OCTOBER 2015

Theft in the City of Pittsburgh

1. INTRODUCTION

This brief presents an analysis of theft in the City of Pittsburgh from January 2005 through July 2015. It begins with a study of trends in the annual rate of theft and an examination of the nature of these crimes, with special attention to crime location, incident time and victim demographics. This brief concludes with an examination of the Pittsburgh Bureau of Police's clearance rate statistics and the relationship between clearance rates and crime characteristics, including category of theft and victim demographics.

Theft Defined

The unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another. Examples are thefts of bicycles, motor vehicle parts and accessories, shoplifting, pocket-picking, or the stealing of any property or article that is not taken by force and violence or by fraud. Attempted larcenies are included.

— The FBI Uniform Crime Report

This document offers three broad conclusions about theft in the City of Pittsburgh:

1. Pittsburgh's theft rate has declined over the past ten years and remains among the lowest in the Pittsburgh Today comparison group.
2. Theft is most prevalent in Pittsburgh's East End and South Side Hilltop neighborhoods.
3. The clearance rate of theft varies depending on the category of theft or item taken.

2. DATA

2.1. Sources

City of Pittsburgh Bureau of Police Offense Data

The analysis in this report is drawn, largely, from incident data collected by the City of Pittsburgh Bureau of Police and reported under the FBI Uniform Crime Report. These data are available for incidents that occurred from January 2005 through July 2015, and include information about the location, date, time and clearance status of each incident. These data also include victim information, including age, race and gender, for the period January 2009 through July 2015.

Federal Bureau of Investigation, Uniform Crime Report (UCR)

The Federal Bureau of Investigation collects crime data from police agencies nationwide. Because crime rates tend to vary with a city's population size,[1] this brief uses data from the UCR to compare Pittsburgh's 2014 theft rate to similarly sized U.S. cities, referred to as the FBI cohort. Specifically, this brief compares Pittsburgh's rate of theft to that of cities, with populations 250,000 to 499,999, which reported this crime to the UCR in 2014.

[1] Lee Ellis, Kevin M. Beaver, and John Wright, *Handbook of Crime Correlates*, 2009, San Diego, CA: Academic Press.

United States Census Bureau

The analysis in this brief incorporates population estimates from the U.S. Census Bureau's 2014 Population Estimates Program to compute the theft rates of 13 comparable U.S. cities and the City of Pittsburgh.

PGHSNAP, City of Pittsburgh Department of City Planning

The analysis of theft incident rates by neighborhood incorporates data from the City of Pittsburgh's Department of City Planning data tool, PGHSNAP. PGHSNAP offers population and demographic statistics derived from the 2010 US Census.

Pittsburgh Today

This report uses 13 of the 14 Pittsburgh Today benchmark cities to compare Pittsburgh's theft rate to those in comparable cities. Pittsburgh Today is a University of Pittsburgh project that has identified a list of 14 U.S. cities that are similar in size and demographics to the City of Pittsburgh, for use in comparing key indicators. The Pittsburgh Today benchmark cities include: Baltimore, Boston, Charlotte, Cleveland, Cincinnati, Denver, Detroit, Indianapolis, Kansas City, Milwaukee, Minneapolis, Philadelphia, Richmond and St. Louis. Indianapolis is omitted from this analysis, due to inconsistencies in data reported to the FBI.

2.2 Period of Study

Much of the analysis in this report is derived from incident records collected from 2005 through 2014, the most recent years for which complete and reliable City of Pittsburgh data are available. A study of clearance rates, for example, would be skewed by the inclusion of recent 2015 records, since there is a lower likelihood of case resolution. However, this report does include

2015 data in analyses of victim demographics, as the 2015 records offer victim descriptions nearly as complete as those of prior years. Victim data are only available for records collected from January 2009 through July 2015.

In comparing across U.S. cities, this report draws on data from the FBI's Uniform Crime Reporting Program, which has released national statistics through 2014. Comparisons of theft rates or clearance rates, therefore, include comparisons to Pittsburgh's 2014 data.

2.3 Incident-level Analysis

This report uses incidents, rather than victims or perpetrators, as the primary unit of analysis. In the case of theft, for example, it is possible for multiple perpetrators to participate in a single theft. Records of this kind were consolidated for the purposes of this brief, with the exception of victim demographic analysis, which employs victim-level data.

2.4 The Limits of Police Data

In 2014, the National Crime Victimization Survey conducted by the Bureau of Justice Statistics (BJS) estimated that 71 percent of thefts go unreported.[2] Victims of theft might choose not to report a crime if they believe that the police will not be able solve the case or assist them in locating their stolen property. Since the data used in this report include only those cases reported to the police or observed by an officer, this analysis could be impacted by selection bias. It is important to consider the ways in which differences in reporting may skew our perception of the nature of theft or the demographic profile of its victims.

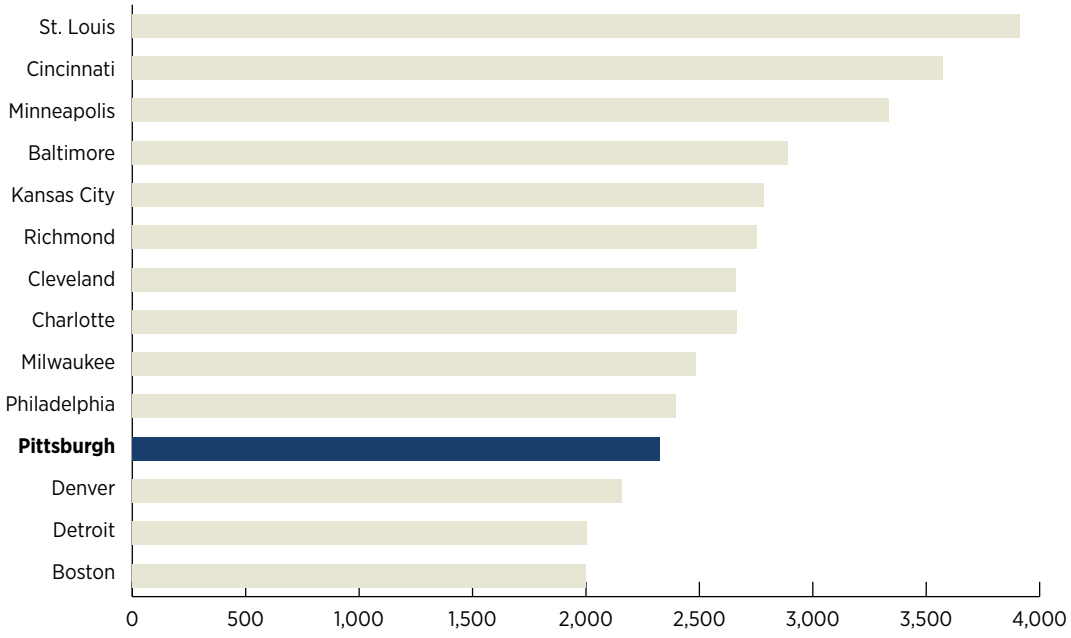
[2] Bureau of Justice Statistics, "Criminal Victimization, 2014," http://www.bjs.gov/content/pub/pdf/cv14.pdf

3. ANALYSIS

3.1 Trends in Theft

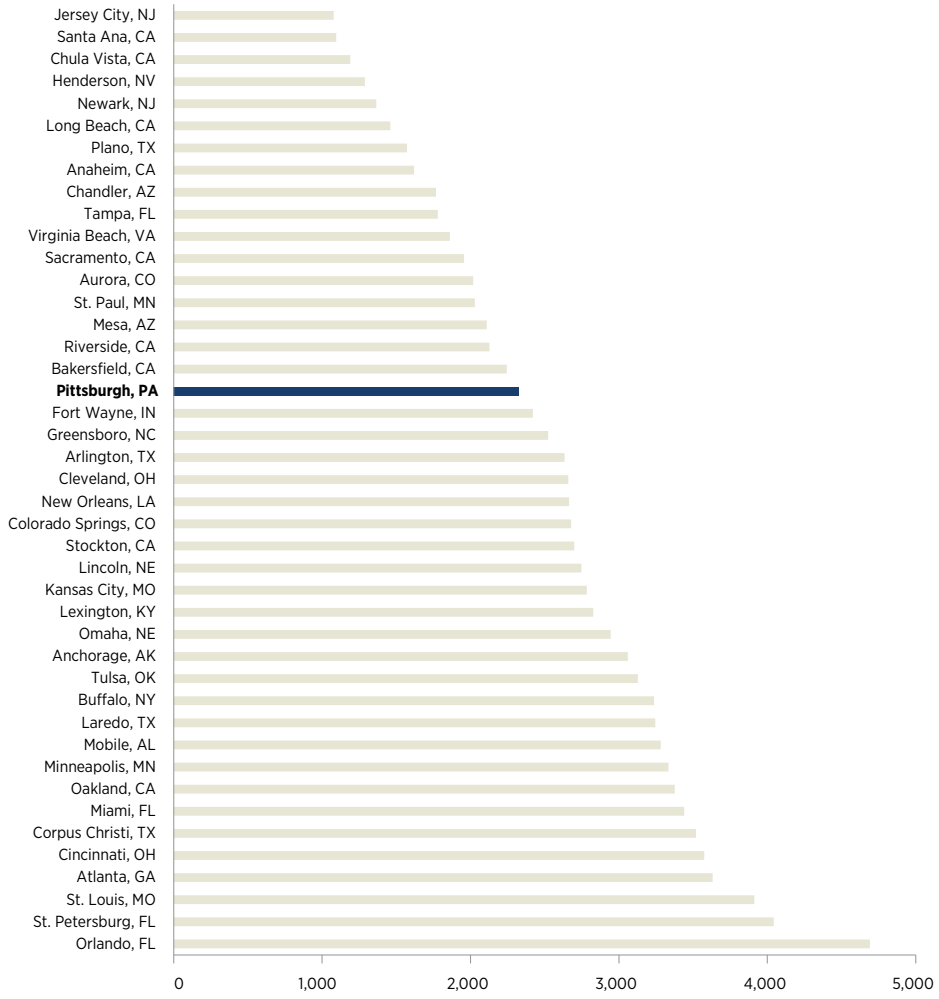
In 2014, Pittsburgh Police responded to approximately 6,800 incidents of theft, at a rate of 2,327 thefts per 100,000 city residents. This rate is among the lowest in the Pittsburgh Today benchmark group. **Figure 1** compares Pittsburgh's 2014 theft rate to the rates of the 13 comparison cities.

FIGURE 1: **Theft rates of comparable U.S. cities, 2014**



Among 43 cities in the FBI cohort, Pittsburgh's 2014 theft rate ranked 18th-lowest, as **Figure 2** shows. Pittsburgh's theft rate, at 2,327 per 100,000 residents, was just below the average of all 43 cohort cities (2,507 per 100,000 residents) and also below that of Cincinnati, Buffalo and Cleveland, the three geographically-closest cohort cities.

FIGURE 2: Theft rates of similarly sized U.S. cities, 2014

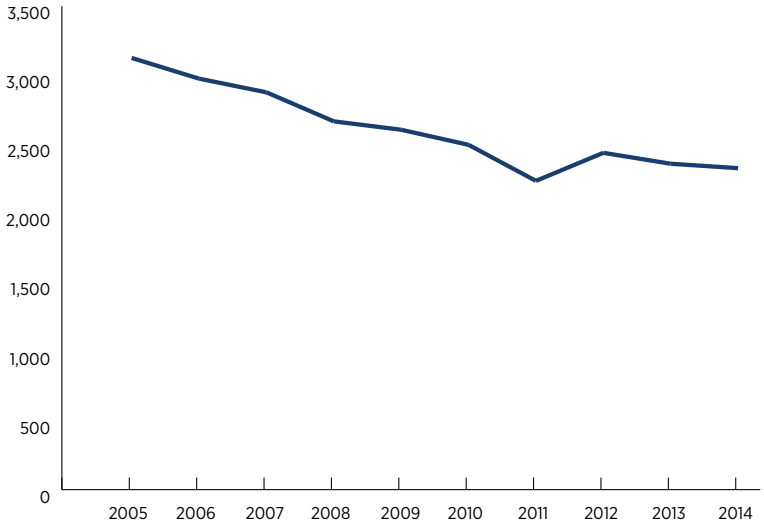


Pittsburgh's 2014 theft rate was one of the lowest this decade. Despite an increase in 2012, theft has been on the decline, falling 26 percent from 2005 through 2014. **Table 1** details the year-over-year percent change in theft across this 10-year period. **Figure 3** plots the theft rate for the last 10 years.

TABLE 1: **Year-over-year percent change in the rate of theft in Pittsburgh, 2005 through 2014**

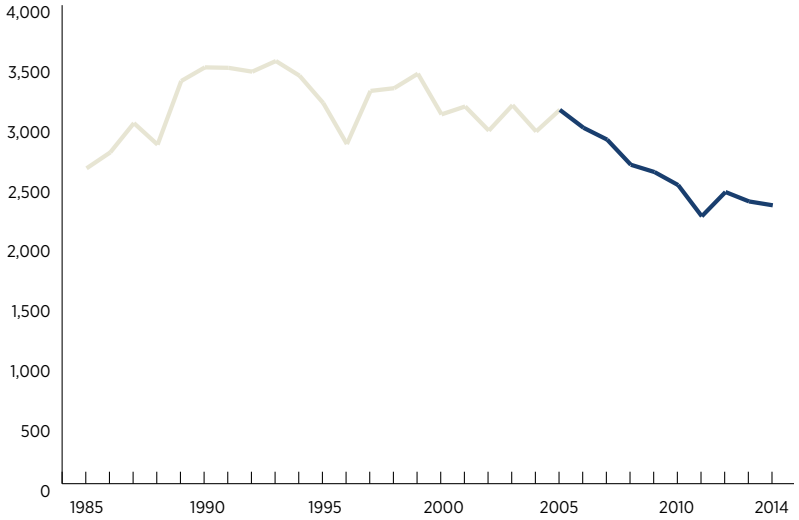
	YEAR-OVER-YEAR PERCENT CHANGE
2005	-
2006	-7%
2007	-9%
2008	-5%
2009	-2%
2010	-5%
2011	-9%
2012	12%
2013	-6%
2014	-1%
Ten-Year	**-26%**

FIGURE 3: **Pittsburgh theft rate, 2005 through 2014**



Although 2005 is the earliest year for which we have comprehensive data, it is useful to consider this decade in the context of the volatile 1980s and 1990s, a period during which cities nationwide experienced unprecedented rates of crime. **Figure 4** plots the City of Pittsburgh's theft rate from 1985 through 2014, using data supplied by the Pittsburgh Bureau of Police to the FBI's Uniform Crime Reporting program. The most recent decade, highlighted in blue, follows a period of fluctuating and sluggish decline. In recent years, however, Pittsburgh has reduced its theft rate more rapidly, resulting in a thirty-year low of 2,235 per 100,000 in 2011.

FIGURE 4: **Pittsburgh theft rate, 1985 through 2014**



Similar to the trends observed in Pittsburgh, theft rates for nearly every benchmark city have declined since 2005. **Figure 5** plots the median theft rate of the benchmark cities over the last ten years, while **Figure 6** presents the ten-year percent change in the theft rate of each city. Although Pittsburgh's theft rate is lower than many of the benchmark cities, its rate of decline is comparable to other cities in its cohort.

FIGURE 5: **Trends in Pittsburgh's theft rate compared to a composite of comparable cities, 2005 through 2014**

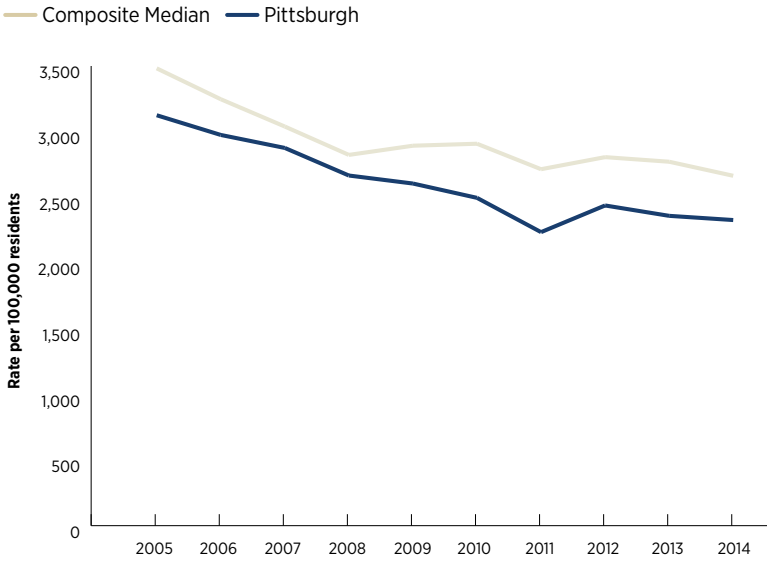
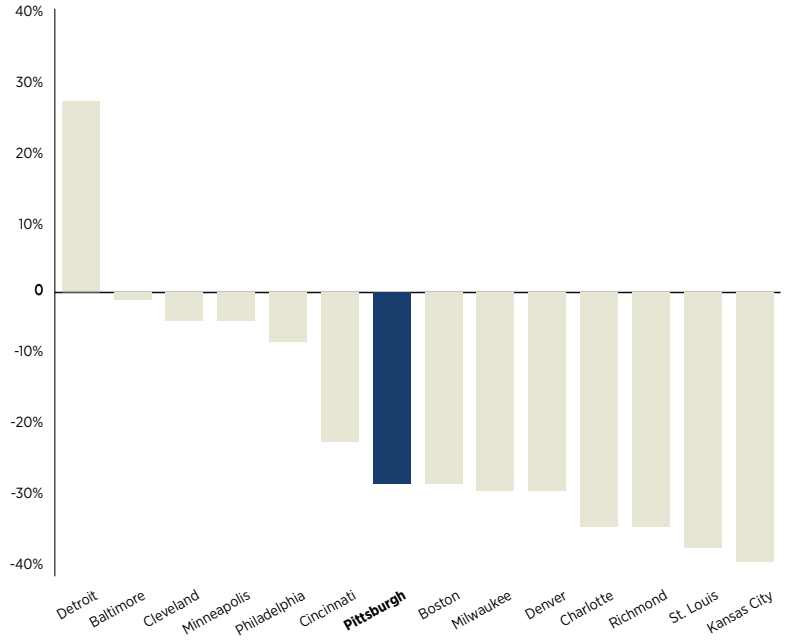


FIGURE 6: **Ten-year percent change in the theft rates of comparable U.S. cities, 2005 through 2014**



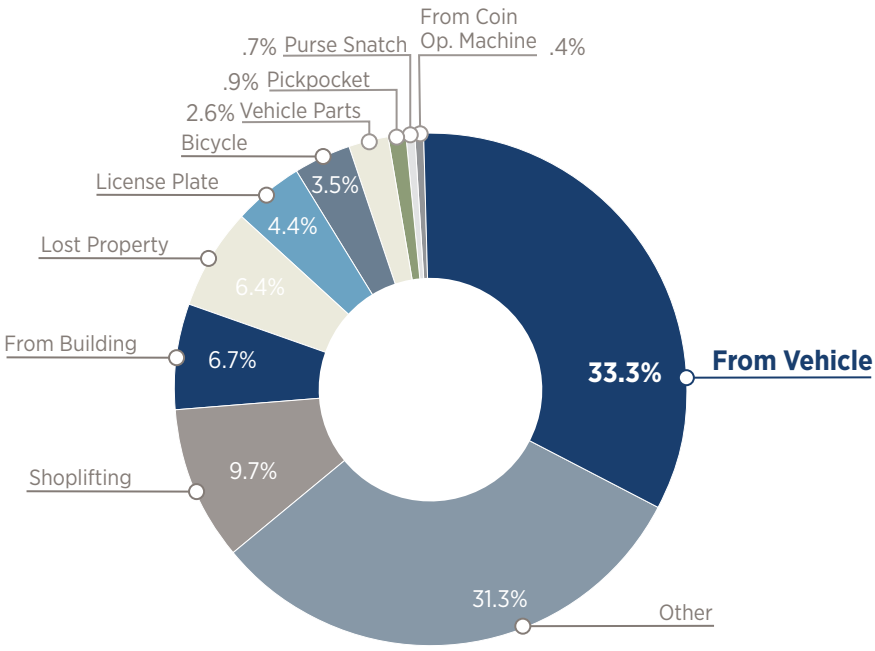
Changes in the Pittsburgh theft rate appear to mirror changes occurring in theft nationwide. This suggests that some share of Pittsburgh's decline may be attributable to national forces that affect property crime everywhere. Researchers have identified several factors that directly contributed to reductions in property crimes nationwide since the 1990s. These factors include the increased use of CompStat by police departments, growth in per capita income and a decline in the use of alcohol.[3]

[3] Oliver Roeder, Lauren-Brooke Eisen, and Julia Bowling, "What Caused the Crime Decline?" February 12, 2015, https://www.brennancenter.org/sites/default/files/publications/What_Caused_The_Crime_Decline.pdf

3.2 The Nature of Theft

To effectively measure and track crime throughout the city, the Pittsburgh Bureau of Police collects data on the circumstances and methods of each reported crime. Officers who respond to a report of theft make note of the category of item stolen, such as a license plate or bicycle, as well as the location from which the item was taken. **Figure 6** serves as a snapshot of theft throughout the City of Pittsburgh in 2014. As shown, the largest share of crimes reported as theft involve the removal of an item from a vehicle (33%), followed by the theft of items categorized as "other" (31%), shoplifting (10%) and theft of items from a building (7%).

FIGURE 7: **Percentage of thefts, by theft type, 2014**



3.3 Where Theft Occurs

A study of citywide theft rates can mask the variations in crime risk that exist across individual communities. Despite strong improvement citywide, select neighborhoods and zones in the City of Pittsburgh experience persistently high rates of theft. **Figure 8** provides an illustration of these disparities by comparing the rates of theft in each City of Pittsburgh neighborhood in 2014.

This map draws attention to several residential areas of the city with particularly high rates of theft, including Lincoln-Lemington-Belmar, East Liberty and the central North Side. When examining neighborhood-level rates, we also observe high levels of theft in areas that typically accommodate non-residents, such as the Central Business District, South Side Flats and the Strip District. Generally, however, adjusting for residential population allows for comparison across neighborhoods and provides a more accurate assessment of the risk posed by theft to members of each community.

It is important to note, however, that rates may be deceiving when the population size is small. This caution particularly applies to some of the higher-rate neighborhoods on the map.

In most cases (e.g., Chateau, South Shore, North Shore, Strip District and Golden Triangle), these are neighborhoods where large numbers of non-residents visit for entertainment purposes.

FIGURE 8: **Theft rate, by neighborhood, 2014**

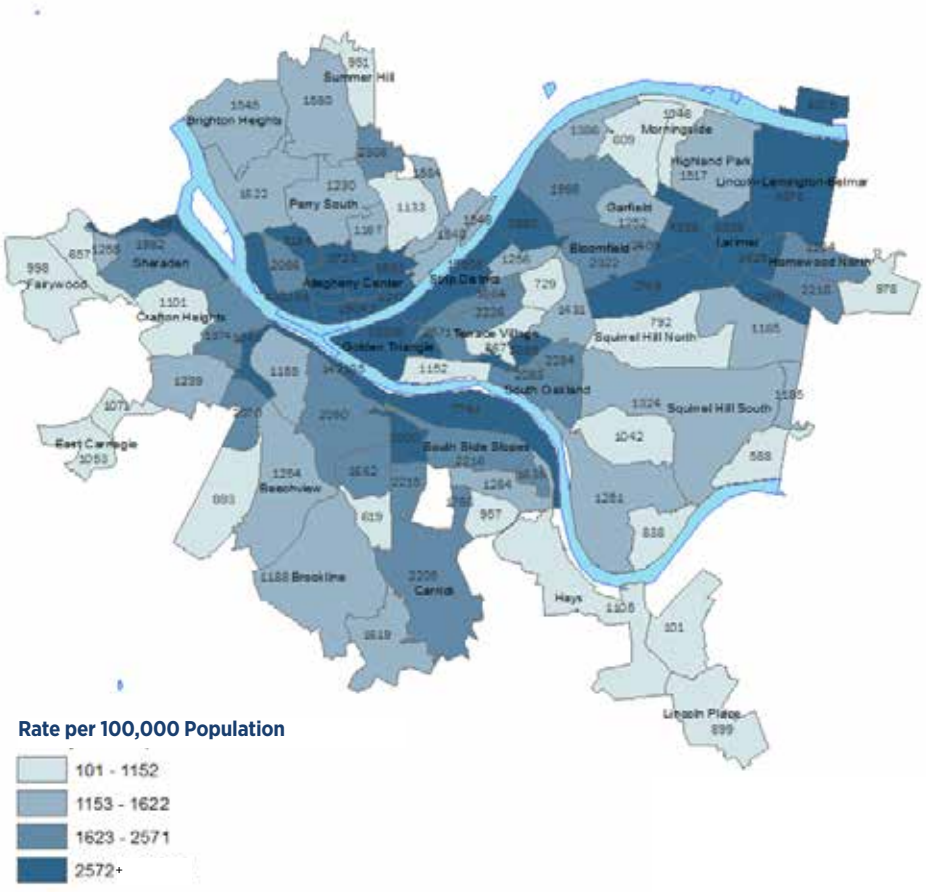


Table 2 lists the 10 City of Pittsburgh neighborhoods with the greatest number of thefts in 2014 and their corresponding rates. In this table, as in the map of theft rates, we observe high levels of theft in neighborhoods within the East End and near Downtown.

TABLE 2: Neighborhoods with the greatest number of thefts, 2014

NEIGHBORHOOD	THEFT	THEFT RATE
Central Business District	697	19,206
South Side Flats	514	7,791
Shadyside	382	2,745
East Liberty	291	4,958
Carrick	223	2,205
Squirrel Hill South	200	1,324
Lincoln-Lemington-Belmar	199	4,075
Bloomfield	196	2,322
Mount Washington	183	2,080
Brookline	157	1,188

Due to variation in neighborhood crime rates, there are accompanying disparities in the number of thefts within multi-neighborhood police zones. **Table 3** lists the number of thefts, the share of total thefts and the theft rate of each City of Pittsburgh police zone. In 2014, the greatest number of thefts occurred in Zones 2, 3 and 4, which, together, contained 58 percent of all theft. However, the rate of theft in Zone 2 is highest, by far, of all zones.

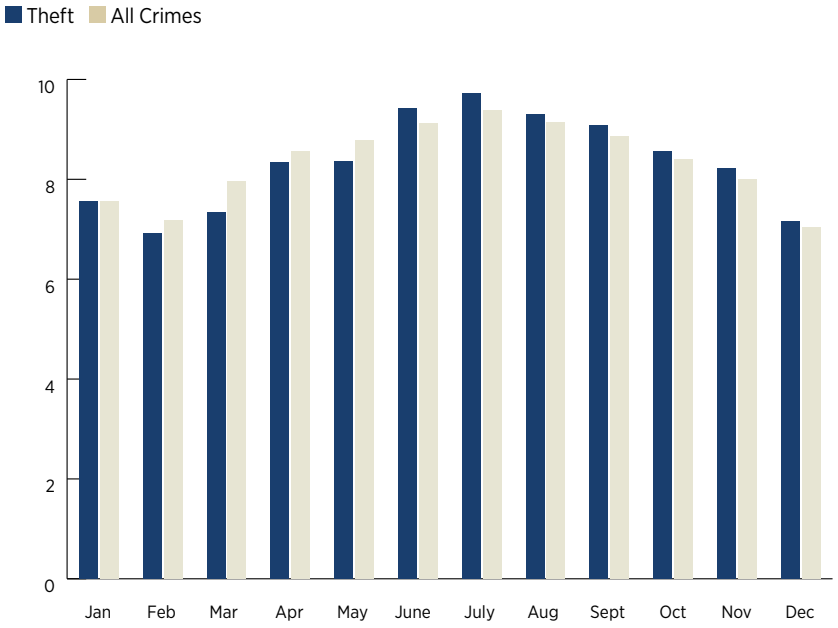
TABLE 3: Thefts and theft rates within each City of Pittsburgh Police Zone, 2014

	THEFT	PERCENT OF TOTAL	RATE PER 100,000
Zone 1	1,006	15%	2,457
Zone 2	1,243	18%	3,877
Zone 3	1,366	20%	2,856
Zone 4	1,412	21%	1,584
Zone 5	1,173	17%	2,330
Zone 6	601	9%	1,325

3.4 When Theft Occurs

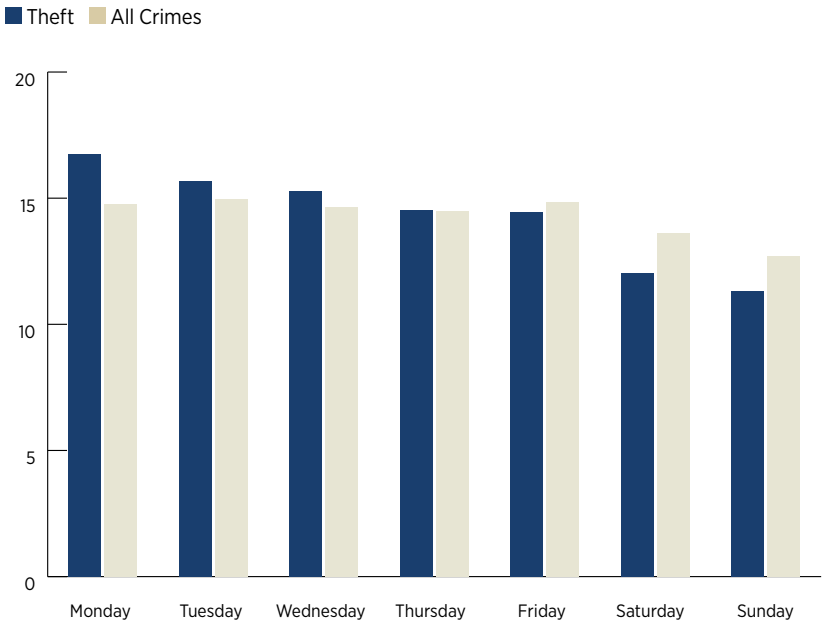
The risk to residents of theft also varies depending on the month of the year, day of the week and time of day. **Figure 9** shows the share of theft that occurred in each month from 2005 through 2014, and contrasts that distribution with all crimes in the City of Pittsburgh. In the last 10 years, police have documented high rates of theft in the warmest months, particularly in June through August. Likewise, thefts were reported less frequently in December through March. Although the monthly theft distribution generally mirrors that of all crimes, thefts tend to cluster in the summer months, with relatively lower rates in the spring.

FIGURE 9: **Percent of thefts occurring each month of the year, 2005 through 2014**



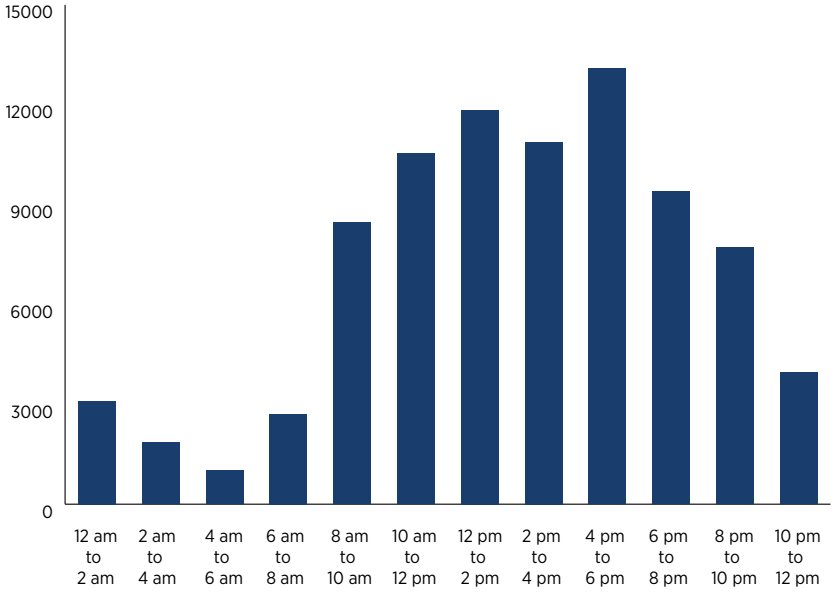
Rates of theft can also vary across a single week. **Figure 10** shows the share of theft that occurred on each day of the week from 2005 through 2015. This distribution is compared to the percentage of all crimes that took place each day throughout this 10-year period. Consistent with most crime, thefts decrease during the weekend.

FIGURE 10: **Percent of thefts occurring each day of the week, 2005 through 2015**



Thefts also fluctuate greatly over the course of a day. **Figure 11** shows the distribution of thefts across 12 two-hour time increments, as observed from 2005 through 2015. The data indicate that thefts occur most frequently during the day, particularly between 8:00am and 8:00pm.

FIGURE 11: **Theft by time of day, 2005 through 2015**



3.5 The Victims of Theft

The demographics of victims of theft are similar to those of the general population of Pittsburgh. **Figure 12** displays the percentage of male and female victims of theft for incidents from 2009 through 2015. Since 2009, 53 percent of theft victims have been female and 47 percent have been male. This ratio is similar to the proportion of each gender in the wider population, meaning that victimization rates for men and women are roughly the same.

FIGURE 12: **Percentage of male and female victims of theft, 2009 through 2015**

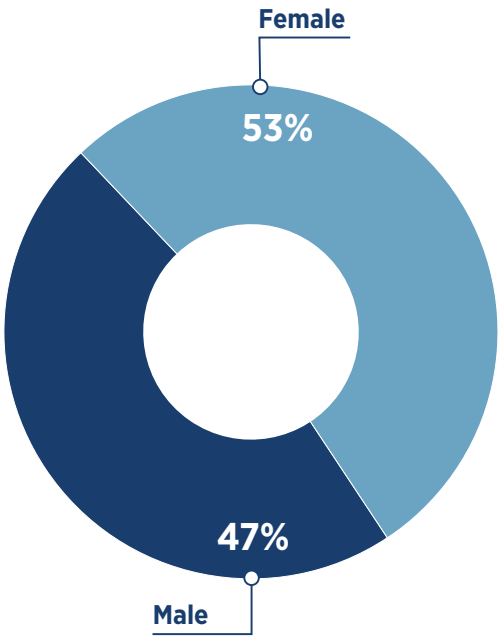
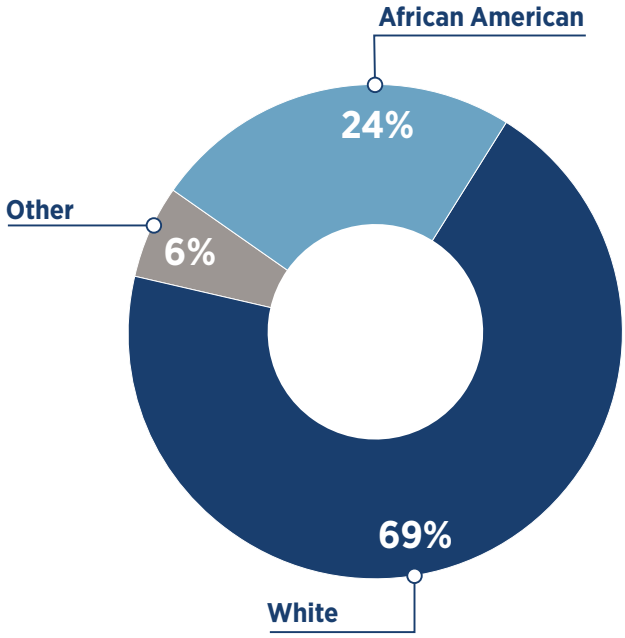


Figure 13 presents the percentages of white victims and African American victims for theft incidents reported from 2009 through 2015. Again, the ratio of African American victims to white victims is similar to the proportion of African American and white residents in the general population of Pittsburgh. Therefore, African American residents are about as likely as white residents to be victims of theft.

FIGURE 13: **Percentages of white and African American victims of theft, 2009 through 2015**

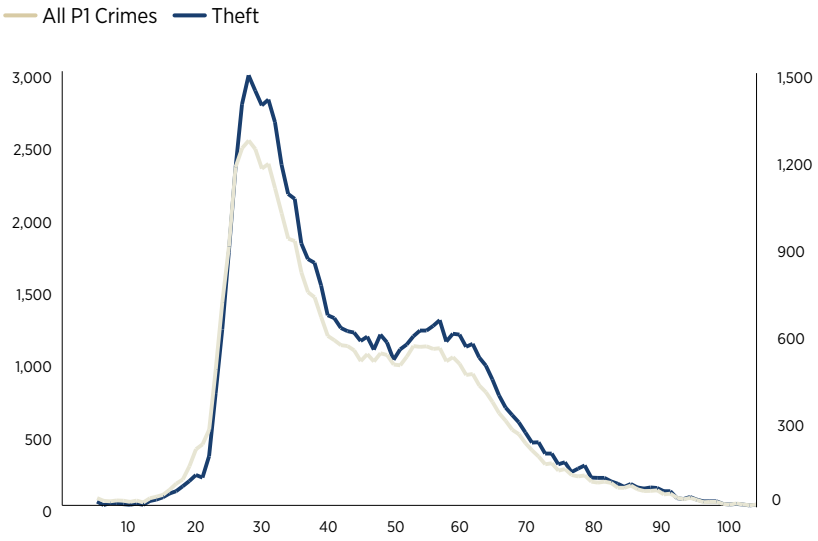


Rates of theft victimization by age closely mirror the distribution across all crimes. Although the median age of theft victims is 59, rates of victimization tend to be highest among young adults in their early 20s. **Table 4** compares the median ages of each Part 1 crime for the period from 2009 through 2015. These data indicate that victims of property crimes tend to be older than victims of violent crimes. **Figure 14** plots the ages of theft victims in comparison to the ages of victims of all Part 1 crimes.

TABLE 4: Median age of Part 1 crime victims, 2009 through 2015

	MEDIAN AGE OF VICTIM
Aggravated Assault	29
Homicide	28
Rape	23
Robbery	28
Part 1 Violent Crimes	28
MV Theft	39
Arson	40
Burglary	39
Theft	**35**
Part 1 Property Crimes	36
All Part 1 Crimes	34

FIGURE 14: Age distribution of theft victims, 2009 through 2015



3.6 Clearance Rates for Theft

Police departments across the country rely on clearance rates as a measure of success. A clearance rate represents the proportion of reported crimes that are investigated and closed. A case is classified as cleared when a perpetrator is arrested and charged or when exceptional circumstances prevent the police and the courts from arresting or prosecuting a known perpetrator. While rising clearance rates can signal increased success in solving crimes, they can also be indicative of falling rates of incident reporting among hard-to-solve crimes, such as theft, or increases in rates of crimes with nearly automatic clearances, such as drug violations, disorderly conduct or weapon violations.

Key Terms

Cleared by Exceptional Means: The case is closed due to exceptional circumstances that prevent arrest and prosecution. These circumstances can include the death of a suspect, difficulty securing victim cooperation, or challenges with extradition.

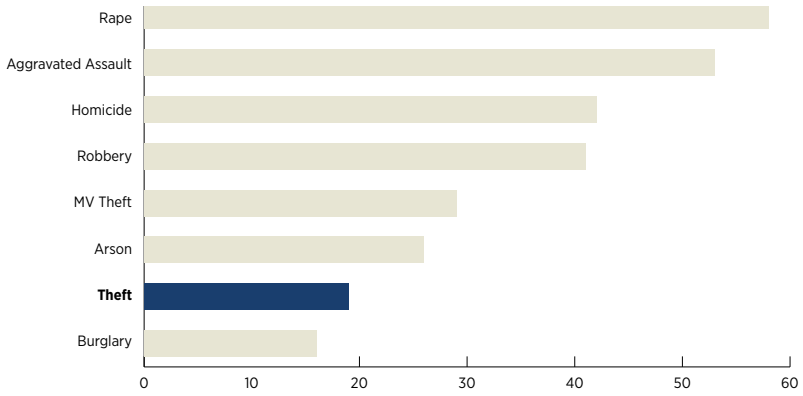
Cleared by Arrest: Police have arrested a juvenile or adult in connection with the incident, charged them with the crime and turned the case over to a court.

Pending: The case remains open.

Clearance Rate: The number of cases cleared by arrest or by exceptional means as a percentage of the total number of reported incidents.

Due to characteristic differences across Part 1 crimes, it is useful to calculate and track clearance rates within a single crime category. In the City of Pittsburgh, theft has a higher clearance rate than burglary but a lower rate than arson, motor vehicle theft and the four Part 1 violent crimes: rape, aggravated assault, homicide and robbery. **Figure 15** illustrates this variation in clearance rate by crime category.

FIGURE 15: **Clearance rate by crime type, 2014**



In 2014, Pittsburgh's clearance rate for theft was 19 percent, meaning that roughly one in five thefts reported to the police culminated in the identification of a suspect. **Figure 16** presents the distribution of all 2014 thefts by clearance status: adult arrest, juvenile arrest, cleared by exception, or pending.

FIGURE 16: **Clearance status of theft, 2014**

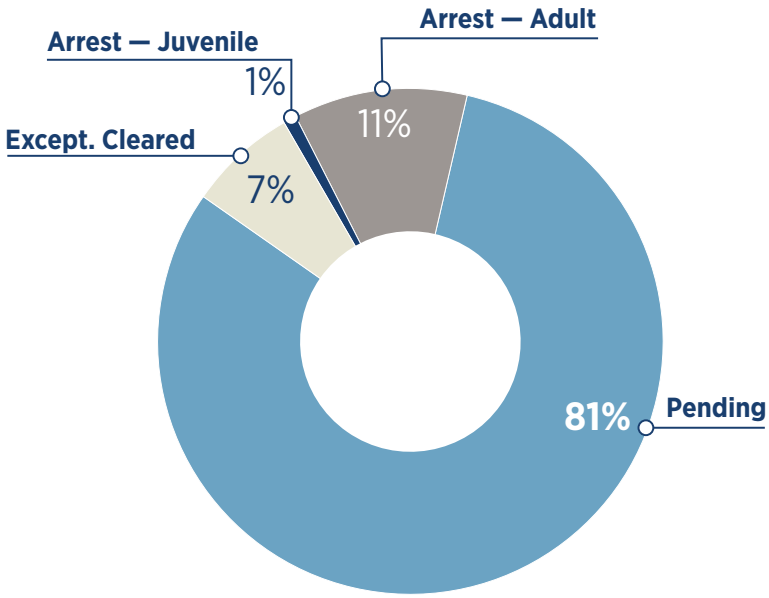
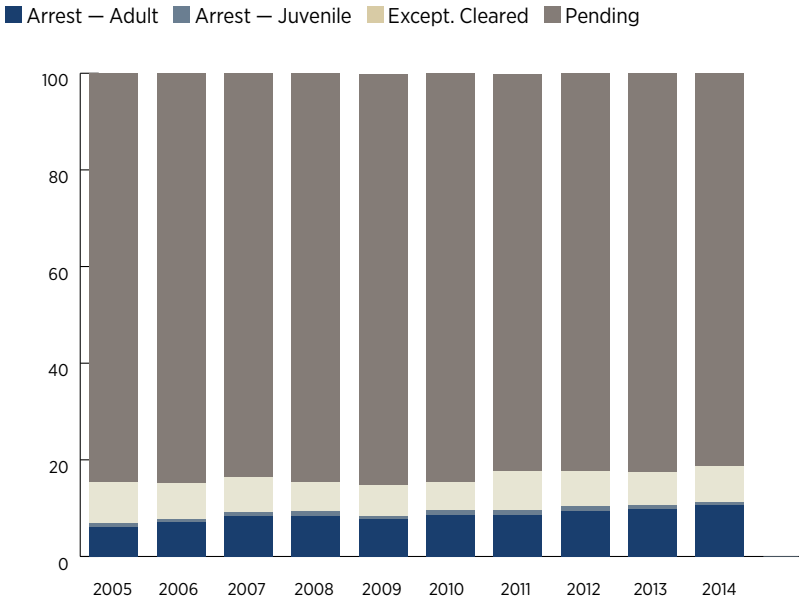


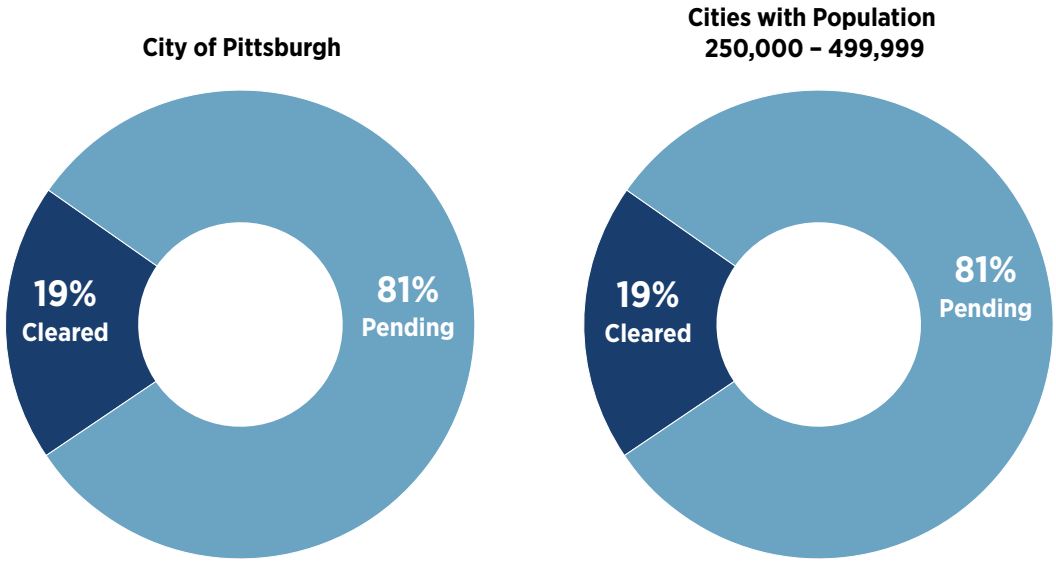
Figure 17 shows trends in the clearance status of thefts over the last ten years. The percentage of theft cases that are cleared by police has increased slightly during this period, from a low of 15 percent in 2005 to the 2014 rate of 19 percent.

FIGURE 17: **Trends in the clearance status of theft, 2005 through 2014**



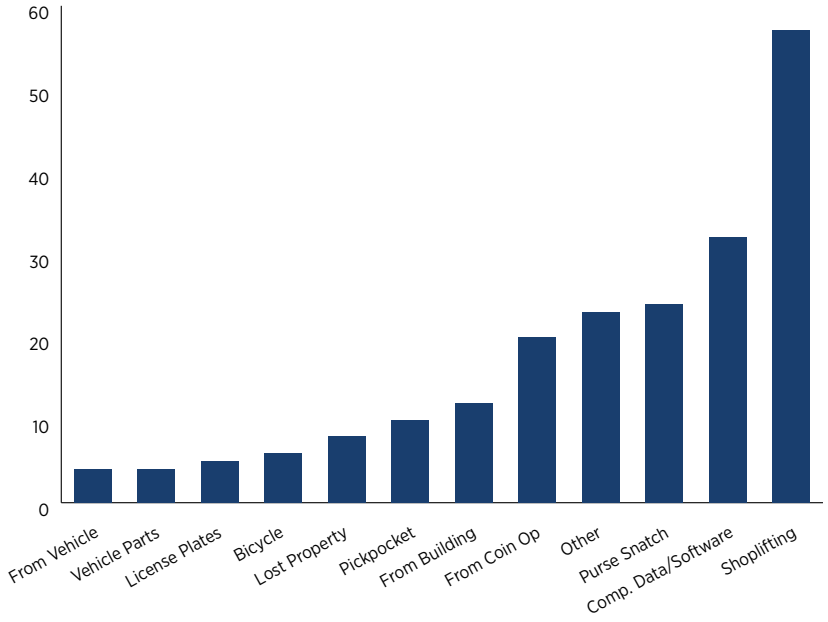
To evaluate Pittsburgh's clearance rate for theft, it is useful to compare Pittsburgh to similar benchmark cities. Because the FBI does not report clearance rates on the city level, this brief will use the FBI's Group I: Population 250,000 to 499,999 subset category for comparison purposes. The FBI generates data for this category by combining crime statistics for all cities with populations of 250,000 to 499,999. As shown in **Figure 18**, Pittsburgh's clearance rate for theft in 2014 was comparable to the rates of these similarly sized cities.

FIGURE 18: **Theft clearance rate in Pittsburgh compared to all cities with population 250,000 to 499,999, 2014**



However, Pittsburgh's theft clearance rate does not apply uniformly to all instances of theft; it can vary depending on the characteristics of the crime. **Figure 19** compares the clearance rates for each category of thefts from 2005 through 2014. The lowest clearance rates are associated with crimes, such as license plate theft, that often take place outside and involve a perpetrator who has no direct contact with a victim. Conversely, thefts with the highest clearance rates, such as shoplifting, often involve contact between the perpetrator and the victim or other witnesses.

FIGURE 19: **Theft clearance rate by category of theft, 2005 through 2014**



There are also modest differences in the clearance rate of theft depending on the demographics of the victim. **Figure 20** compares the theft clearance rates for female victims and the clearance rates of male victims for the period from 2009 through 2014. While the differences are small, thefts with female victims are more likely to be cleared than thefts involving a male victim. **Figure 21** shows the clearance rates of thefts for African American victims compared to white victims. Thefts are cleared at a higher rate for African American victims of theft.

FIGURE 20: **Clearance rate by the gender of the victim, all crimes, 2009 through 2014**

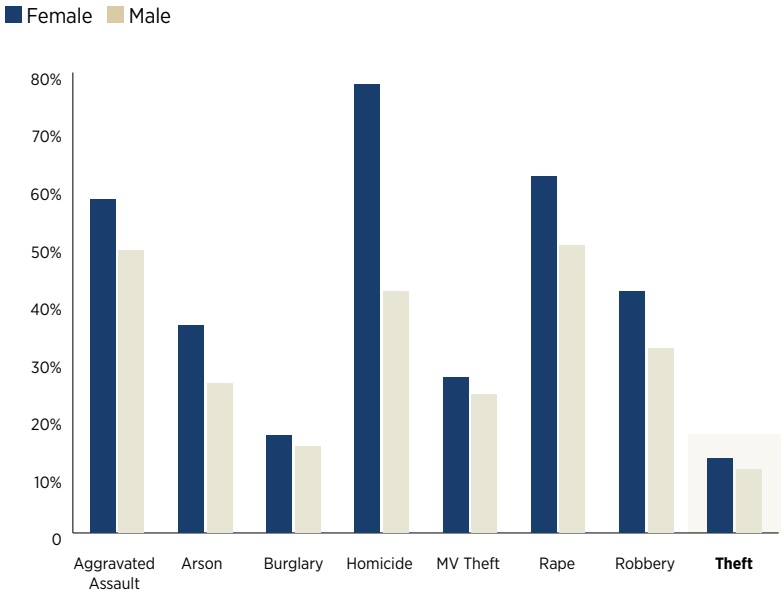


FIGURE 21: **Clearance rate by the race of the victim, all crimes, 2009 through 2014**