, and ample opportunities for formal public input. The process for Comprehensive Plan amendments is described in the Implementation Element. ^{228.1}

Investing for an Inclusive City 229

Investing in adequate, well-maintained public facilities and infrastructure that meet the needs of a growing city will help implement the Comprehensive Plan and fulfill our vision of an inclusive city. Public facilities and infrastructure offer vital services to residents, businesses and visitors. They shape and enhance the public realm; provide affordable housing; contribute to health, wellness, and quality of life; support economic growth; and advance the District as a smart, sustainable, and resilient city. ^{229.1}

Public facility and infrastructure investments should address three priorities: reach and maintain a state of good repair; add capacity necessary to meet the needs of growth; and address the forces driving change to successfully respond to future opportunities and challenges. Capital investments that incorporate sustainable, resilient, and high-quality design features and respond to emerging technologies make the District a more attractive, efficient place to live and work, and will pay future dividends by reducing costs to public health and the environment. These investments ensure that the city's transportation, housing at various income levels, communications, energy, water, and wastewater systems adequately serve the needs of the District, and that education, public-safety, and health and wellness facilities effectively and efficiently deliver high-quality services to residents, workers and visitors. The District must prioritize public investment in security, trauma, and violence prevention in the context of a public health crisis. 229.2

The District must use its resources and assets strategically to advance the well-being of all residents. When a development project depends on public subsidies, surplus land, and/or entitlements such as Zoning Map or Future Land Use Map amendments, Planned Unit Developments, variances, tax increment financing, and tax abatements, the District should leverage the enhanced value of the land that results. The enhanced value shall meet the equity needs of DC's neighborhoods in the form of deeply affordable housing and other priorities detailed in the Comprehensive Plan. The leverage can



The new South Capitol Bridge represents a significant statement about public infrastructure.

CITYWIDE ELEMENTS

take the form of deeply affordable housing units in excess of the Inclusionary Zoning requirements, special assessment cash contributions or increased tax rates, or other tools supported by the Comprehensive Plan. As an example, transit infrastructure investments, such as a new station, should be aligned with land use policies that support uses, densities, and connections that support transit-oriented development. The primary goal of this equityleveraging effort is to ensure that land-use policies and actions align with the public investment and that District residents' interests are balanced with the developers' interests. 229.3

Public and private infrastructure and facilities within in the District include:

- Over 1,100 miles of streets, 2401 bridges, 1650 signalized intersections, and 70,000 streetlights;
- 40 stations and 38 miles of track within the regional Metrorail system;
- 87.9 miles of bicycle lanes, with 44 miles added since 2010, and 290 Capital Bikeshare stations
- Approximately 400 miles of fiber optic cable;
- Over 40,000 subsidized affordable rental units;
- 236 traditional public and private charter schools, 26 public libraries, approximately 370 parks, and recreation facilities, and 60 public safety facilities;
- Over 2,200 miles of electrical cable and related substations;
- Over 2,300 miles of natural gas pipelines; and
- Over 1,300 miles of drinking water pipes and 1,800 miles of sewer lines, with pumping stations. 229.4

Since the adoption of the 2006 Comprehensive Plan, the District and other entities undertook a variety of important facility and infrastructure investments to improve the quality of life for District residents. These investments have largely replaced aging infrastructure, improved existing facilities, or addressed environmental problems; however, few investments have actually expanded capacity to meet the city's growing needs. Between 2006 and 2016, the city rehabilitated existing infrastructure such as schools, transit and electrical networks that were largely developed prior to the 1980's. The city benefitted from the increasing tax revenues from growth while not experiencing the costs of expanding infrastructure to the same degree. The same cannot be said going forward. Increasingly, further population and job growth will require investments in new capacity. ^{229,5}

The Forecast of D.C. Residents by Age in Figure 2.11 provides an example of increased demand: the District can expect more than 21,000 additional school-age children and another 7,000 infants and toddlers by 2025. D.C. Public Schools has capacity, but not necessarily in the neighborhoods expected to have the greatest growth in children. Other public and private infrastructure has investment needs to address both deferred maintenance and upgrade out-of-date facilities before investments can be made to expand capacity. The Metro transportation system, facilities for municipal fleets, and the electrical grid are only a few examples of where new investments are necessary to meet the growing needs of the city. ^{229.6}

Forecasted growth will occur with competing priorities, rising costs, uncertain federal resources, and limited borrowing capacity. This will challenge the District to seek new ways of delivering the underlying structural supports that serve the residents and businesses of the city. Adding to the complexity, the District must function as a city, county, and a state, along with serving as the nation's capital and the seat of the federal government. These are unique challenges not experienced by any other municipality in our nation. 229.7

The District's Capital Improvement Plan (CIP) is the official plan for making improvements to public facilities and infrastructure over a six-year horizon. The 2006 Comprehensive Plan strengthened the linkage between the Plan and the CIP. Proposed projects are now evaluated for consistency with the Comprehensive Plan and other District policies and priorities. As a result, the Comprehensive Plan became a guide for capital investments, leading to greater coordination across agencies doing public facilities planning; and the development of review criteria for a more objective and transparent process. ^{229,8}

Recognizing the difficulty of developing an appropriate capital plan to support the District's needs, within the resources available, the District has implemented a new modeling tool called the Capital Asset Replacement Scheduling System (CARSS). The tool provides a set of mechanisms and models that: enable the District to inventory and track all assets; uses asset condition assessments to determine the needs and timing for replacement; provide a tool to then prioritize and rank the associated capital projects, both new and maintenance projects; and then determine the funding gap and assess the impact on out-year budgets from insufficient capital budget. 229.9

The current FY 2017-2022 CIP allocates approximately \$6.3 billion to a wide range of capital projects in the District, including maintenance, replacement, or upgrade of vehicular fleets for police, fire, and emergency medical services; street, sidewalks, and alley infrastructure; and public buildings and facilities, such as schools, recreation centers, parks, health and wellness facilities, and police, fire, and government administration buildings. ^{229,10}

The District also uses a 15-year Long-Range Capital Financial Plan to estimate the replacement needs of aging assets, evaluate how population growth will require expansion of existing infrastructure and facilities, and determine the District's fiscal capacity to fund these projects. This longrange plan was conducted in 2016 and included an analysis that estimated a capital budget shortfall of approximately \$4.2 billion through 2022. This gap includes unfunded new capital projects needed to support the growing population and unfunded capital maintenance of existing assets. 229.11

Perhaps the most significant challenge the District faces to meet the needs of growth is an already relatively high debt per capita. District law requires that annual debt service be no more than 12 percent of general fund expenditures. This means the city has limited capacity to borrow funds for new long-term investments. Going forward, the District must consider innovative ways to deliver and finance infrastructure, perhaps learning from other parts of the country experiencing rapid growth similar to that of the District. ^{229,12}

The District has already begun the process. The Long-Range Capital Financial Plan represents a more rigorous and efficient analysis of capital needs and fiscal capacity. On large sites with significant infrastructure needs, such as the Wharf along the Southwest Waterfront, the District is using tools like tax increment financing or payments in lieu of taxes to fund the needed infrastructure for the projects. The District recently created an Office of Public Private Partnerships, which is charged with building collaborations between the private sector and District government to design, build, fund, operate, and/or maintain key infrastructure and facility projects. The Office is exploring ideas such as co-location of private sector uses on Districtowned land and social-impact bonds to fund new local public facilities. All are important steps, but more is needed to fully invest in an inclusive city. 229.13