



# Capital Budgeting in Philadelphia

Examining the city's investments through an equity lens



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## About this report

This report was researched and written by Alix Sullivan, an officer with The Pew Charitable Trusts' Philadelphia research and policy initiative, with additional research from senior associate Maridarlyn Gonzalez. It was edited by Larry Eichel, senior adviser with the initiative, and Katie Martin, the initiative's project director, along with Carol Hutchinson, principal associate, editorial. Senior Geographic Information System (GIS) officer Mike Wissner and senior GIS associate Jessie Mandirola also contributed to the report. Ned Drummond and Cara Bahniuk created the graphics and designed the report; and Jolene Nieves Byzon, Mary Markley, and Jeremy Ratner managed the publication's production.

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This report does not necessarily reflect the opinions of any of these individuals or their institutions.

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Founded in 1948, **The Pew Charitable Trusts** uses data to make a difference. Pew addresses the challenges of a changing world by illuminating issues, creating common ground, and advancing ambitious projects that lead to tangible progress.

## Overview

When Philadelphians talk about their local government, the conversations often involve places where the city provides services to residents—facilities such as the parks, libraries, fire stations, and city office buildings that Philadelphia creates, maintains, and improves with funding from its capital budget.

Throughout the country, government officials are increasingly factoring equity into their decisions on capital investments. Seeing how equitably such investments have been made in the past can help policymakers determine whether and how to change the capital planning process to create more equitable outcomes in the future.

As part of the city of Philadelphia’s stated goal to “reduce historical inequities,” the previous mayoral administration asked The Pew Charitable Trusts to help determine how capital fund investments were distributed across various demographic groups in the city. With this lens in mind, Pew analyzed Philadelphia’s capital fund commitments from fiscal year 2011 through fiscal 2022, basing the framework largely on an equity-focused report from Baltimore and adapting the methods used there to better fit Philadelphia.<sup>1</sup> The Baltimore approach was based on the location of each capital project and the surrounding community’s makeup, allowing analysts to measure the per capita level of investment for various demographic categories. In this analysis for Philadelphia, Pew included only investments that could be linked to a single, specific location, which amounted to slightly more than half of the total.

Pew found that, on a citywide basis, capital investment in Philadelphia amounted to \$802 per capita over the period studied, though the amount varied widely from one part of the city to another. Census tracts that received greater shares of capital investment tended to have higher median household incomes and a larger share of non-Hispanic White residents relative to the city overall. And tracts with the lowest share of investment tended to have a higher percentage of non-Hispanic Black or African American residents and lower median income levels.<sup>2</sup>

The starkest differences appeared when an index known as “indicators of potential disadvantage” was applied. This index, developed by the Delaware Valley Regional Planning Commission, includes income, race, and ethnicity as well as characteristics such as age, gender, disability status, and the size of the area’s foreign-born population.

Census tracts where the potential disadvantage was the lowest had over 2.5 times more capital investment per capita (\$1,235) than tracts where the potential disadvantage was the highest (\$454). Within demographic groups, the patterns were clear-cut in some, but not all, cases.

As the share of Black residents increased in the census tract groups, the per capita investment decreased; tracts with the smallest share of Black residents had a per capita investment of \$898, compared with \$507 for the group with the largest share. The opposite occurred with White population levels. The tracts with the smallest share of White residents had a per capita investment of \$474, compared with \$964 for the tracts with the largest share.

For Hispanic or Latino Philadelphians of any race, the picture was less distinct.<sup>3</sup> The difference between census tracts with the highest and lowest percentage of Hispanic residents was quite small, with more variation in the middle groups. And among Asian residents, the differences among all groups were modest.

Among the other key findings from the analysis:

- Assets that Pew classified as “citywide,” meaning those meant to serve the entire city, generally cost more to build and maintain than local assets, which serve individual neighborhoods. And citywide assets are largely concentrated in Center City tracts, which have higher income levels and more White residents. These factors contributed to the magnitude of the per capita investment differences between various demographic groups.
- Similarly, investments in cultural assets such as museums tend to be concentrated in specific areas of the city, such as Center City. On the other hand, investments in assets such as recreation and health centers, most of which Pew classified as “local” or “multi-neighborhood,” are found throughout the city, resulting in relatively small differences in the per capita numbers.

Given Philadelphia’s stated goal in the fiscal 2025 Capital Program and Budget to increase racial equity, the city may want to invest more in areas that were historically subjected to underinvestment or disinvestment. However, the presence of large, citywide assets in and around Center City and the required capital investment to maintain and improve them is not likely to change, perhaps limiting how much variation there can be in the distribution of capital investment throughout the city. Instead, local leaders could opt to focus investment on local and neighborhood-level assets, whose impact may be felt more by residents, particularly in areas with historically lower investment levels.

## **Philadelphia’s budgeting process**

Each year, Philadelphia issues a series of budget reports, ordinances, and documents including an annual operating budget of approximately \$6 billion; a five-year plan projecting revenue and expenditures; an annual capital budget of approximately \$4.7 billion; and a six-year capital program projecting capital investments.<sup>4</sup>

The capital budget is organized by department, and it details investments to be made on city assets during the year. Funds from Philadelphia’s capital budget are generally used for facilities and services with at least a five-year life span and a minimum \$15,000 value.

In assembling this budget and six-year plan, officials judge potential projects using several criteria, including the current mayor’s priorities, the desire to deliver city services effectively, and the availability (and constraints) of funding sources, including those originating within the city and those from outside sources, such as state and federal funding.<sup>5</sup> The Capital Program and Budget set the priorities for the coming years, including projects such as creating street traffic-calming infrastructure, installing LED lighting, building health centers, and improving existing parks and recreation centers. The City Council approves it each year as part of the overall budget process.

Since an executive order in early 2020 mandating that the city government commit to “embedding racial equity as an explicit governing principle,” Philadelphia has increasingly considered racial equity in targeted, specific ways, such as inclusion in the Capital Program and Budget released each year.<sup>6</sup>

That is accomplished through “scoring by the City’s outside racial equity consultant, input from the Office of Diversity, Equity, and Inclusion, and prioritization by the City’s Budget Equity Committee, comprising employees across city departments,” according to the approved fiscal 2024-29 Capital Program and Budget.<sup>7</sup> As of 2024, the city no longer uses an external racial equity consultant. Departments must respond to racial equity questionnaires regarding funding requests, and the city also seeks feedback via community engagement.<sup>8</sup>

## This report's approach

Pew's analysis of capital spending in Philadelphia is based on an approach undertaken in Baltimore. In 2019, the Baltimore City Department of Planning worked with the Baltimore Neighborhood Indicators Alliance-Jacob France Institute at the University of Baltimore to examine capital allocations from fiscal years 2014-20 through an equity lens.

This approach, replicated annually, measured several key demographic indicators—including race, income, and diversity level—across Baltimore's aggregated clusters of census tracts known as Community Statistical Areas (CSAs). The analysis then mapped the investments, identifying each project as local, multi-neighborhood, or citywide. The rationale was that local projects, such as improvements to a neighborhood library branch, largely affect the immediate surrounding area, while improvements to citywide institutions, such as the National Aquarium, affect both the immediate area and the entire city.

Analysts then calculated the per capita level of investments in each CSA based on demographic categories, such as ethnicity and income. The stated goal of this analysis was 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.”<sup>9</sup>

Pew made several changes to Baltimore's approach to analyze Philadelphia and its equity goals. Those changes included altering the indicators used, changing the geography level analyzed (census tracts rather than larger CSAs), and measuring funds that have been encumbered (money committed to be spent via purchase order or other documentation) rather than completed expenditures. These decisions are further detailed later in this report.

For each demographic indicator in Philadelphia, Pew assigned all local census tracts to one of four equally sized groups. A census tract with a comparatively low median household income would be part of Group 1 for household income, while the tract with the highest income would be part of Group 4. Pew measured each indicator in isolation—meaning, for example, that a single tract could be part of Group 1 for household income, Group 2 for Hispanic population, and Group 3 for another indicator.

Pew used those results to examine investment levels throughout the city on a per capita basis for each indicator.<sup>10</sup>

## Demographic analysis

Based on the Baltimore framework and that city's definitions and efforts around racial equity, Pew chose the indicators listed below to analyze Philadelphia's capital program through an equity lens. (See Table 1.)

In addition to basic indicators of race, ethnicity, and income, Pew included an “indicators of potential disadvantage” score for each census tract. The purpose of the score, developed by the Delaware Valley Regional Planning Commission, is to measure the combined level of concentration of nine indicators of potential disadvantage, recognizing that analyzing single indicators in isolation may be insufficient in measuring inequity.<sup>11</sup>

Pew's analysis focused on a 12-year period, fiscal 2011-22, when Philadelphia's demographics were in flux. To capture snapshots of those changes over time, Pew used the U.S. Census Bureau's American Community Survey (ACS) five-year data for the periods ending in 2012, 2015, 2018, and 2021. This allowed Pew to match each investment with the demographic data most appropriate for the time the investment was made.

Table 1  
**Demographic Indicators**

Category	Indicators
<b>Race and ethnicity</b>	<ul style="list-style-type: none"> <li>▪ Non-Hispanic White</li> <li>▪ Non-Hispanic Black or African American</li> <li>▪ Hispanic or Latino of any race</li> <li>▪ Non-Hispanic Asian</li> <li>▪ Non-White (includes Hispanic or Latino of any race)</li> </ul>
<b>Household income</b>	<ul style="list-style-type: none"> <li>▪ Median household income</li> </ul>
<b>Indicators of potential disadvantage</b>	Aggregate score based on: <ul style="list-style-type: none"> <li>▪ Youth (under 18)</li> <li>▪ Older adults (over 64)</li> <li>▪ Female</li> <li>▪ Racial minority</li> <li>▪ Ethnic minority</li> <li>▪ Foreign-born</li> <li>▪ Limited English proficiency</li> <li>▪ Disabled</li> <li>▪ Low-income (below 200% of federal poverty line)</li> </ul>

Notes: This report details the results for several race and ethnicity indicators: White, Black or African American, Hispanic or Latino, and Asian. The non-White indicator aggregates these groups, along with other racial and ethnic groups, into one category. The results for non-White groups are detailed in the accompanying data supplement to this report.

Source: U.S. Census Bureau, American Community Survey, five-year estimates for the periods ending in 2012, 2015, 2018, and 2021

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## **Elements of Philadelphia’s capital investments, FY 2011-22**

There are two crucial sets of data required to analyze the city’s capital investments: assets and encumbrances.

Assets are what gets built, including “physical and technological infrastructure, neighborhood and community facilities, and public buildings,” as defined by the city’s Capital Program and Budget.<sup>12</sup> The city provided Pew with spatial data, including details about the location, purpose, and use of each asset.

An encumbrance, according to the Capital Program and Budget, is a “commitment of funds to be expended and recorded in the city’s accounting system.”<sup>13</sup> Encumbrances do not represent actual spending. Rather, they are documents, such as purchase orders or contracts, that “reserve appropriation in anticipation of future expenditures,” according to the city’s Annual Financial Report for the Fiscal Year Ended June 30, 2022.



Encumbrances can and often do carry forward from one year to the next. Pew's analysis uses encumbrances rather than appropriations or expenditures because encumbrances serve as proxies for work that will be completed. The city provided the size of each encumbrance, the department involved, and the asset to which the encumbrance was linked.

Pew classified these data points further based on fiscal year, extent of geographic influence, and intended activity, each of which is described below. To compare encumbrances based on these factors against various demographic indicator groups, Pew calculated the per capita allocations of encumbrances across each group of indicators.

## **Analysis of assets and encumbrances**

For this analysis, Pew considered the fiscal 2011-22 capital budgets, which encompassed the recovery from the 2007-09 Great Recession, years of stable or increasing budgets leading up to the pandemic in 2020, and the beginning of the recovery from the COVID-19 economic shock.

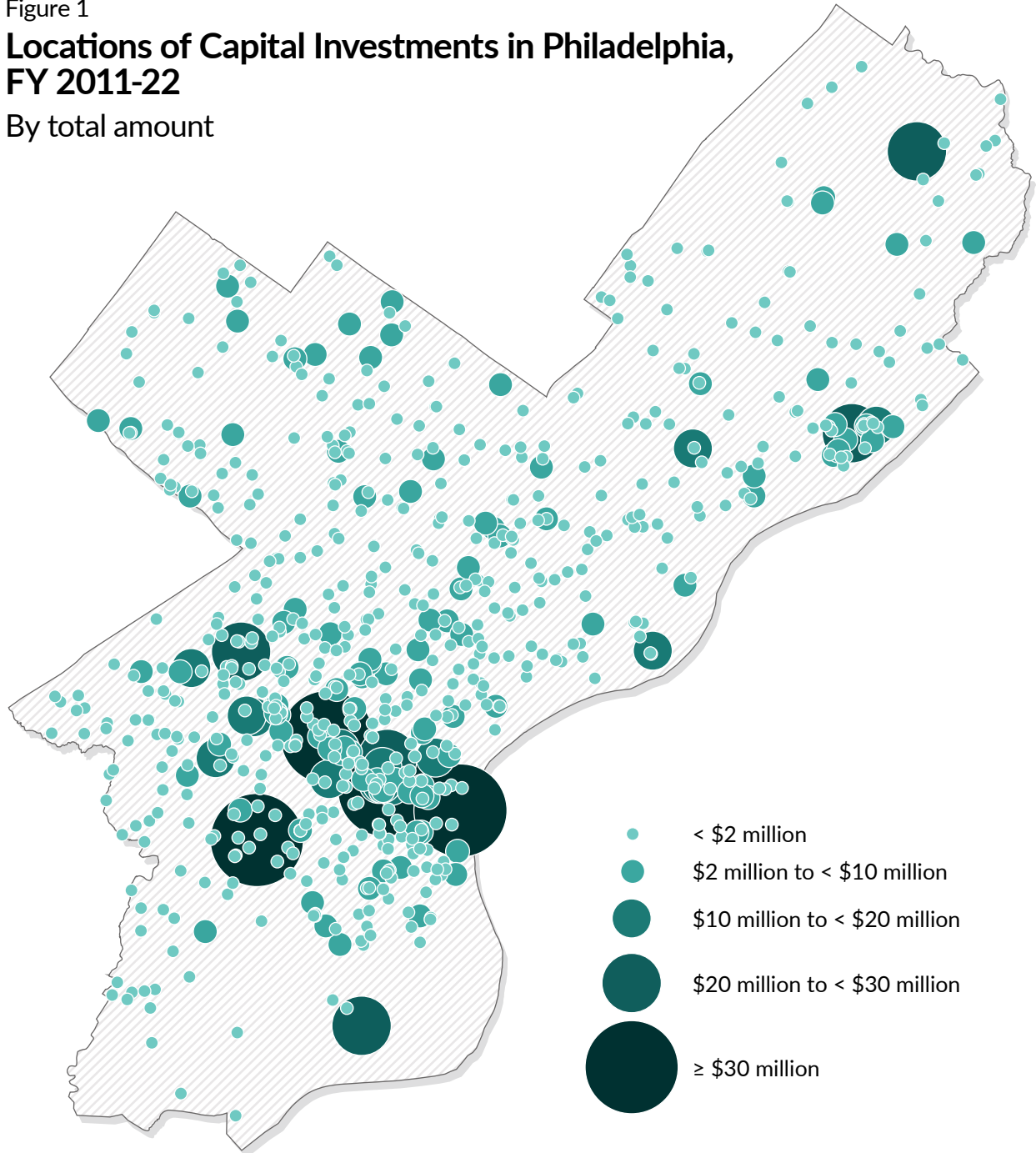
During this period, the city registered \$2.5 billion in encumbrances.<sup>14</sup> Of that total, \$1.3 billion (just over 50%) were included in Pew's analysis, representing 10,547 encumbrances and 730 assets. In the analysis, Pew included only investments that could be linked to specific locations, meaning that some capital investments, such as IT infrastructure, were not analyzed in this report.

Figure 1 shows the locations of those assets, and each asset's point size corresponds to the total encumbrances linked to that asset—ranging from \$596 to \$81.3 million. Assets were distributed throughout the city, with more in Center City and the surrounding areas and fewer in Southwest and Northeast Philadelphia. Most of the assets had total encumbrances of \$2 million or less. Assets with relatively larger total encumbrances were generally concentrated around Center City.

Figure 1

## Locations of Capital Investments in Philadelphia, FY 2011-22

By total amount



Notes: Each asset's total encumbrance amount displayed on the map was first classified using the natural breaks (Jenks) method, which groups together assets within a similar range of values. Pew then adjusted the ranges to simplify interpretation. Most assets had a total of less than \$2 million (83%), while a few had total encumbrances of \$30 million or higher (0.5%, or four assets). Penn's Landing was a major outlier, with a total of \$81.3 million in encumbrances over the study period.

Source: Pew analysis of city of Philadelphia capital budget data

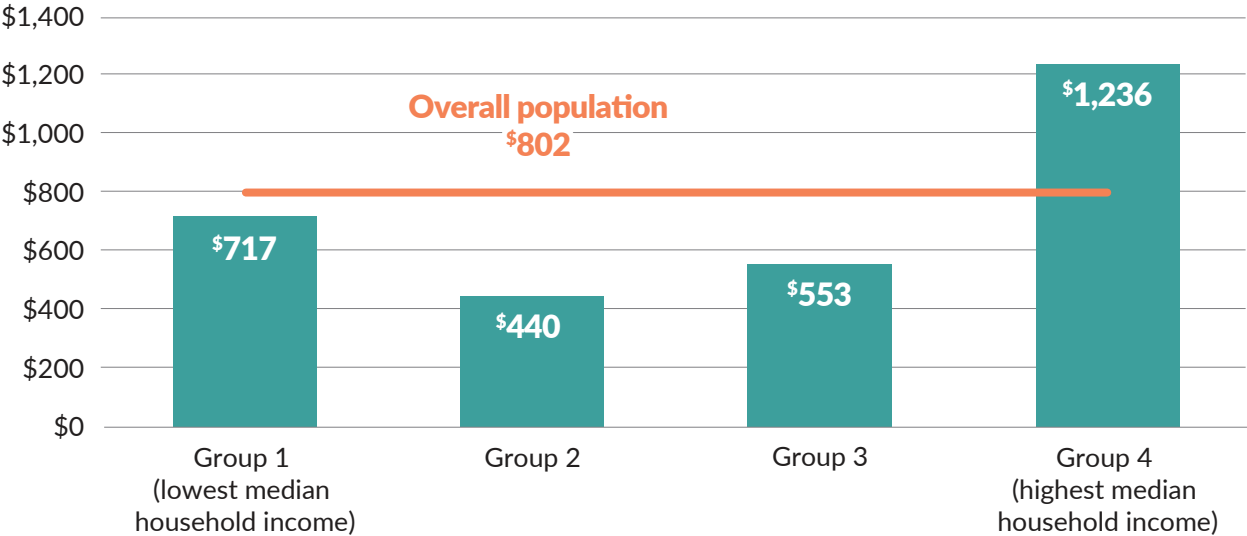
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# Per capita investment across demographic indicators

Pew’s analysis determined that the city encumbered approximately \$802 per resident from fiscal 2011 through fiscal 2022. The per capita numbers varied widely among census tracts, based on their demographic characteristics. Generally, the tracts that received larger shares of investment over the period studied had higher median household incomes and higher percentages of White residents. Tracts with lower shares of investment had higher percentages of Black residents and lower median household incomes.

For census tracts with the highest median income level, the per capita investment was \$1,236, or 54% higher than the citywide average. The group with the lowest median household income level had a per capita investment of \$717, or 11% lower than the citywide average; investment for the two middle groups was even lower. (See Figure 2.)

Figure 2  
**Per Capita Investment, by Median Household Income Level**  
FY 2011-22



Notes: Census tracts were classified into four groups of equal size (quartiles) over the four sets of five-year ACS estimates. For each tract, the range of values represented by each group—median income in this case—varied by year. For the 2021 five-year ACS income estimates, for instance, Group 1 represents census tracts with the lowest median household income ( $\leq$  \$36,006); Group 2, the second-lowest ( $>$  \$36,006 to \$52,697); Group 3, the second-highest ( $>$  \$52,697 to \$74,432); and Group 4, the highest ( $>$  \$74,432). See the accompanying data supplement for per capita results for all demographic indicator groups.

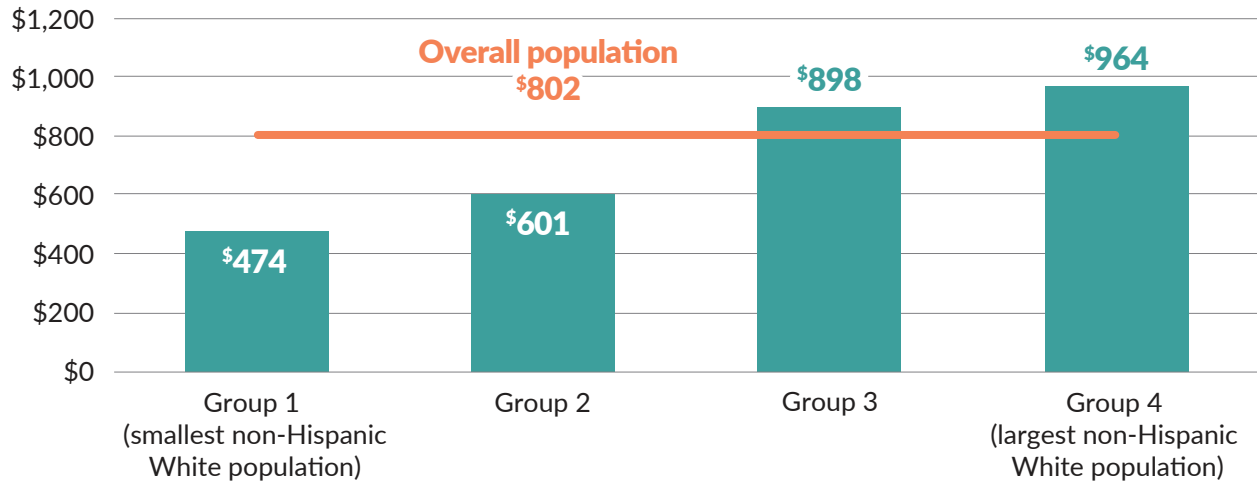
Source: Pew analysis of city of Philadelphia capital budget data

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The city encumbered \$964 per capita for census tracts with the highest share of White residents, 20% above the citywide average. (See Figure 3.)

Figure 3

### Per Capita Investment, by White Population Level FY 2011-22



Notes: Census tracts were classified into four groups of equal size (quartiles) over the four sets of five-year ACS estimates. For each tract, the range of values represented by each group—the share of the White population in this case—varied by year. For the 2021 five-year ACS estimates, for instance, Group 1 represents census tracts with the lowest percentage of White residents ( $\leq 6.47\%$ ); Group 2, the second-lowest ( $> 6.47\%$  to  $30.10\%$ ); Group 3, the second-highest ( $> 30.10\%$  to  $64.36\%$ ); and Group 4, the highest ( $> 64.36\%$ ). See the accompanying data supplement for per capita results for all demographic indicator groups.

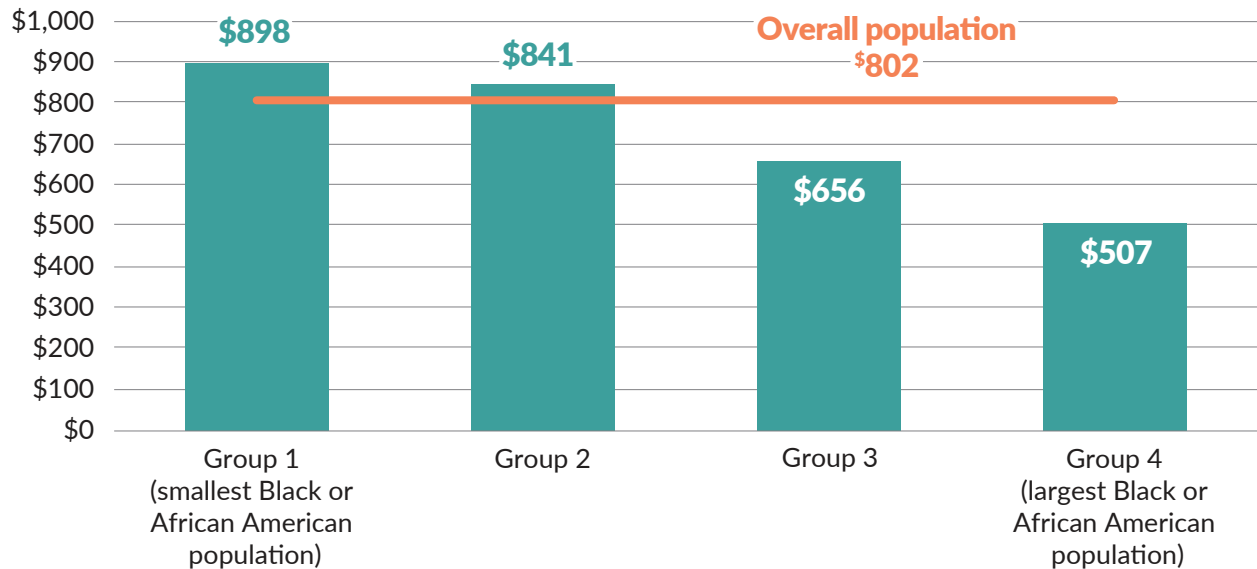
Source: Pew analysis of city of Philadelphia capital budget data

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Census tracts with the highest percentage of Black residents had encumbrances of \$507 per capita, 37% below the citywide average. (See Figure 4.)

Figure 4

## Per Capita Investment, by Black or African American Population Level FY 2011-22



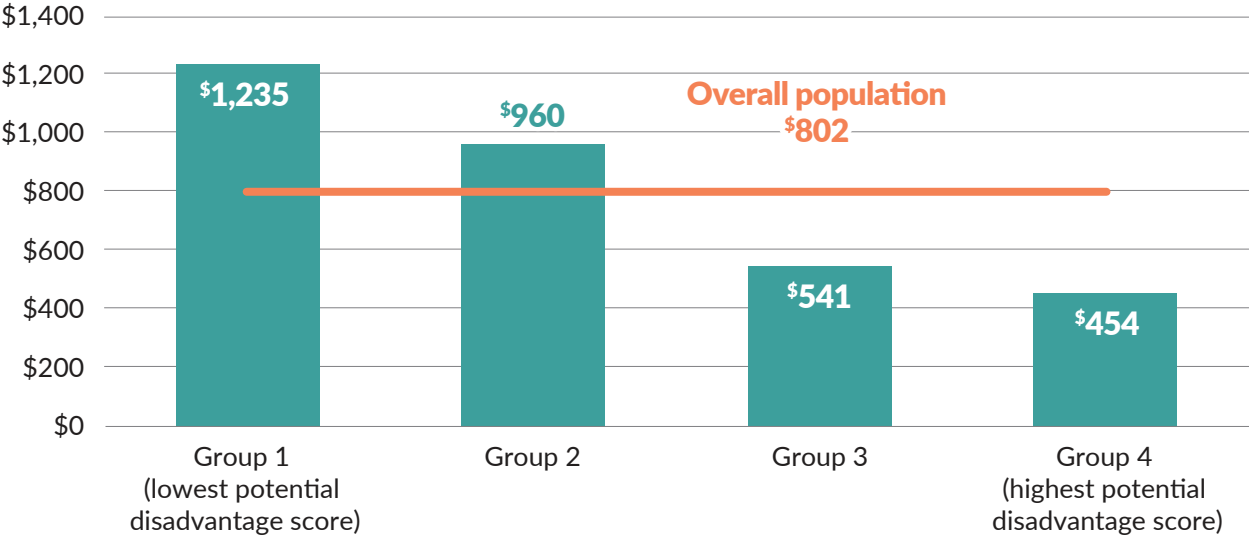
Notes: Census tracts were classified into four groups of equal size (quartiles) over the four sets of five-year ACS estimates. For each tract, the range of values represented by each group—the share of Black or African American residents in this case—varied by year. For the 2021 five-year ACS estimates, for instance, Group 1 represents census tracts with the lowest percentage of Black or African American residents ( $\leq 8.65\%$ ); Group 2, the second-lowest ( $> 8.65\%$  to  $26.28\%$ ); Group 3, the second-highest ( $> 26.28\%$  to  $75.39\%$ ); and Group 4, the highest ( $> 75.39\%$ ). See accompanying data supplement for per capita results for all demographic indicator groups.

Source: Pew analysis of city of Philadelphia capital budget data

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The starkest differences, however, appeared when the potential disadvantage score was applied. Census tracts where the potential disadvantage was the lowest received over 2.5 times more capital investment per capita (\$1,235) than tracts where the potential disadvantage was the highest, at \$454.

Figure 5  
**Per Capita Investment, by Potential Disadvantage Level**  
FY 2011-22



Notes: Census tracts were classified into four groups of equal size (quartiles) over the four sets of five-year ACS estimates. For each tract, the range of values represented by each group—potential disadvantage score in this case—varied by year. For the 2021 five-year ACS estimates, for instance, Group 1 represents census tracts with the lowest potential disadvantage score ( $\leq 18$ , of a maximum of 36); Group 2, the second-lowest ( $> 18$  to 22); Group 3, the second-highest ( $> 22$  to 25); and Group 4, the highest ( $> 25$ ). See accompanying data supplement for per capita results for all demographic indicator groups.

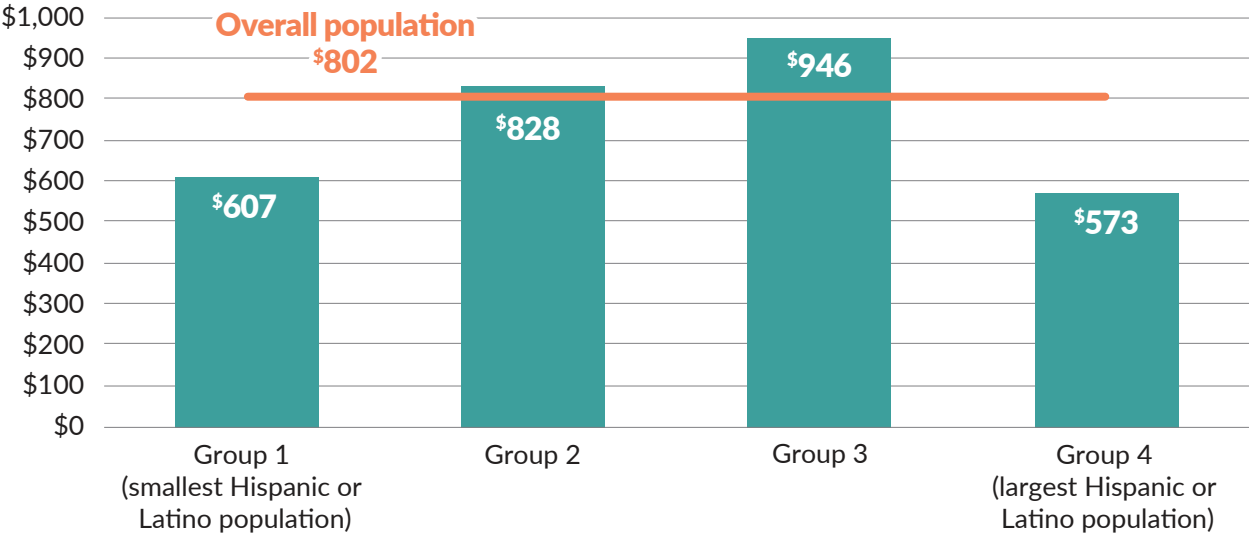
Source: Pew analysis of city of Philadelphia capital budget data

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Within demographic groups, the patterns were clear-cut in some cases but not in others. The higher the percentage of Black residents in a census tract, the lower the capital investment level over the years; and the higher the percentage of White residents, the higher the level of capital investment.

But for Hispanic Philadelphians, the picture was less clear. The difference between tracts with the highest and lowest percentage of Hispanic residents (\$573 and \$607, respectively) was quite small. Tracts with the second- and third-highest percentages fared much better than the other two, at \$828 and \$946 per capita, respectively. (See Figure 6.)

Figure 6  
**Per Capita Investment, by Hispanic or Latino Population Level**  
 FY 2011-22



Notes: Census tracts were classified into four groups of equal size (quartiles) over the four sets of five-year ACS estimates. For each tract, the range of values represented by each group—share of Hispanic or Latino population in this case—varied by year. For the 2021 five-year ACS estimates, for instance, Group 1 represents census tracts with the lowest percentage of Hispanic or Latino residents ( $\leq 3.39\%$ ); Group 2, the second-lowest ( $> 3.39\%$  to  $6.70\%$ ); Group 3, the second-highest ( $> 6.70\%$  to  $14.35\%$ ); and Group 4, the highest ( $> 14.35\%$ ). See accompanying data supplement for per capita results for all demographic indicator groups.

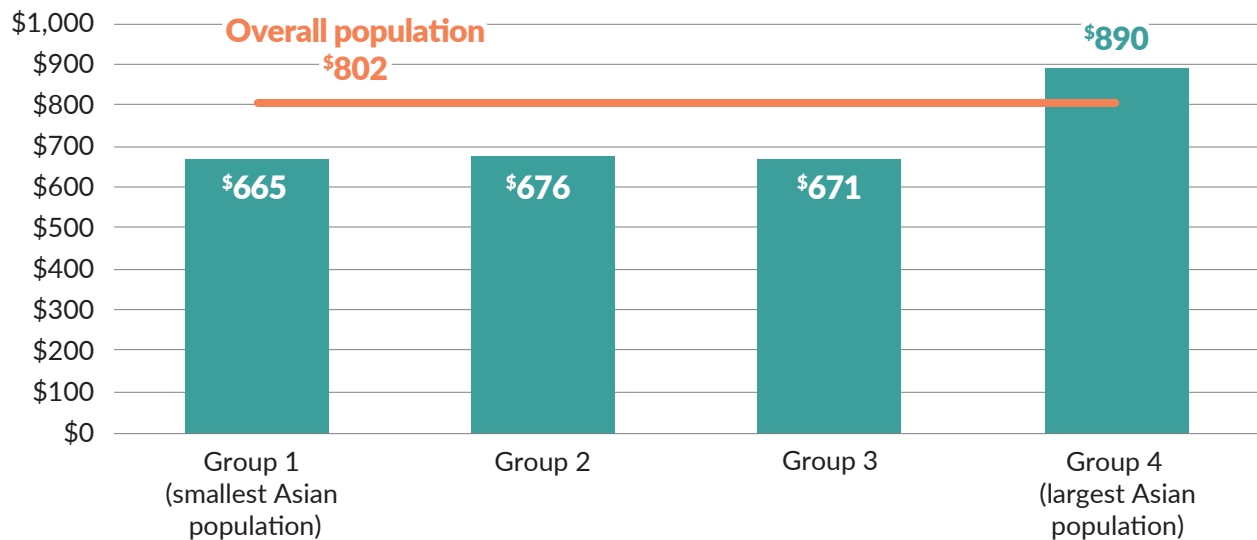
Source: Pew analysis of city of Philadelphia capital budget data

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Among Asian residents, there was less variation among all of the groups. (See Figure 7.)

Figure 7

## Per Capita Investment, by Asian Population Level FY 2011-22



Notes: Census tracts were classified into four groups of equal size (quartiles) over the four sets of five-year ACS estimates. For each tract, the range of values represented by each group—the share of the non-Hispanic Asian population in this case—varied by year. For the 2021 five-year ACS estimates, for instance, Group 1 represents census tracts with the lowest percentage of Asian residents ( $\leq 0.87\%$ ); Group 2, the second-lowest ( $> 0.87\%$  to  $4.09\%$ ); Group 3, the second-highest ( $> 4.09\%$  to  $9.83\%$ ); and Group 4, the highest ( $> 9.83\%$ ). See accompanying data supplement for per capita results for all demographic indicator groups.

Source: Pew analysis of city of Philadelphia capital budget data

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### Rebuild Results

Philadelphia's Rebuild program is separate from the capital budget. It is largely funded by the Philadelphia beverage tax and aims to improve parks, recreation centers, and libraries. During the selection process, the mayor chooses sites for improvement, which the City Council then approves. Site selection focuses on areas of high need and poor conditions, with the goal of developing and stabilizing communities. The scope of Rebuild investments varies widely, from relatively minor repairs to complete master plan redesign.<sup>15</sup>

Pew's analysis of capital investments includes investments from the city's Capital Program and Budget as well as the Rebuild program. This section, however, looks at the Rebuild program in isolation.

Rebuild is relatively new; the first encumbrances came in fiscal 2018, and the number and size of the investments have been relatively small. From fiscal 2018 through fiscal 2022, Rebuild had a total of \$51.8 million in encumbrances; 90% of them, or \$46.8 million worth, were included in Pew's analysis, producing a citywide per capita investment of \$29. Perhaps not surprisingly, given Rebuild's purpose,



the program made many of its investments in areas that have not always received a high level of capital investment—thereby producing very different per capita numbers across demographic groups.

For many of the demographic indicators, groups that had lower per capita investment than the citywide average fared differently—and often better—under Rebuild. For example, the group with the lowest median household income had a Rebuild per capita investment that was 45% higher than Rebuild’s citywide per capita investment. And the group with the highest potential disadvantage per capita score saw per capita investment under Rebuild that was 20% higher than the average per capita Rebuild investment citywide.

Visual representation of some of the Rebuild-specific analysis is available in the appendix. Additionally, the accompanying data supplement shows per capita results for all groups.

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## Results by area of influence

Pew classified each city asset in Philadelphia as local, multi-neighborhood, or citywide to analyze the “area of influence” around investments in these assets, or facilities, a metric also used in the Baltimore report to measure the geographic reach of investment dollars around each asset:

- **Local assets**, such as playgrounds and library branches, are those intended for use primarily by those living within about a half-mile of the site.
- **Multi-neighborhood assets**, such as fire stations and health centers, have wider-reaching bases of intended users, within about 1.5 miles of the site.
- **Citywide assets** are those intended for the entire city and include cultural institutions such as the Philadelphia Museum of Art as well as general infrastructure assets, such as salt sheds and the city’s prisons.

Of the 730 assets included in the analysis, 46.7% were local, 33.7% multi-neighborhood, and 19.6% citywide. Pew also analyzed 10,547 encumbrances. Of those, 53.1% were associated with local assets; 24.7% with multi-neighborhood assets; and 22.2% with citywide assets.

Although fewer in number, citywide assets had higher encumbrance fund totals than local and multi-neighborhood assets did. Overall, citywide assets were associated with 43.4% of the total encumbered funds analyzed, compared with 34.4% for multi-neighborhood assets and 22.2% for local assets. In most of the fiscal years analyzed, local asset encumbrances made up the smallest share.

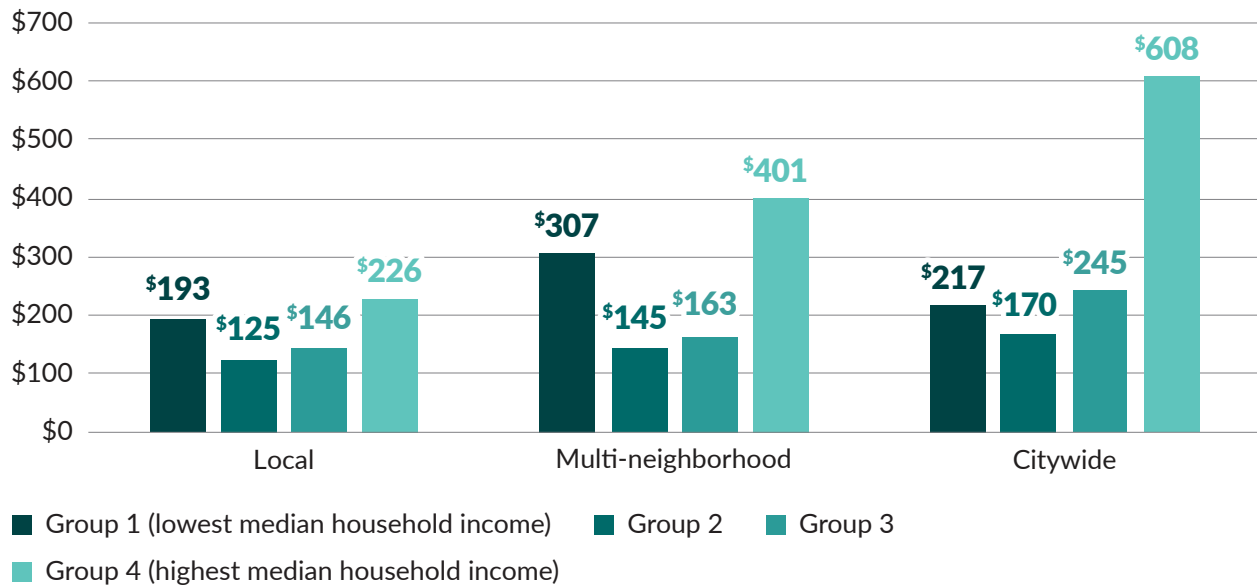
Citywide investments, which had the highest total encumbered funds over the study period, were largely concentrated in and near Center City. This means that the per capita allocations of encumbrances for these assets were heavily focused on areas with relatively high-income residents, larger percentages of White people, and low potential disadvantage scores. Areas with fewer citywide investments tended to have lower median incomes, larger shares of non-White populations, and higher potential disadvantage scores.

For every type of asset—local, multi-neighborhood, and citywide—census tracts with the highest median incomes had higher per capita encumbrances than tracts with the lowest median incomes. For local assets, the highest-income group had a per capita investment nearly 1.2 times greater than that of the lowest-income group. And at the citywide level, the highest-income group had a per capita investment 2.8 times greater than the lowest-income group’s. (See Figure 8.)

Investments for the lowest-income group were generally higher than those for the two middle-income groups (Groups 2 and 3), suggesting that some investment, particularly for local and multi-neighborhood assets, may have been targeted toward low-income areas.

Figure 8

## Per Capita Investment, by Area of Influence By median household income level



Notes: Census tracts were classified into four groups of equal size (quartiles) over the four sets of five-year ACS estimates. For each tract, the range of values represented by each group—median household income in this case—varied by year. For the 2021 five-year ACS income estimates, for instance, Group 1 represents census tracts with the lowest median household income ( $\leq$  \$36,006); Group 2, the second-lowest ( $>$  \$36,006 to \$52,697); Group 3, the second-highest ( $>$  \$52,697 to \$74,432); and Group 4, the highest ( $>$  \$74,432). See accompanying data supplement for per capita results for all demographic indicator groups.

Source: Pew analysis of city of Philadelphia capital budget data

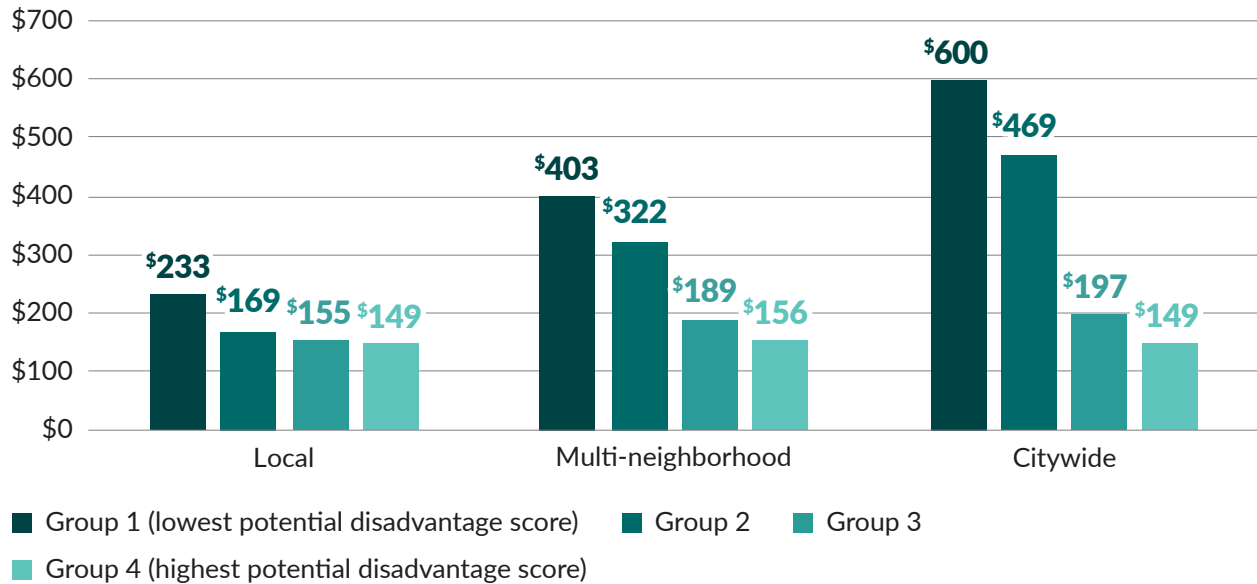
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These differences were more clear-cut in a comparison of census tracts by indicators of potential disadvantage. Local, multi-neighborhood, and citywide per capita investment was highest in areas with the lowest potential disadvantage and trended downward to the lowest per capita investment in tracts with the highest potential disadvantage scores. (See Figure 9.)

Figure 9

## Per Capita Investment, by Area of Influence

By potential disadvantage score



Notes: Census tracts were classified into four groups of equal size (quartiles) over the four sets of five-year ACS estimates. For each tract, the range of values represented by each group—potential disadvantage score in this case—varied by year. For the 2021 five-year ACS estimates, for instance, Group 1 represents census tracts with the lowest potential disadvantage scores ( $\leq 18$ , of a maximum of 36); Group 2, the second-lowest ( $> 18$  to 22); Group 3, the second-highest ( $> 22$  to 25); and Group 4, the highest ( $> 25$ ). See accompanying data supplement for per capita results for all demographic indicator groups.

Source: Pew analysis of city of Philadelphia capital budget data

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## Results by activity

Beyond a capital asset's geographic area of influence, it is also important to understand how people use and interact with different types of assets. Pew developed eight activity categories and assigned one to each asset. Activities included recreational, safety, cultural, public works/city operations (also referred to here as "public works"), transportation, social services, open space, and other. Definitions and examples of each can be found in the appendix.

Recreational assets were largely categorized as local or multi-neighborhood in their area of influence and were evenly distributed throughout the city. Safety assets, many of which were police district headquarters and fire stations, were primarily multi-neighborhood in area of influence. Department-wide facilities for police, fire, and prisons were mostly categorized as citywide—including the prisons in the Holmesburg neighborhood.

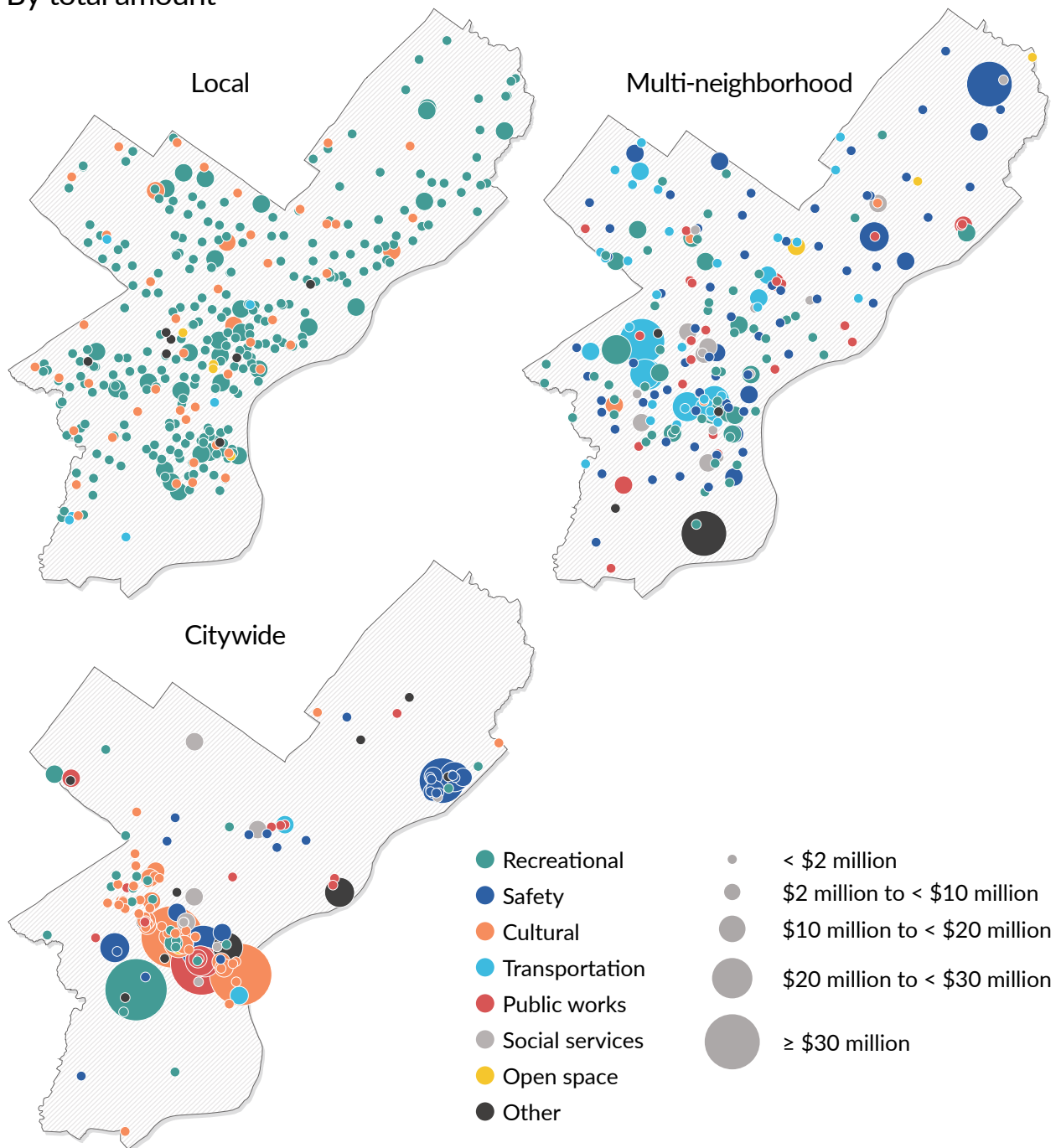
Cultural assets were mostly local and citywide, with the local assets consisting largely of Free Library branches and the citywide ones mostly museums and other large institutional destinations.

Figure 10 shows where the assets are located; whether they are local, multi-neighborhood, or citywide in nature; which activity is associated with each one; and how large the associated encumbrances are.

Figure 10

## Investments by Area of Influence and Activity, FY 2011-22

By total amount



Notes: Each asset's total encumbrance amount displayed on the map was first classified using the natural breaks (Jenks) method, which groups together assets within a range of values. Pew then adjusted the ranges to simplify interpretation. Most assets had a total encumbrance of less than \$2 million (83%), while a few had total encumbrances of \$30 million and above (0.5%, or four assets). Penn's Landing was a major outlier, with a total of \$81.3 million in encumbrances over the study period.

Source: Pew analysis of city of Philadelphia capital budget data

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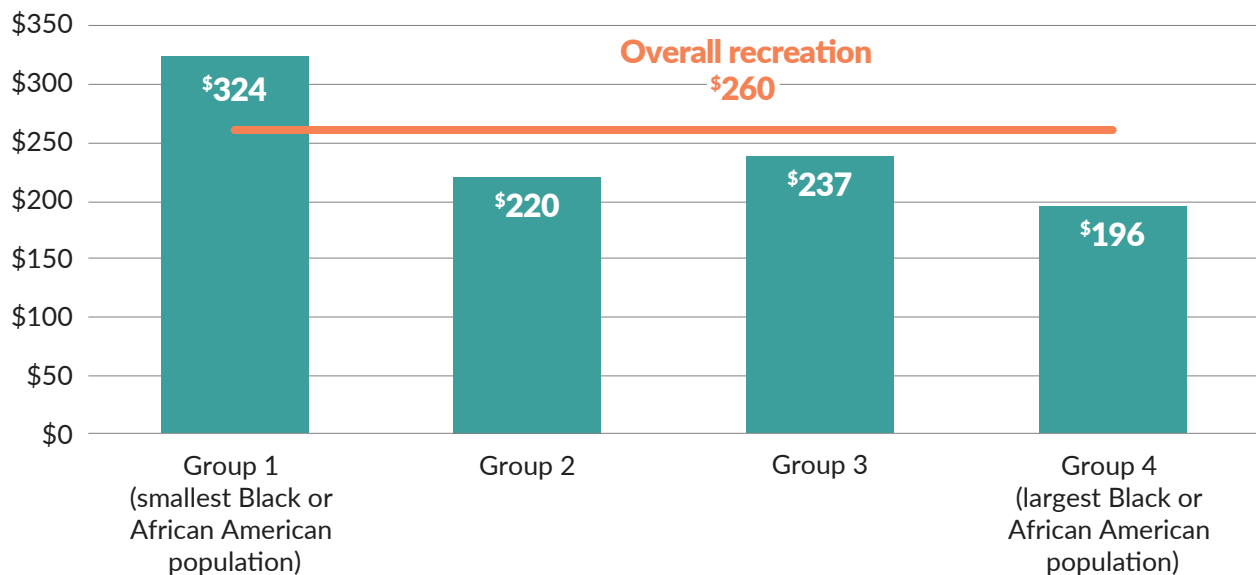
Along with the variation in the geographical distribution of investments by activity category, there was significant variation in the per capita investment across the demographic indicator groups.

The level of variation was greater among some activities than others. Assets that were in the social services, recreational, and safety categories were the least varied, while those in the cultural category were the most varied.

Recreational assets had the highest citywide per capita investment over the study period, at \$260. This category was also one of the least varied among demographic groups because of the widespread nature of recreational assets across the city, as seen in Figure 10. However, some disparities were still evident. Figure 11 shows per capita investment in recreation for Black or African American residents. Census tracts with the smallest share of Black or African American residents had a per capita investment of \$324, or 25% higher than the citywide average. On the other hand, tracts with the largest share of Black or African American residents had a per capita investment of \$196, or 25% lower than the citywide average.

Figure 11

## Recreational Per Capita Investment, by Black or African American Population Level FY 2011-22



Notes: Census tracts were classified into four groups of equal size (quartiles) over the four sets of five-year ACS estimates. For each tract, the range of values represented by each group—the share of Black or African American residents in this case—varied by year. For the 2021 five-year ACS estimates, for instance, Group 1 represents census tracts with the lowest percentage of Black or African American residents ( $\leq 8.65\%$ ); Group 2, the second-lowest ( $> 8.65\%$  to  $26.28\%$ ); Group 3, the second-highest ( $> 26.28\%$  to  $75.39\%$ ); and Group 4, the highest ( $> 75.39\%$ ). See accompanying data supplement for per capita results for all demographic indicator groups.

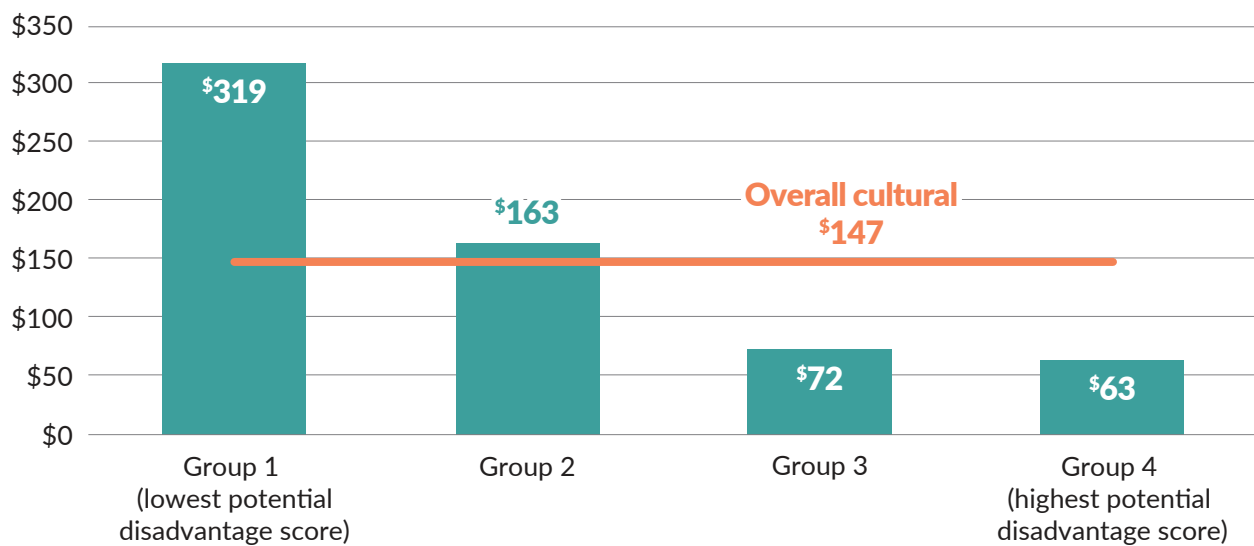
Source: Pew analysis of city of Philadelphia capital budget data

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The citywide investment for cultural assets was \$147 per capita. But funding varied considerably across all demographic indicator groups. Census tracts with higher median household income and lower disadvantage had higher per capita investment levels than those with lower income levels, larger Black or Hispanic populations, and high levels of disadvantage. This tracks with the concentration of large investments in citywide cultural assets in and around Center City, such as the Philadelphia Museum of Art and other facilities along the Benjamin Franklin Parkway.

Figure 12 shows per capita investment for cultural assets among potential disadvantage groups. For tracts with the lowest disadvantage levels, the per capita investment in cultural assets was \$319, which is almost 2.2 times the citywide level. However, groups 3 and 4, consisting of tracts with higher levels of disadvantage, had per capita investment of \$72 and \$63, respectively, each less than half the citywide level.

Figure 12  
**Cultural Per Capita Investment, by Potential Disadvantage Level**  
 FY 2011-22



Notes: Census tracts were classified into four groups of equal size (quartiles) over the four sets of five-year ACS estimates. For each tract, the range of values represented by each group—potential disadvantage score in this case—varied by year. For the 2021 five-year ACS estimates, for instance, Group 1 represents census tracts with the lowest potential disadvantage score ( $\leq 18$ , of a maximum of 36); Group 2, the second-lowest ( $> 18$  to 22); Group 3, the second-highest ( $> 22$  to 25); and Group 4, the highest ( $> 25$ ). See accompanying data supplement for per capita results for all demographic indicator groups.

Source: Pew analysis of city of Philadelphia capital budget data

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Of course, not all activity categories have equal impacts on surrounding communities, and some populations may benefit from certain activities more than others. For example, recreational facilities may have more impact on families and young people, while older residents may be more affected by cultural assets and older adult centers. Some assets and investments, such as large infrastructure projects or prisons, may be unwelcome in some communities.

The investment levels for all activity categories and all demographic indicator groups are included in the appendix and the attached data supplement.

## Conclusion

From fiscal 2011 through fiscal 2022, Philadelphia’s per capita investment in capital improvements varied widely by geography and by the demographic characteristics of a project’s surrounding area.

The city invested more, on a per capita basis, in areas with higher incomes, more White residents, and lower levels of potential disadvantage—and invested less in areas with lower incomes, more Black residents, and higher levels of potential disadvantage. A contributing factor to these results is that many of Philadelphia’s largest and most expensive assets, meant to serve the entire city, are located in and around Center City. Neighborhood-level investment, particularly for recreation and social services, was more evenly distributed among demographic groups.

Baltimore, which initiated this type of analysis, requires its Department of Planning to update its report annually. In doing so, it has implemented draft updates through the capital planning process to “better inform decisions as they were being made rather than only looking back,” according to its most recent update.<sup>16</sup>

Given Philadelphia’s stated commitment to increasing equity in governing, the city could consider continually analyzing the distribution of its capital spending across the city—with a particular focus on distributing funds equitably, assessing results regularly, and making adjustments as needed to allow officials to see whether their efforts are producing the desired outcomes.

## Endnotes

- 1 Baltimore Neighborhood Indicators Alliance-Jacob France Institute, “Equity Analysis of Baltimore City’s Capital Improvement Plan, FY 2014-FY 2020,” 2019, <https://planning.baltimorecity.gov/sites/default/files/Final%20Report%20-%20CIP%20Analysis%20August%202019.pdf>.
- 2 Throughout the report, “non-Hispanic White” may be referred to as “White.” Additionally, “non-Hispanic Black or African American” may be referred to as “Black” or “Black or African American.” And “non-Hispanic Asian” may be referred to as “Asian”.
- 3 Throughout the report, “Hispanic or Latino of any race” may be referred to as “Hispanic” or “Hispanic or Latino.”
- 4 City of Philadelphia, FY24 Operating and Capital Budget Overview Presentation, 2023, <https://www.phila.gov/media/20230301214628/operating-and-capital-budget-presentation-FY2024.pdf>.
- 5 “Capital Program and Budget,” City of Philadelphia, <https://www.phila.gov/documents/capital-program-and-budget/#:-:text=Every%20year%2C%20the%20Philadelphia%20City,final%20capital%20program%20and%20budget>.
- 6 City of Philadelphia, Executive Order No. 1-20: Office of Diversity, Equity, and Inclusion (2020), <https://www.phila.gov/media/20210602145107/executive-order-2020-01.pdf>.
- 7 City of Philadelphia, “Six-Year Capital Program for Fiscal Years 2024-2029 and Capital Budget for Fiscal Year 2024,” <https://www.phila.gov/media/20230802133249/Capital-Program-FY2024-2029-and-Capital-Budget-FY2024.pdf>.
- 8 City of Philadelphia, “Six-Year Capital Program for Fiscal Years 2024-2029.”
- 9 Baltimore Neighborhood Indicators Alliance-Jacob France Institute, “Equity Analysis of Baltimore City’s Capital Improvement Plan.”
- 10 Baltimore Neighborhood Indicators Alliance-Jacob France Institute, “Equity Analysis of Baltimore City’s Capital Improvement Plan.”
- 11 Philadelphia has highlighted not just racial equity but also intersectionality as “important guiding principles,” stating that using both acknowledges that “racial equity without explicit focus on disability, gender, sexual orientation, poverty, and other social identities is not fully equitable.” This notion means that those with multiple marginalized identities should be prioritized in “creating policy solutions to dismantle systems of oppression,” as these individuals in particular experience “compounding oppression.” City of Philadelphia Office of Diversity, Equity, and Inclusion, “Racial Equity 101: Philadelphia’s Focus on Racial Equity in Government,” 2022, <https://www.phila.gov/media/20220906101633/Racial-Equity-101-Philadelphias-Focus-on-Racial-Equity-in-Government.pdf>.
- 12 City of Philadelphia, “Six-Year Capital Program for Fiscal Years 2024-2029.”
- 13 City of Philadelphia, “Six-Year Capital Program for Fiscal Years 2024-2029.”
- 14 It is important to recall the distinction between allocated funds within the capital budget and encumbered funds. From fiscal 2011 to 2022, the city encumbered, or committed to expend, \$2.5 billion in capital investments. This sum is distinct from the annual budgeted amount for capital investments, which was approximately \$4.7 billion in fiscal 2024.
- 15 “Rebuild,” City of Philadelphia, Nov. 7, 2023, <https://www.phila.gov/programs/rebuild/>.
- 16 City of Baltimore Department of Planning, “FY 24 Capital Improvement Program Distribution Analysis: Annual Update to 2019 Report—Equity Analysis of Baltimore City’s Capital Improvement Plan, FY2014-FY2020,” 2023, <https://planning.baltimorecity.gov/sites/default/files/FY24%20CIP%20Distribution%20Analysis%20Draft.pdf>.

