



National Commission
on COVID-19 and
Criminal Justice

Pandemic, Social Unrest, and Crime in U.S. Cities

PREPARED FOR THE COMMISSION BY

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Summary

- + **This study examined crime rates for 11 different offenses in 27 US cities** during the COVID-19 pandemic and social unrest over police violence. Not all cities reported data for each offense.
- + **Residential burglaries, larcenies, and drug offenses fell significantly during the pandemic.** Residential burglary dropped by 20% between February and June 2020. Larceny and drug offenses decreased by 17% and 57%, respectively, between March and June 2020. These declines reflect quarantines (residential burglary), business closings (larceny), and reduced police and street activity (drug offenses).
- + **Commercial burglaries rose by 200% during a single week in late May and early June of 2020 and then decreased just as abruptly to prior levels.** The spike is likely associated with the property damage and looting at the beginning of protests against police violence.
- + **Homicides and aggravated assaults rose significantly in late May and June of 2020.** Homicides increased by 37%, and aggravated assaults went up by 35%. Gun assaults rose during the same period, but the increase was not significantly greater than in previous years.
- + **Domestic violence rose during the pandemic (March - June 2020), but the increase was not significantly greater than in previous years.** This result is based on just 13 cities and should be treated with caution.
- + **Robbery increased significantly by 27%** during the pandemic (March - June 2020).
- + In our view, **subduing the COVID-19 pandemic is a necessary condition for halting the rise in violence.** In addition, **both the rise in violence and social unrest are likely to persist** unless effective violence-reduction strategies are coupled with needed reforms to policing.

Introduction

During the spring and early summer of 2020 momentous changes occurred in everyday life in the United States. The COVID-19 pandemic brought widespread quarantines and business closings. The killing of George Floyd by a Minneapolis police officer on May 25th triggered mass protests, many still ongoing, across the country. In this report, we examine the consequences of these conditions for crime rates in US cities.

Prior investigations found that crime rates dropped as cities responded to the pandemic by implementing social distancing requirements and shuttering businesses (e.g., Abt, Rosenfeld, and Lopez 2020; Mohler, Bertozzi, Carter, et al. 2020; Police Executive Research forum 2020). Recent press reports document violent crime increases in several cities in the aftermath of the social unrest prompted by the police violence in Minneapolis (Sanchez, Gingras, and Dolan 2020; Wernau and Barrett 2020). These accounts are helpful in assessing recent changes in crime rates but are limited by a focus on a small number of cities or crime types. Most do not place current crime fluctuations in the context of longer crime trends, which is necessary to determine whether the recent changes are distinctive or simply part of recurring crime cycles.

CITIES OF FOCUS

In the current study, we examine weekly changes in 11 different criminal offenses for 27 cities (listed in the Appendix) between January of 2017 and June of 2020, a total of 182 weeks. The mean population of the sample is approximately 1.2 million, and the median (the halfway point) is 660,00. New York City is the largest city in the sample, with 8.4 million residents, and Cincinnati is the smallest, with 300,400 residents.

We assess changes over time in the following violent and property offenses: homicide, aggravate assault, gun assault, domestic violence, robbery, total burglary, residential burglary, commercial burglary, larceny, motor vehicle theft, and drug offenses. The crime data were obtained from the online portals of city police departments providing weekly data for the three and-a-half-year time period. Not all of the cities reported data for each of the crimes, and offense classifications varied somewhat across the cities. We omitted data for nonstandard offense classifications (e.g., classifications based on state statute). Finally, the crime counts for recent months are preliminary and may be subject to revision, although subsequent changes should not substantially affect the main results.

STRUCTURAL BREAKS

Structural breaks denote a statistically significant change in the average level or rate of change in a time series, in this case weekly crime rates between January 2017 and June 2020. The structural break procedure used here assumes the break point is unknown and allows the model to estimate the significant break in the series. Because street crimes tend to rise and fall with seasonal changes, the estimates are adjusted for seasonal effects by controlling for the crime rate during the same week in the previous year.

*The **vertical red lines** throughout this report indicate the points at which structural breaks occur in the data.*

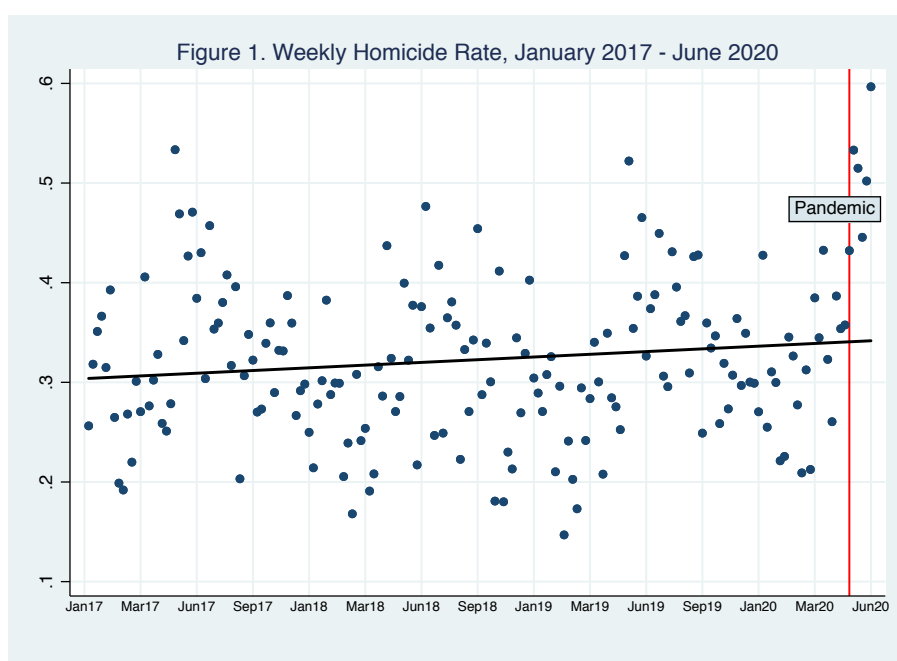
The offense counts were converted to weekly crime rates per 100,000 city residents for analysis. “Structural breaks” methodology was used to estimate statistically significant changes in crime rates over time. This report proceeds by describing the average change over time for the sample as a whole in weekly crime rates for each of the 11 offenses, noting variation among the cities in the direction and degree of change. We conclude with recommendations for addressing crime increases while implementing needed reforms to improve the fairness and effectiveness of policing.

Results

We present a graphic portrayal of each of the 11 offenses that displays the average weekly offense rate for the cities included in the analysis over the three and-a-half-year (182-week) period. The dots represent the offense rate for each week, and the black line shows the linear trend over the 182 weeks. The vertical red line indicates the week of the structural break (i.e., the statistically significant change in the series). The accompanying discussion summarizes the graphic results and highlights differences across the cities in the direction and degree of change after the structural break.

HOMICIDE

Figure 1 displays the average weekly homicide rate in the 20 cities for which homicide data were available (see Appendix Table A1). There appears to be a rough cyclical pattern and a very slight upward trend in the homicide rate over time. The model estimated a structural break near the end of May 2020, after which the homicide rate increased by 37% through the end of June. The rise in homicide was led by three cities: Chicago, Philadelphia, and Milwaukee.

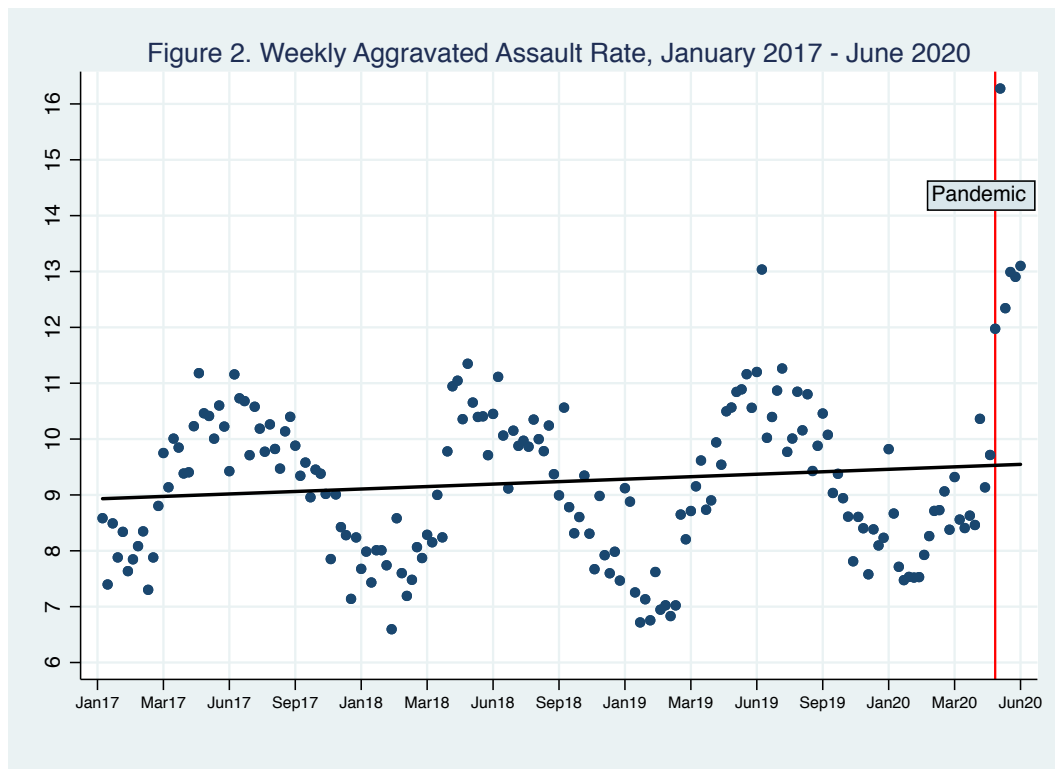


KEY TAKEAWAY

Homicide rose 37% in June 2020.

AGGRAVATED ASSAULT

Aggravated assaults are assaults committed with a deadly weapon or those that result in or threaten serious bodily injury to the victim. The weekly aggravated assault rate in the 17 cities with available data exhibits a clear cyclical pattern over time, rising during the late spring and summer months and falling during the fall and winter. The model estimated a structural break in the series near the end of May 2020. (Recall that the structural break model adjusts the estimate for seasonal effects). The aggravated assault rate rose by 35% from late May through the end of June 2020. The rise in aggravated assaults was led by Chicago, Louisville, Nashville, and Detroit.

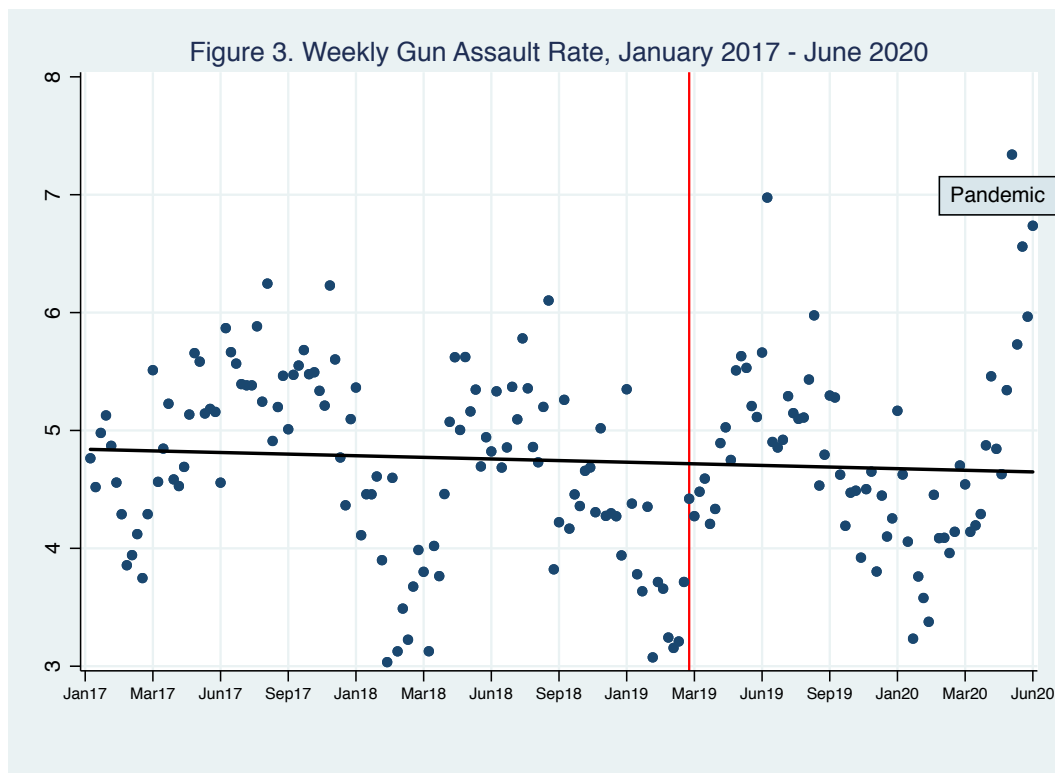


KEY TAKEAWAY

Aggravated assault rose 35% in June 2020.

GUN ASSAULT

Gun assaults are aggravated assaults committed with a firearm. The weekly gun assault rate for the 17 cities with available data moved cyclically over time and exhibits a structural break in the early spring of 2019. Gun assaults rose during the late spring and early summer of 2020, but the increase was not significantly greater than the year before.

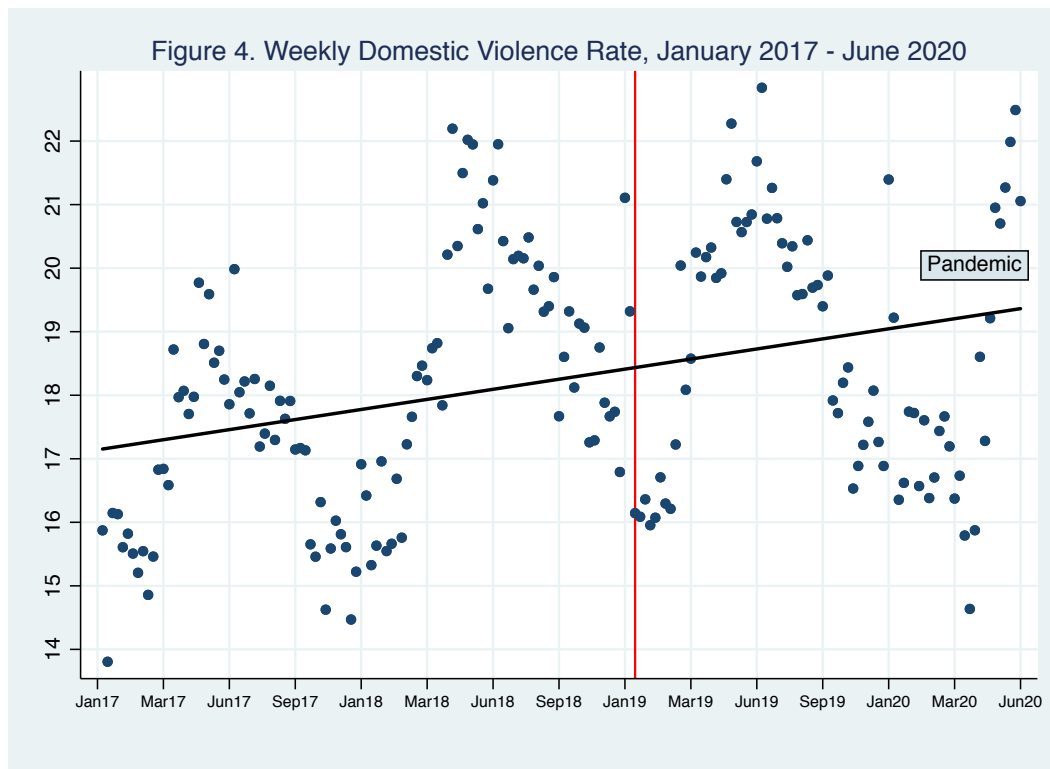


KEY TAKEAWAY

No significant change in gun assault over previous year.

DOMESTIC VIOLENCE

Domestic violence consists primarily of aggravated and so-called simple assaults, those committed without a dangerous weapon or serious bodily injury to the victim. Unlike other violent offenses, we observe a marked upward cyclical trend in the weekly domestic violence rate over the three and-a-half-year time period. The model estimated a structural break in the domestic violence series during the winter of 2019. The domestic violence rate rose to a recent peak of 22 per 100,000 through the spring and early summer of 2020, which was slightly below that of a year earlier. The rise in domestic violence during 2020 was not significantly greater than in the previous year. These results must be viewed with some caution because they are based on just 13 cities for which we were able to obtain domestic violence data.

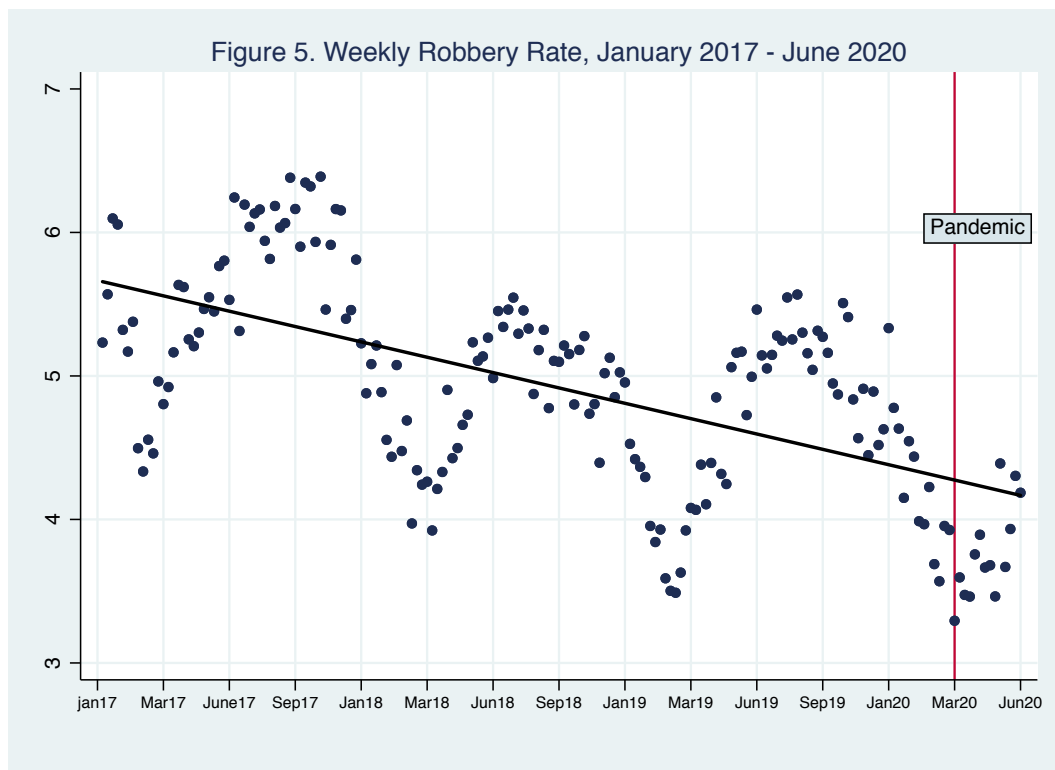


KEY TAKEAWAY

No significant change in domestic violence over previous year.

ROBBERY

Robberies are thefts committed with force or the threat of force. The average weekly robbery rate in the 24 cities with available data exhibits a cyclical downward trend from January of 2017 through June 2020. A structural break in the trend occurred during March 2020, after which the robbery rate rose by 27% through the end of June. June 2020 robbery rates, however, were well below those of a year earlier. St. Paul experienced a robbery spike in late May and early June of 2020 followed by a large decrease through the end of the month.

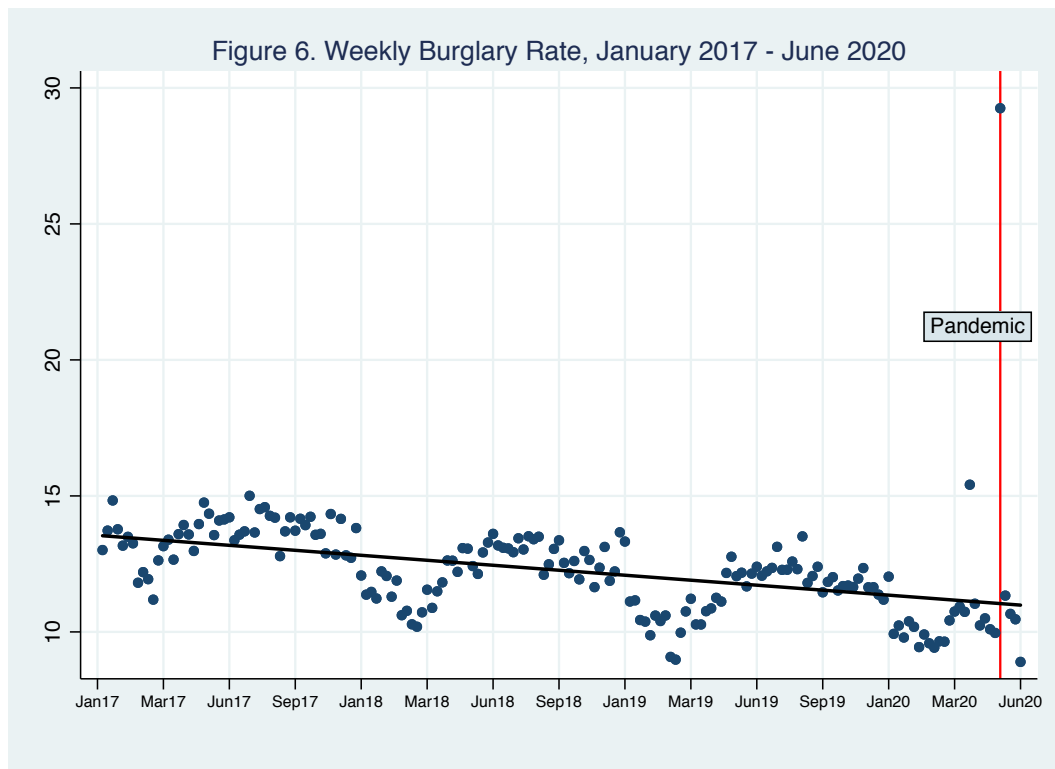


KEY TAKEAWAY

Robbery rose 27% during the pandemic.

BURGLARY

Burglaries involve breaking and entering a residential or commercial premise for the purpose of committing a crime. Weekly burglary rates in the 23 cities with available data trended downward in cyclical fashion until the last week of May, when they rose by 190% over the previous week (see the explanation below). They then abruptly decreased the following week through the end of June. Several cities led the burglary spike, including Los Angeles, Washington, New York City, Atlanta, Chicago, and St. Louis. Other cities, such as Phoenix, Detroit, and Omaha, did not experience a burglary increase in late May of 2020.



Commercial and Residential Burglary

The abrupt burglary increase in late May of 2020 resulted from a 200% increase in commercial burglaries in the 17 cities with available data, as shown in Figure 7. The brief spike in commercial burglary coincided with the emergence of mass protests against police violence in many cities, which we discuss in the conclusion. The downward trend in residential burglaries since 2017 accelerated significantly in February of 2020 (see Figure 8). Residential burglary dropped by 20% from February through June of 2020. Nearly every one of the 17 cities with available data experienced a drop in residential burglary. The sole exception is San Francisco, where residential burglaries increased in mid-May.

Figure 7. Weekly Commercial Burglary Rate, January 2017 - June 2020

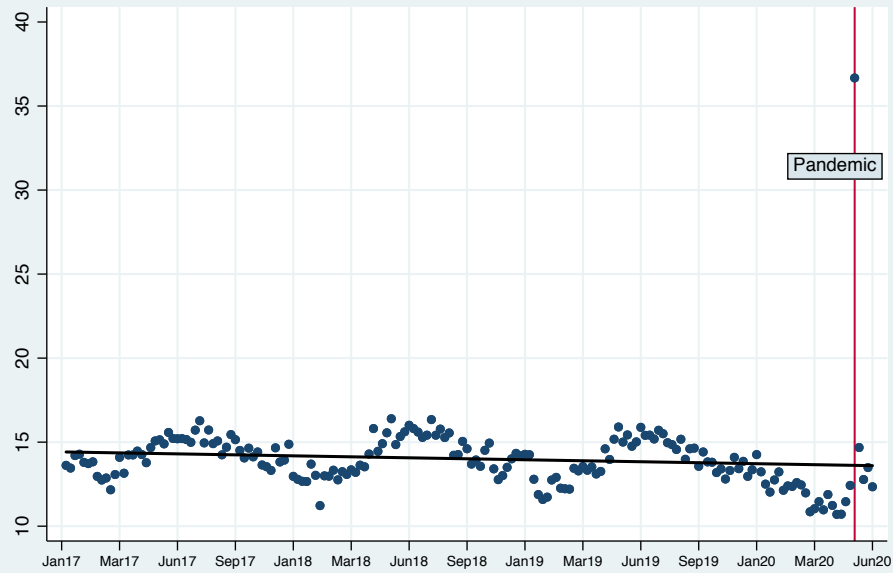
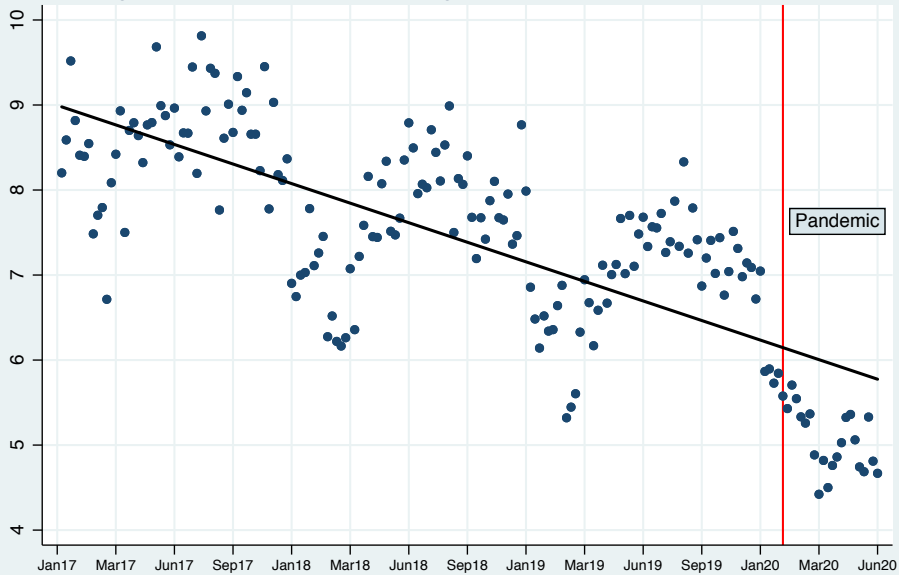


Figure 8. Weekly Residential Burglary Rate, January 2017 - June 2020

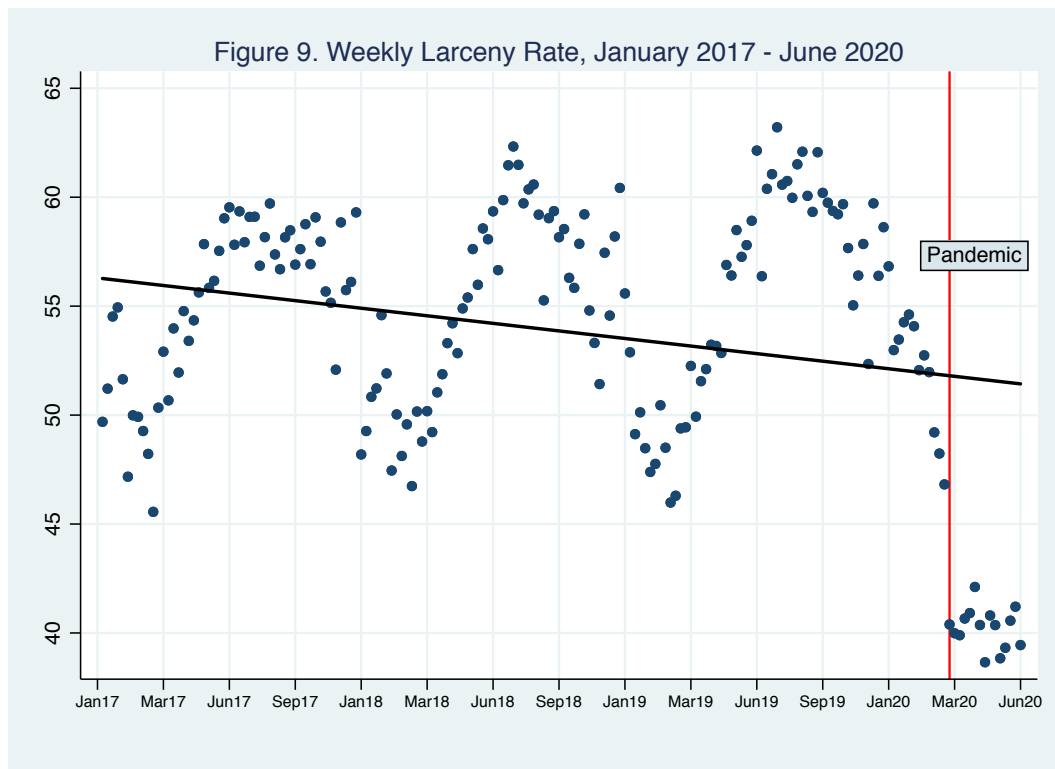


KEY TAKEAWAY

Commercial burglary spiked by 200% during the last week of May 2020. Residential Burglary fell by 20% during pandemic.

LARCENY

Larcenies are thefts unaccompanied by force or breaking and entering. The weekly larceny rate exhibits a pronounced cyclical pattern over time in the 21 cities with available data. The downward linear trend in larceny is the result of the large and significant drop beginning in March of 2020. The larceny rate fell by 17% from March through the end of June. Most cities experienced a greater decline in larceny during the spring of 2020 than in previous years, although the decrease in some cities (e.g., Boston, Nashville, Dallas) did not exceed earlier declines.

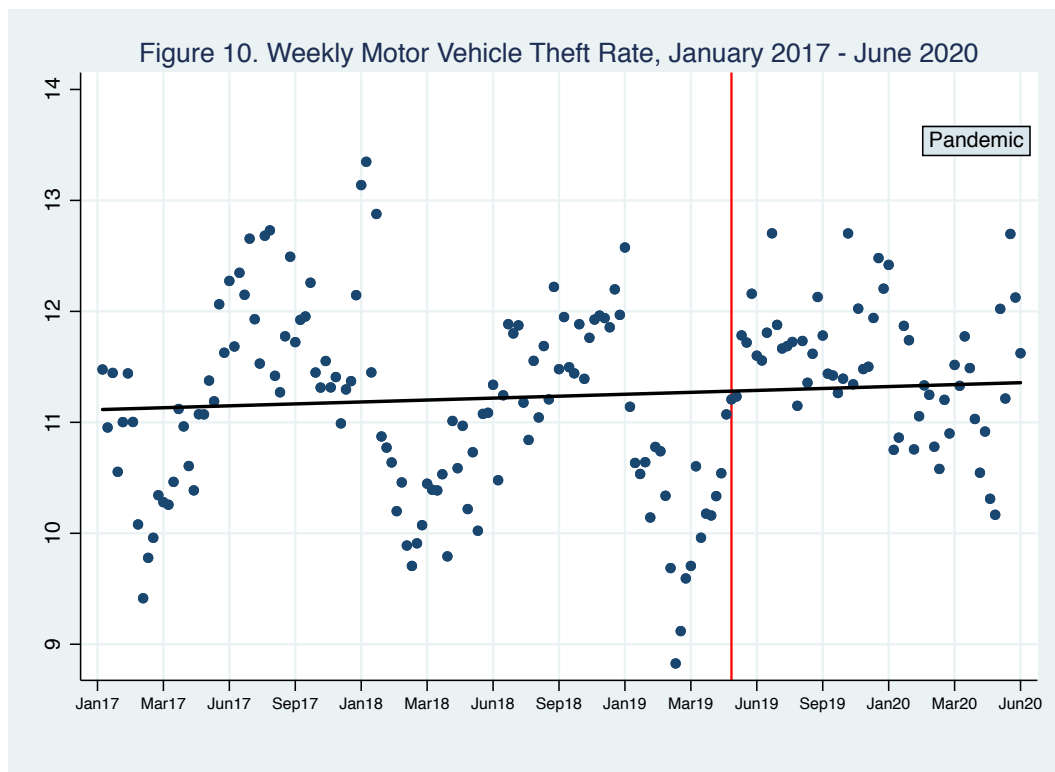


KEY TAKEAWAY

The larceny rate fell by 17% during the pandemic.

MOTOR VEHICLE THEFT

Weekly motor vehicle theft rates rose and fell cyclically with no evident linear trend from January 2017 to the structural break in May of 2019 in the 23 cities with available data. Afterward, however, the cyclical pattern in the time series appears to dissipate. Motor vehicle theft rates rose in some cities during the spring of 2020 (e.g., Los Angeles, San Francisco, Denver) and fell at about the same time in others (e.g., Atlanta, Detroit, Dallas). As a result, no structural break in the time series was found during the spring of 2020.

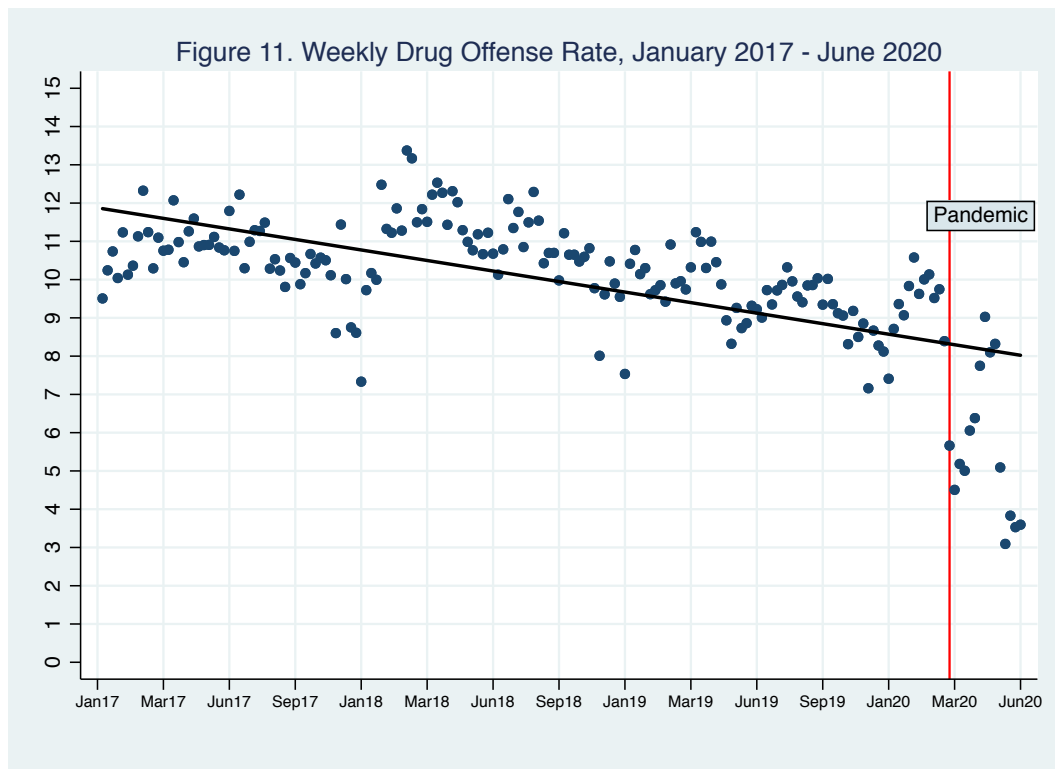


KEY TAKEAWAY

No significant change in motor vehicle theft over previous year.

DRUG OFFENSES

Drug offenses include arrests for the manufacture, sale, or possession of illicit drugs. The weekly drug offense rate exhibits a downward cyclical trend until the structural break in March of 2020, when the rate fell sharply, increased during the next two months, and then dropped again. Between March and the end of June 2020, the drug offense rate decreased by 57%, dropping to a level far lower than at any time during the previous three and-a-half-years. Drug offenses decreased in most of the 19 cities with available data, with particularly sharp declines in Chicago, San Francisco, Denver, and Philadelphia.



KEY TAKEAWAY

Drug offenses dropped by 57% during the pandemic.

Conclusion

This study reveals statistically significant changes in the rates of property, drug, and violent offenses for a sample of US cities during the spring and early summer of 2020. In general, with a significant exception, property and drug crime rates decreased, while violent crime rates increased during this period. The exception is commercial burglary, which spiked at the end of May. Not all cities can be characterized by these average patterns, however. Motor vehicle theft rates rose in some cities and fell in others, and several cities did not experience a spike in commercial burglary in late May of 2020. The dramatic rise in commercial burglary in other cities, however, merits further discussion.

Where it did occur, the spike in commercial burglary is notable for its abruptness, size, brevity, and timing. It interrupted a lengthy period of declining commercial burglary rates and increased to a level three times higher than the peak rates of the previous several years. The spike was limited to a single week—the *same* week in nearly every city where it occurred. As noted earlier, the spike took place at the beginning of the period of social unrest after George Floyd’s killing in Minneapolis. The cities with the greatest increases in commercial burglary—Los Angeles, Washington, New York City, Atlanta, Chicago, and St. Louis—also had particularly large and boisterous demonstrations marked by sporadic property destruction and looting (Taylor 2020; Wagner 2020). But the spike in commercial burglary ended as abruptly as it began, which calls into question claims that property damage and looting persisted as the protests continued through the month of June.

Rates of homicide and aggravated assault also increased significantly in late May of 2020. Some of the violence was directly connected to the protest activity, although in most cases it appears to have involved persons other than the protesters (Taylor 2020). Most of the increase in violent crime took place away from the demonstrations and was not limited to a single week.

While domestic violence increased during the spring and early summer of 2020, the increase was not significantly greater than during the same period in the past. Therefore, based on the limited available evidence, the recent rise in domestic violence cannot be unambiguously tied to the COVID-19 pandemic. This result underscores the importance for drawing causal conclusions of placing recent changes in crime rates in the context of past changes, especially seasonal fluctuations.

It is too early to draw strong inferences about the causes of the recent rise in urban violence, but it is instructive to compare the recent upturn with the increase that occurred five years ago in the midst of a similar period of widespread protest against police violence. Homicide and nonfatal violent crime increased in 2015 and 2016 in the

aftermath of protests against police brutality in Ferguson, MO, Baltimore, Chicago, and elsewhere around the country. Analysts tied the heightened violence to two versions of the so-called Ferguson Effect. The first connects the violence to “de-policing,” a pullback in law enforcement. The second essentially turns this explanation on its head and connects the violence to “de-legitimizing,” positing that communities, disadvantaged communities of color in particular, drew even further away from the police due to breached trust and lost confidence. As a result of diminished police legitimacy, fewer people reported crimes to the police or cooperated in investigations, and more engaged in street justice to settle disputes (see Rosenfeld, Gaston, Spivak, and Irazola 2017). It remains unclear whether either of these theories explains the previous rise in violence, much less today’s increase. What is clear is that there is no simple connection between protests against police brutality and violent crime.

In summary, with one exception, property crime rates in US cities fell significantly during the spring of 2020. Drug offense rates did as well. The timing of these declines coincided with the stay-at-home mandates and business closings in response to the COVID-19 pandemic. Quarantines reduced residential burglary. When businesses are closed, there is no shoplifting. Selling drugs on the street is more difficult when there are fewer people on the street and when police prioritize away from drug enforcement activities. Violent crime rates rose later in the spring, and the increases coincided with the emergence of a sustained period of social unrest in US cities. Given the limited number of cities in the study sample, these results should be regarded as merely suggestive of recent changes in urban crime rates. But the main patterns are clear enough to warrant consideration of the policy challenges facing city leaders, specifically the challenge posed by the rise in violent crime.

“SUBDUING THE COVID-19 EPIDEMIC IS ALSO A NECESSARY CONDITION FOR HALTING THE RISE IN VIOLENCE. THE POLICE, PUBLIC HEALTH, AND COMMUNITY APPROACHES TO VIOLENCE REDUCTION REQUIRE THAT PEOPLE MEET FACE-TO-FACE; THEY CANNOT BE REPLACED BY ZOOM.”

Several evidence-based strategies are available to address the increase in violence. Some, such as concentrating enforcement activity on crime hot spots and focusing deterrence efforts on the small number of persons disproportionately responsible for violent crime, necessarily involve the police as well as other criminal justice officials. Other promising interventions are led by social service and health professionals or by community-based “violence interrupters” (see Abt 2019). All three approaches—law enforcement, public health, and community—are necessary.

Subduing the COVID-19 epidemic is also a necessary condition for halting the rise in violence. The police, public health, and community approaches to violence reduction require that people meet face-to-face; they cannot be replaced by Zoom. An underappreciated consequence of the pandemic is how social-distancing requirements have affected outreach to high-risk individuals. When they are not responding to a radio dispatch, police officers engage in “self-initiated” activities such as foot patrols, checking occupied and unoccupied vehicles, and conducting field interviews. The ability of the police to prevent and investigate crimes is greatly diminished when they cannot perform these essential functions.¹ Similarly, when street outreach workers are unable to engage directly with those at the highest for violence, their anti-violence efforts are significantly hampered.

Just as leaving the police out of the urgent business of violence reduction is not a viable policy option, neither is abandoning police reform. Implementing needed changes in the policy and practice of policing must proceed hand-in-hand with stemming the rise in violence (Stanton 2020). Otherwise, a protracted period of angry protest and escalating violence is all but inevitable.

¹ As an example of the impact the pandemic has on police activity, weekly Compstat reports by the Crime Analysis Unit of the St. Louis Metropolitan Police Department during the spring and early summer of 2020 show 80%-to-90% reductions in traffic stops, pedestrian stops, foot patrols, vehicle checks, and other self-initiated actions.

APPENDIX

Table A1. Cities by Offense (N=27)											
	1	2	3	4	5	6	7	8	9	10	11
Atlanta	X		X		X	X	X	X	X	X	
Austin	X	X		X	X	X	X	X	X	X	X
Boston		X	X		X				X	X	X
Chicago	X	X	X	X	X	X	X	X	X	X	X
Cincinnati		X	X	X					X	X	
Dallas			X			X	X	X	X	X	X
Denver	X			X	X	X	X	X	X	X	X
Detroit	X	X		X	X	X				X	X
Los Angeles	X		X	X	X	X	X	X		X	
Louisville	X	X		X	X	X			X	X	X
Memphis	X			X	X	X	X	X	X	X	X
Milwaukee	X		X		X	X				X	
Minneapolis					X	X	X	X	X	X	
Nashville	X	X	X	X					X	X	X
New York	X				X	X	X	X			X
Omaha	X	X	X	X	X	X			X	X	
Philadelphia	X	X	X		X	X	X	X	X		X
Phoenix	X	X			X	X	X	X	X	X	X
Pittsburgh	X	X	X		X	X	X	X	X		X
Raleigh	X	X			X	X	X	X	X	X	X
Riverside	X		X		X	X	X	X	X	X	
Sacramento			X		X						X
San Francisco		X	X	X	X	X	X	X	X	X	X
Seattle	X	X			X	X			X	X	X
St. Louis	X	X	X	X	X	X	X	X	X	X	X
St. Paul		X	X	X	X	X	X	X		X	X
Washington	X	X	X		X	X			X	X	
Total	20	17	17	13	24	23	17	17	21	23	19

Key

1 - Homicide
 2 - Aggravated Assault
 3 - Gun Assault
 4 - Domestic Violence
 5 - Robbery
 6 - Total Burglary
 7 - Residential Burglary

8 - Commercial Burglary
 9 - Larceny
 10 - Motor Vehicle Theft
 11 - Drug Offenses

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