

FY21

Capital Improvement Program

Equity Analysis

Annual Update to 2019 Report

“Equity Analysis of Baltimore City’s Capital Improvement Plan, FY2014-FY 2020”

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Introduction

In 2019, the Department of Planning partnered (DoP) with Baltimore Neighborhood Indicators Alliance-Jacob Francis Institute at the University of Baltimore (BNIA) to prepare an analysis of Baltimore's Capital Improvement Program (CIP) for FY14-20 and to develop a methodology that the Department could use to do annual analysis going forward. This is an update to that report, adding data for FY21.¹ The following pages include an analysis of the FY21 capital budget using the methodology that BNIA outlined. Also included are initial suggestions for expanding and revising this analysis in the future. These initial suggestions were developed in partnership with the City of Baltimore's Office of Civil Rights and Equity (CRE). Moving forward, DoP will continue to work with CRE and other partners inside and external to City government to refine this list and develop other ways we can improve this analysis.

Why conduct this analysis?

Baltimore has often been cited as one of the most segregated cities in the US. As stated in the DoP Equity Action Plan, "it is undeniable that historic policy and planning decisions created and exacerbated inequity and inequality in Baltimore City. Policies to deliberately segregate white and black residents – such as restrictive covenants, the Federal Housing Administration's openly racist system for mortgage loan approval, urban renewal, and others – directly contributed to so many of the economic and social challenges Baltimore City faces today." The problem today is that continued residential segregation provides an often unknown basis upon and means for which different standards of public service or public policies can be delivered. To overcome persistent segregation requires intentional action to address these biases.

Recognizing the longstanding, and continuing, patterns of inequity in Baltimore, in 2015, staff at the DoP convened an Equity in Planning Committee. Over the next few years, DoP established an Equity Action Plan that set forth goals and strategies to address the legacy effects of inequity and how current policies continue to maintain or exacerbate these inequities. The Baltimore Planning Commission, staffed by the DoP, is legally tasked with providing the primary review and approval of the City's billion-dollar Capital Improvement Program (CIP). For this reason, one of the first action steps under the Equity Action Plan was to conduct an equity analysis of the CIP, which was the subject of the 2019 report. Using the report's analysis of the CIP as a starting point, the DoP aims to implement policies that support more equitable allocation of funds, engage more stakeholders in the capital budget process and identify additional funding sources to meet Baltimore's overwhelming capital needs.

In 2018, the Equity Assessment Program was passed by the Baltimore City Council requiring the DoP to conduct an annual equity assessment of the proposed capital budget. This annual report serves as this assessment.

¹ This report includes excerpts from the 2019 report prepared by Baltimore Neighborhood Indicators Alliance.

Overview of 2019 Report

The [2019 report](#) uses an equity lens created by the U.S. Urban Sustainability Directors Network (USDN) to analyze Baltimore's capital budget investments. The USDN equity lens is used by the Baltimore DoP to evaluate existing practices and procedures as outlined in the agency's Equity Action Plan. The USDN lens considers four overarching areas of equity: Structural Equity, Procedural Equity, Distributional Equity, and Transgenerational Equity.

The main goals of the analyses in the report were: 1) to establish a methodology for assessing the influence of various kinds of CIP investments to neighborhoods and 2) to track these investments across different measures of equity over time.

To understand who is likely benefiting from capital improvement investments through the CIP, the report analyzes the distribution of capital improvement appropriations from FY14-20 compared to the distribution of various community-based indicators (race, income, vacancy, etc.). The report includes analysis of all projects from FY14-20 where a location can be identified, which ranges from between 20 percent to 60 percent of the total funds in the CIP.

Of course, CIP allocations are one of many kinds of neighborhood investments. A 2019 study by the Urban Institute found that up to 90 percent of capital investment in neighborhoods comes from the private sector in the form of commercial lending for real estate development and/or residential mortgage and rehabilitation. In addition, funds spent directly by State or Federal agencies, such as improvements to state universities or public transit infrastructure, are not included in the CIP. While this report discusses the larger context of investment in the City, the analysis in this report only focuses on those dollars which are allocated through the City's Capital Improvement Program.

Overview of Methodology

Because the Department of Planning plays a large role in coordinating and approving the capital budget each year, the report focuses solely on those dollars which flow through the City's capital budget.

CIP data consists of funding levels that were approved and allocated to agency-requested capital projects prior to the start of the fiscal year. Capital projects included in this analysis include bridges, major road reconstructions (but not resurfacing), parks, recreation centers, playgrounds, athletic fields, pumping stations, municipal building upgrades (fire stations, police stations, city office buildings, libraries, etc.), cultural organizations receiving City GO bonds, landfill, solid waste transfer stations, and more.

Identifying Project Locations

Projects fall into two categories with respect to how the data can be analyzed: those with a location identified and those without a location identified; the latter are referred to as "bulk" project accounts. In many cases, the location of the capital investment is known when funds are requested as the funds are targeted towards a specific building or bridge, for example. However, for some types of capital investments, agencies request funds for a type of work, such as road resurfacing or vacant building demolition, to be used for that purpose throughout the city. Where the money for these kinds of projects is actually spent is only known after expenditures are made. Capital projects that fall into this category that were not included in this analysis include demolition, housing and business incentives, road resurfacing, traffic safety improvements, traffic signals, certain water/sewer main repair and/or replacement projects, certain school building improvements (those smaller than a full renovation or replacement), and more.

Determining Areas of Influence for CIP Projects

One of the main objectives of this analysis was to provide a replicable methodology for determining how different kinds of CIP projects impact neighborhoods. For example, capital investment in a local library branch will be very important to the neighborhood(s) served by the branch, but may not have too much impact in other parts of town. In contrast, investments in major cultural destinations such as the National Aquarium affect the immediate downtown area as well as the city as a whole. To account for this kind of differentiation in the spatial influence of different CIP projects, the Department of Planning staff along with members of the Planning Commission categorized projects into three categories based on the geographic impact of each project. Projects with a smaller footprint, largely beneficial solely to the community in which they are located were categorized as "Local". Projects with a slightly larger, multi-neighborhood impact, were classified as "Multi-Neighborhood". The third and final category, "Citywide", was applied to projects that would impact the city as a whole. Projects classified as Multi-Neighborhood or Citywide also had neighborhood impacts so it was important to craft a methodology that would allow for a higher amount of funding to be assigned to the area surrounding the project.

The CIP investment data with definitive spatial information- such as an address or parcel ID, a street segment, or project with clear boundaries- was entered into a Geographic Information System (GIS) for analysis (See Appendix A of the [2019 Report](#) for more details). Distance buffers were created around the project’s spatial location in order to distribute the value of funds. A quarter (0.25) mile distance has been established in the literature as a “walking distance” within the fields of public health, planning, and transportation¹⁵¹⁶; this distance was used as a basis for local project impact.

Influence of CIP Projects	Distribution of Allocation	Examples
Local	¼ mile buffer applied to all projects Funding distributed by share of area in each Community Statistical Area (CSA)	Park and playground renovations, road reconstruction and streetscapes, environmental restoration sites, recreation centers, school improvements
Multi-Neighborhood	50% of funding remains in ¼ buffer 50% of funding distributed beyond to a 1-mile radius	Rec & Parks (Cylburn, Middle Branch Fitness), Business Parks, Public Markets
Citywide	50% of funding remains in ¼ buffer 50% of funding distributed beyond to a 5-mile radius	Major Cultural/Tourism (Walter’s, B&O, Aquarium, Rash Field), City Services (City Hall, Police HQ, Landfill)

Distribution of CIP Allocations by Community

Using this methodology to distribute CIP allocations to communities, allocations were calculated for all 55 Community Statistical Areas (CSAs) in Baltimore. CSAs are clusters of neighborhoods organized around census tract boundaries, which are consistent statistical boundaries. Total values were normalized by the population size of each CSA to create per-capita spending figures.

FY21 Analysis

The FY21 analysis includes three important components:

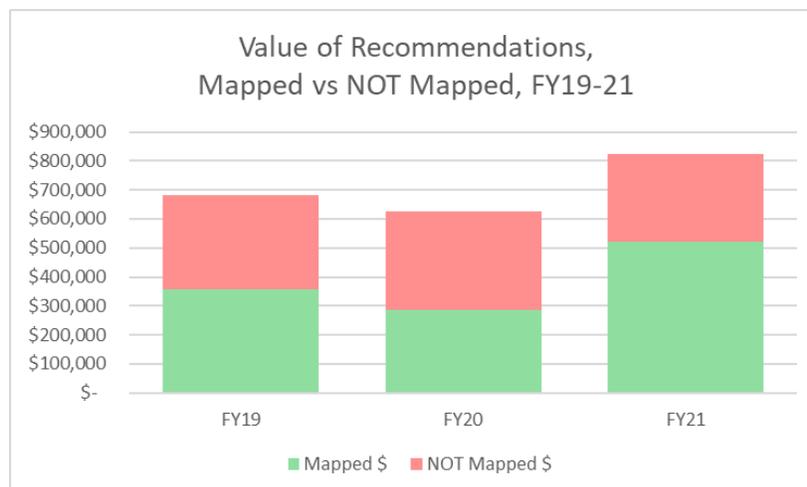
- The **% of projects mapped** documents what is included in the analysis. Unfortunately, a significant portion of the capital budget is excluded from the analysis because we don't have location information.
- The **per capita investment by community statistical area** shows the geographic distribution of capital resources. This shows which communities are getting large investments, and which ones are not.
- Finally, the **investment by race and income** shows which demographics are benefitting most from the City's capital investments.

% of Projects Mapped

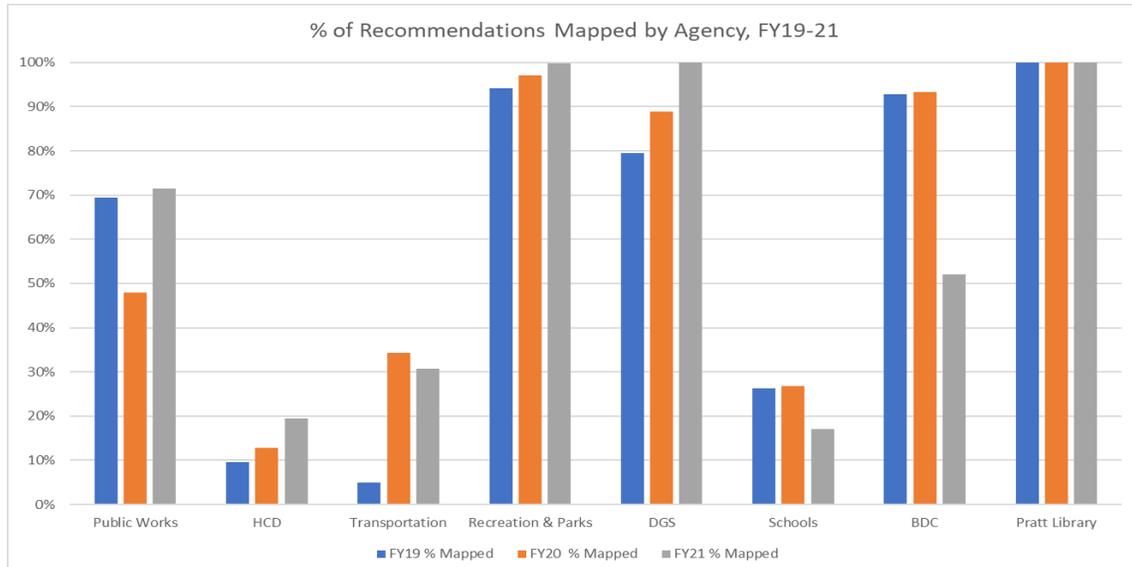
The equity analysis can only be conducted on those projects that we have location information for. The chart below shows the value of projects that we have location information for compared to those that we don't have location information for. Both the % and value of mapped recommendations has grown from FY19 to FY21, but there are consistently over \$300 million worth of projects for which we don't have location, and therefore can't be included in the equity analysis.

For the first time, in FY21, the Department of Planning asked agencies to submit GIS files with location information along with CIP requests. This resulted in a higher percentage of mapped projects in FY21. In FY19 and FY20, we had location information for about half of the projects in the CIP, whereas for FY21, we had location information for more than 60% of the projects in the CIP.

For some projects, agencies were not able to provide location information for FY21, but they provided information about how they have spent previous capital dollars for similar purposes. This is important information to analyze through an equity lens, but is not included in this analysis as the information was provided after the funds have been spent and therefore cannot affect the decision-making process.

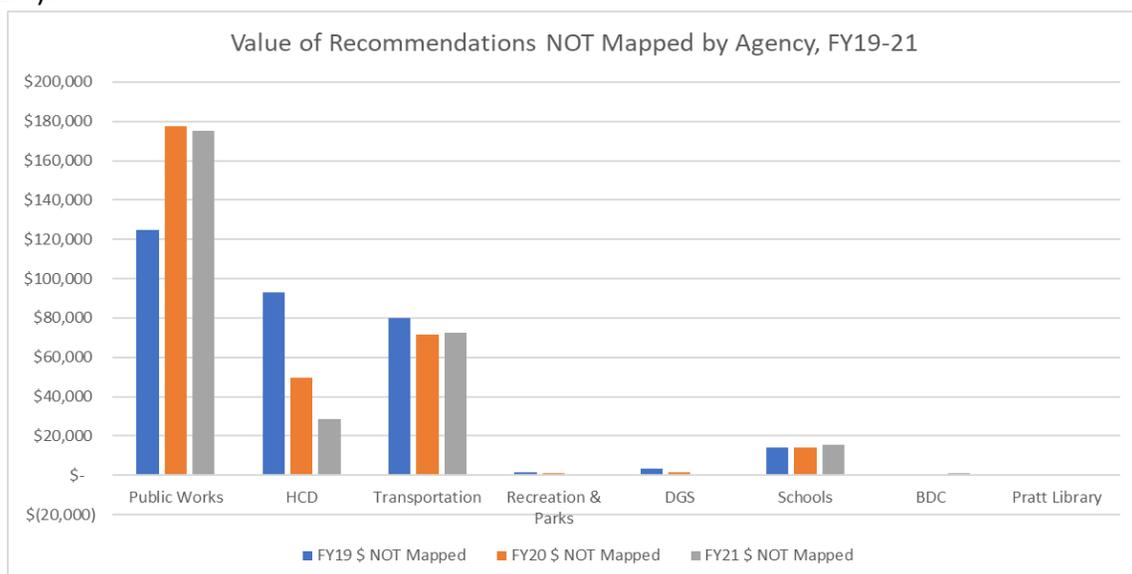


The percent of projects mapped varies widely by agency. Certain agencies such as General Services, Pratt Library, and Recreation and Parks provide location information for nearly every project. Other agencies frequently request funds for a type of activity (ex. demolition, street resurfacing, replacing water mains) rather than a specific location.



Note: 21st Century Schools is not included in the CIP and not part of the equity analysis. Schools does provide DoP with a full list of location specific requests that they make to the State. Local funds are used to match the State funds, but we don't map the locations because we don't know which requests the State will fund.

In addition to looking at the percent of agency projects that are mapped, it is important to look at the value of projects that are NOT mapped to understand what is missing from the analysis. For example, in FY21, the Department of Public Works (DPW) has a significantly higher percentage of projects mapped than the Baltimore Development Corporation (BDC) (71% compared to 52%), but far more dollars excluded from the analysis (\$175.3m compared to \$1.1m).



Per Capita Investment by Community Statistical Area

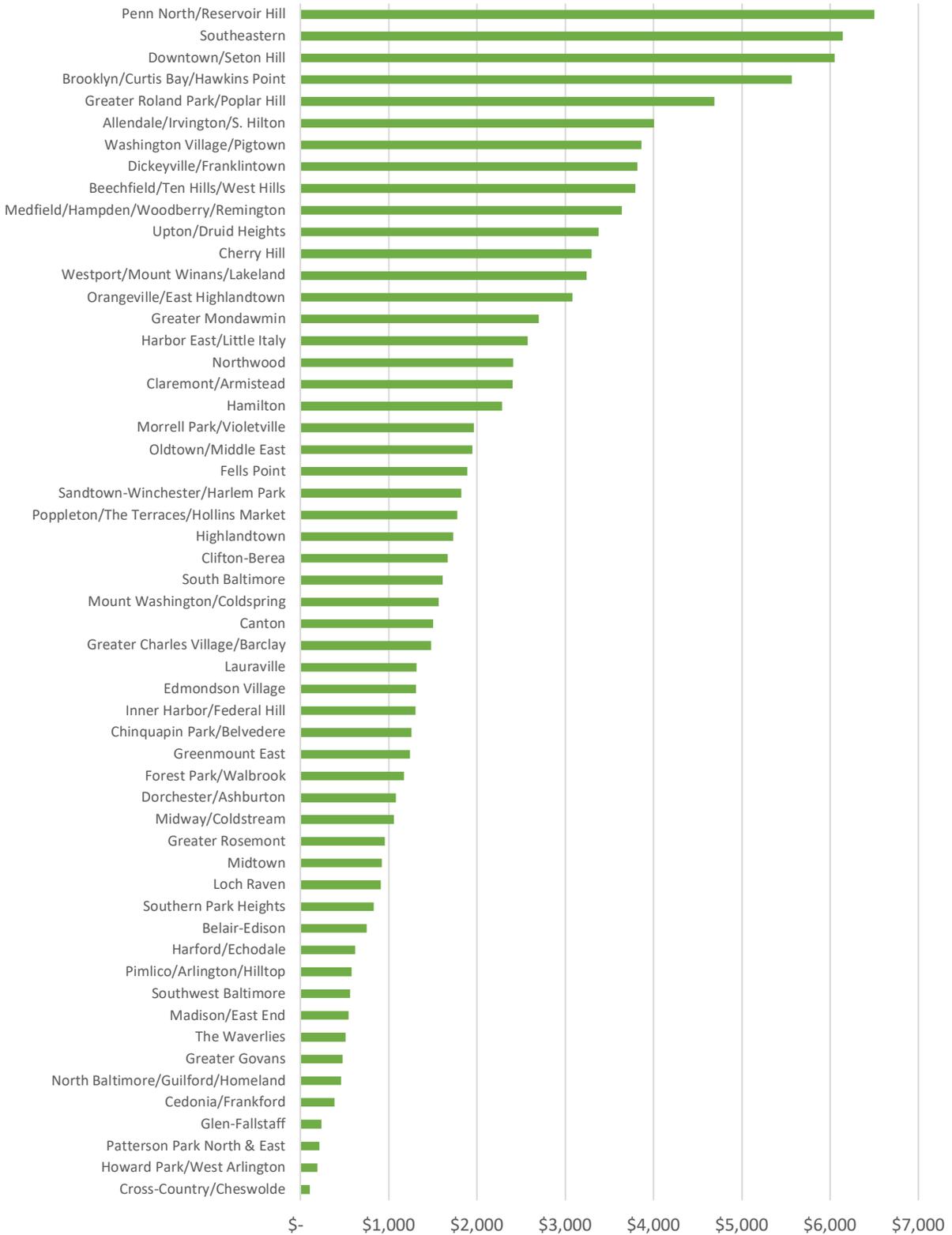
Given the annual variations in the amount of funding allocated for the CIP and how many mapped projects could be included in the analysis, allocations were grouped into 3-year averages. Maps of the three most recent 3-year averages are on the following pages. For maps going back to FY14, see Appendix B of the [2019 Report](#).

To better understand the specific projects (and the dollar amounts associated with those projects) that are driving these maps, check out this [interactive map](#).

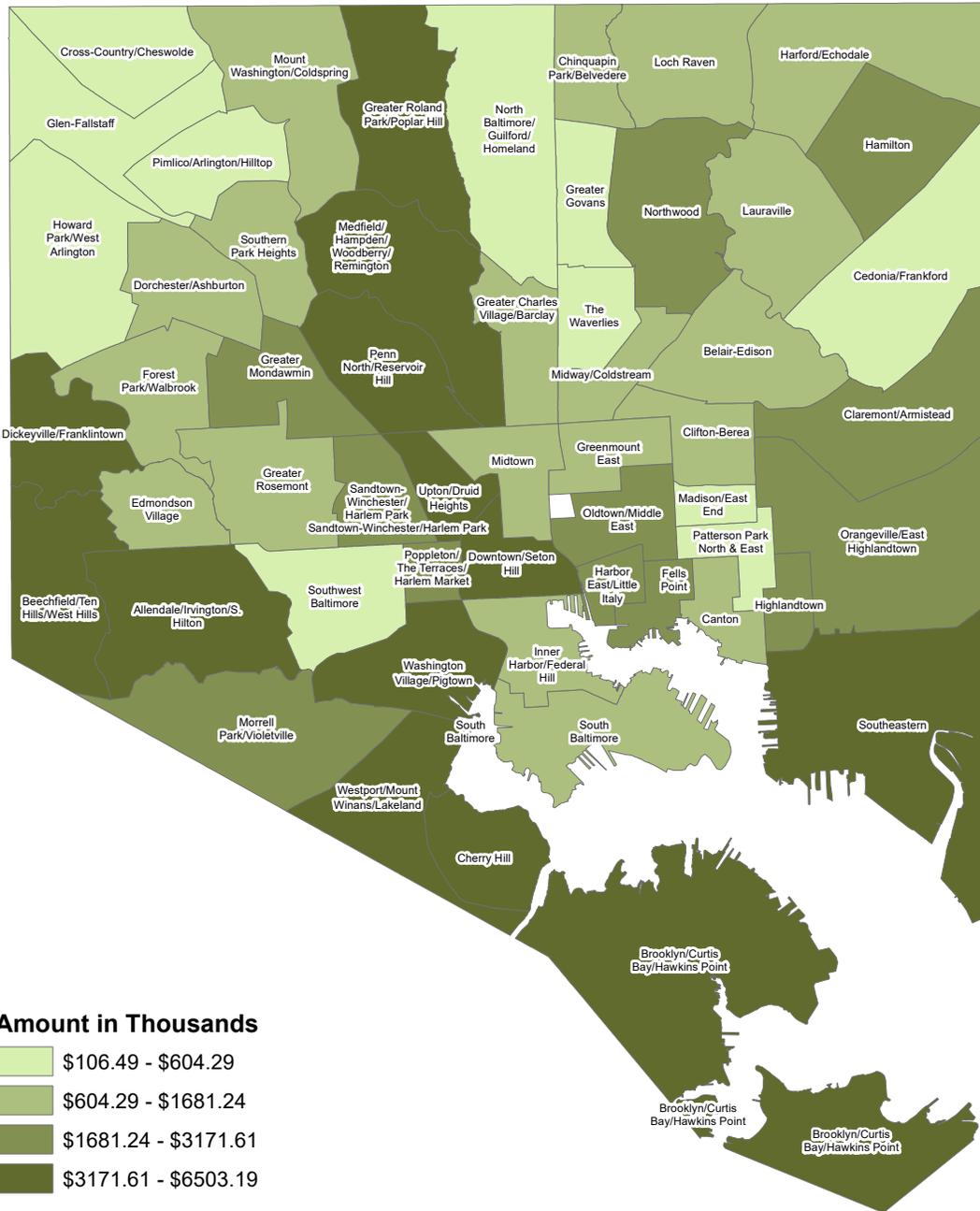
From FY14 to FY20, the total per capita allocations for projects with locations was highest in Penn North/Reservoir Hill, Downtown/Seton Hill and Southeastern Baltimore. However, much of the allocation attributed to Penn North/Reservoir Hill and Greater Mondawmin has citywide impact (i.e. Druid Lake Reservoir improvements). The Southeastern community had significant multi-neighborhood capital projects such as Broening Highway Bridge over Colgate Creek (FY17).

In FY19-21, these three areas continue to have the highest per capita investment. In Penn North/Reservoir Hill, the Vernon Pump Station Rehabilitation (FY2019, \$42.8m) accounts for the majority of the investment. In Southeastern, there are several utility projects that account for the majority of the investment. In Downtown/Seton Hill, the majority of funds are allocated to water main replacements and a combination of various City facility improvements.

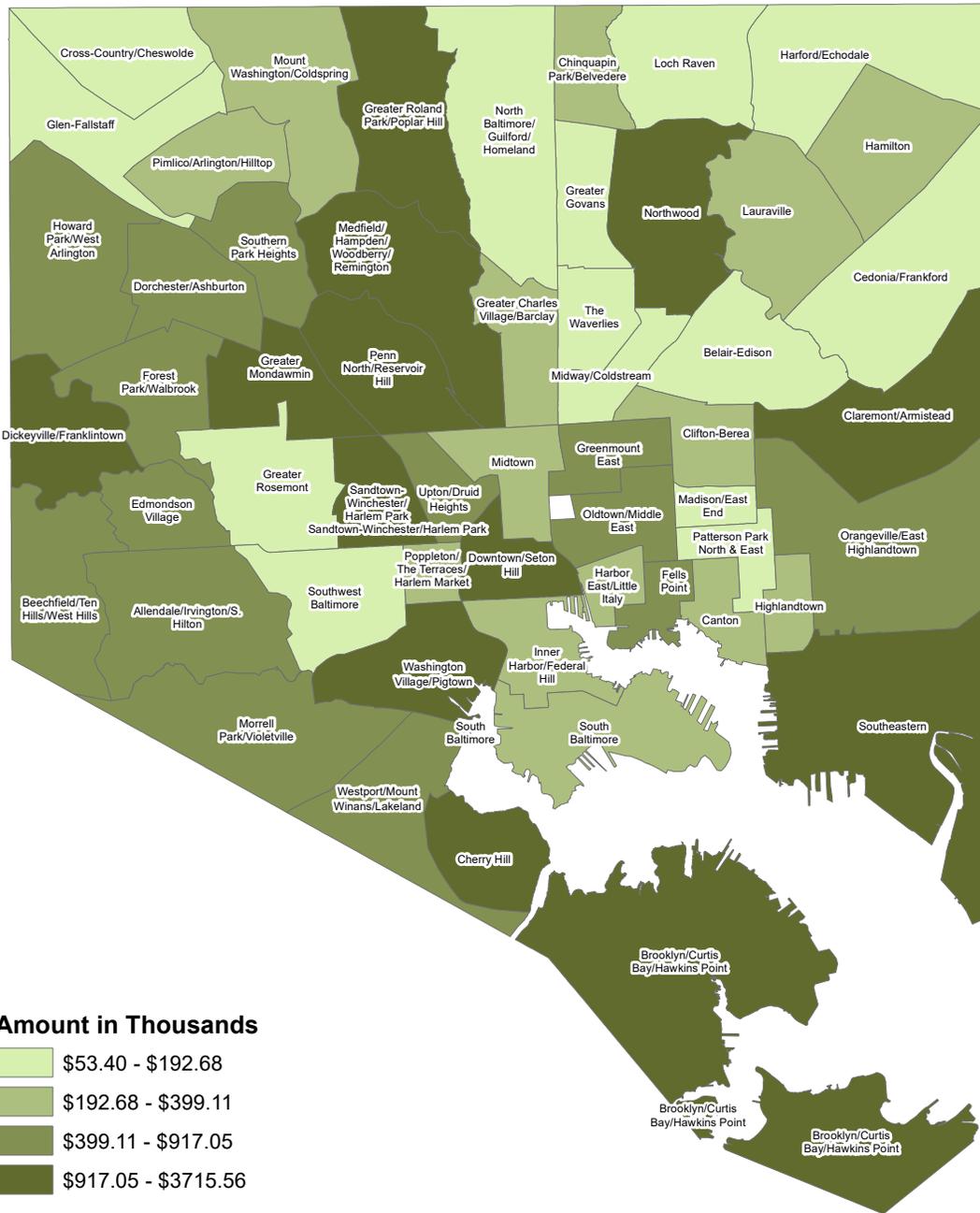
FY19-21 Per Capita Investment by CSA



Per Capita CIP Allocations, FY 2019-2021



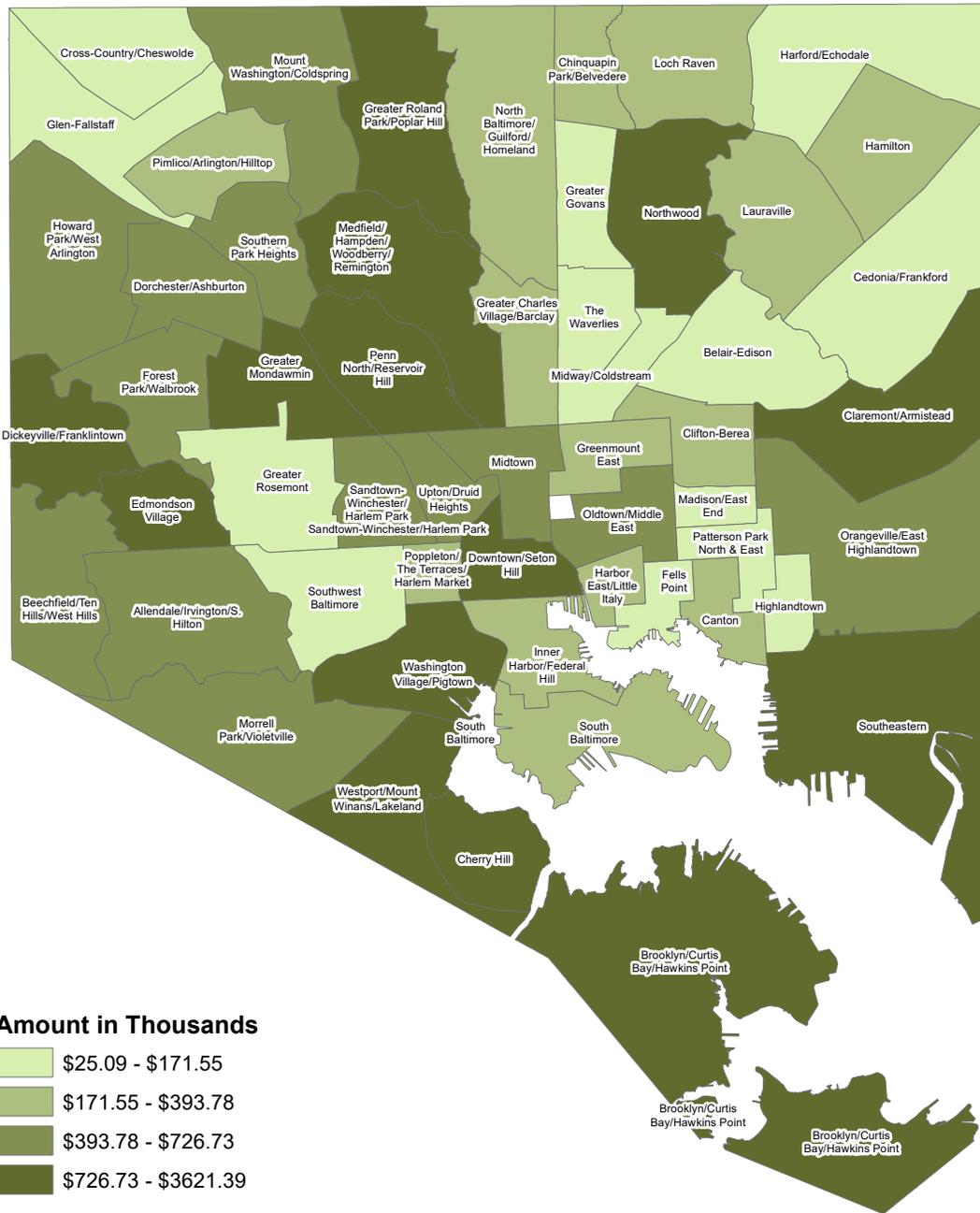
Per Capita CIP Allocations, FY 2018-2020



6/5/20

Source: Baltimore Planning

Per Capita CIP Allocations, FY 2017-2019



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Source: Baltimore Planning

Investment by Race and Income

Allocations by % of Black/African American Residents

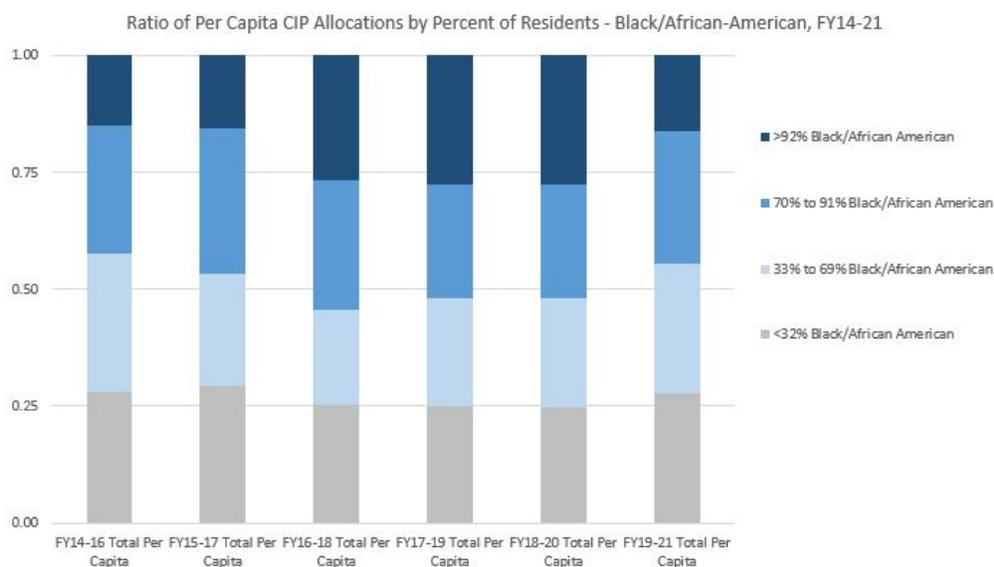
One of the most important goals is to ensure CIP resources are consciously redistributive towards areas where persons of color make up a large percentage of the population. In 2017, Baltimore had an overall 62.3% Black/African American (AA) population, where some neighborhoods have more than 92% Black/AA residents.

Based on the 3-year average per capita CIP allocations from FY 14-16 and FY 15-17, per capita spending allocated to neighborhoods with the highest percentage of Black/AA residents (>92%) was only half of that allocated to areas to the lowest percentage Black/AA (\$3,849.32 versus \$7,167.43).

From FY16-18 through FY18-20, the relationship of per capita spending becomes more equal not only among the highest and lowest percentages but across all neighborhood categories in terms of Black/AA residents.

For FY19-21, the pattern looks more similar to FY14-16 and FY15-17.

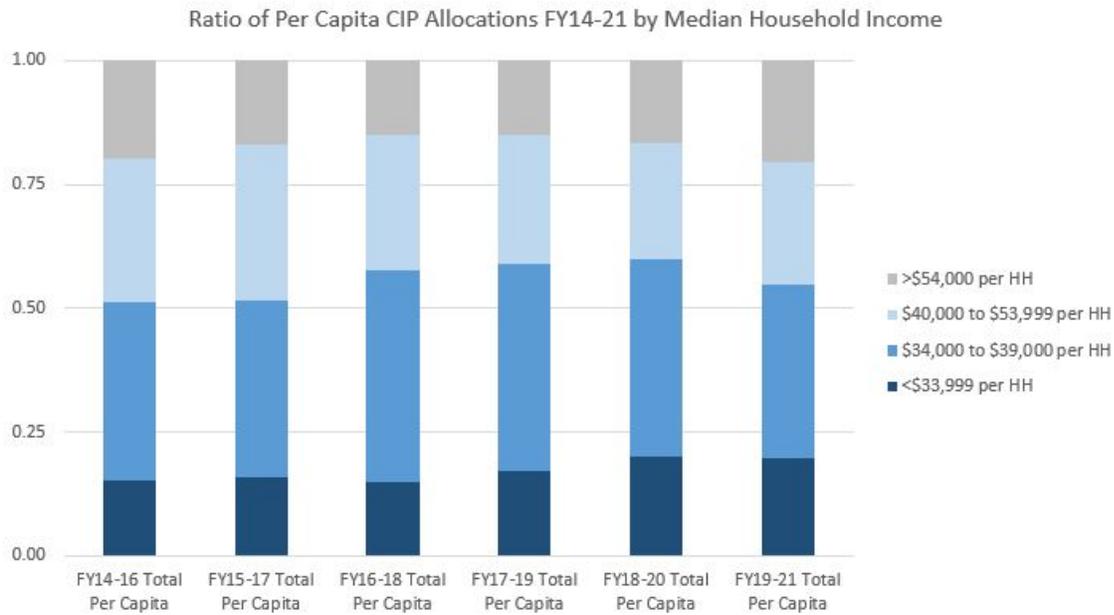
In FY18, there was \$157m allocated for Ashburton Finished Water Reservoir Improvements and \$41m for Ashburton PS Rehabilitation, both of which are in predominantly Black/African American CSAs. These investments may partially explain why from FY16-FY18 through FY18-20, the investment in Black/African American CSAs was higher.



Allocations by Income

The median income in Baltimore in 2017 was \$46,641. In all three-year time periods, the highest per capita CIP allocations were in the category of CSAs just below the citywide median (\$34,000-\$39,999), but not within the lowest category (with a median income less than \$33,999). In fact, communities with the highest and the lowest median incomes had less than half of CIP allocations occurring in the middle income neighborhoods.

In FY19-21, the allocations for communities with incomes below \$39,000 shrinks from the prior 3-year averages, but remains higher than it was in FY14-16 and FY15-17. The allocation for communities with incomes over \$54,000 increases from the prior 3-year averages.



Recommendations for Future Analysis

The analysis included in this report is based on the methodology outlined by BNIA in their 2019 Report, “Equity Analysis of Baltimore City’s Capital Improvement Plan, FY2014-FY 2020.” We recognize that this is an important first step, but it has significant limitations. We are committed to partnering with the new Office of Equity and Civil Rights to expand and refine this analysis, potentially developing new methodologies or companion analysis in the future. We have started the conversation with leadership from the Office of Equity and Civil Rights and identified several recommendations for future exploration.

- **Conduct equity analysis earlier in the CIP review process.** Conduct equity analysis as soon as requests are submitted in the Fall and provide feedback to agencies before they finalize requests. There is very little we can do to achieve an equitable CIP if the requests that are made are not equitable. This will also engage agencies more in the equity analysis and allow us to understand any potential tensions between equity goals and other goals, such as asset management.
- **Provide more active review of utility funded projects.** As the Department of Public Works has by far the largest share of the CIP and the highest value projects, the locations of public works projects have the greatest impact on the distribution of investment by CSA, race, and income.
- **Change business practices as needed to better assess equity.** One example of a business process that could be changed is requiring a cost benefit analysis for a proposed capital improvement. What is the cost of fixing the existing facility vs relocating to another facility and who benefits from the investment in each location?
- **Leverage the Equity Assessment Program to require agencies to provide additional location information.** As noted earlier in this report, one of the challenges of conducting the equity analysis is that we only have location information for 50-60 percent of the funds in the CIP.
- **Engage with community stakeholders to understand the impact of projects.** The analysis currently differentiates between projects with local, multi-neighborhood, and citywide impact, but does not consider other ways that projects might have different impacts. Some projects may negatively impact neighborhoods while others have a positive impact; some projects may have a high impact, while others may have a low impact. We could also understand to what extent agencies are engaging with community stakeholders about the scope of projects vs. simply notifying them of projects.
- **Consider how each agency might respond to equity challenges.** Each agency is going to have different challenges and opportunities related to making their capital budget more

equitable. We need to work with each agency individually to identify these opportunities and barriers. We will focus first on the Department of General Services (DGS).

- **Learn from best practices from other cities.** When we first started trying to figure out how to conduct an equity analysis of the capital budget, we were unable to find precedents from other cities. However, in the last few years many cities have developed equity programs and policies that can help us better evaluate our efforts.