Center For
POLICING EQUITY

REDESIGNING PUBLIC SAFETY

Traffic Safety

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This report and a companion brief are available at **policingequity.org/traffic-safety**.

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Introduction

One of the most common reasons for contact with police in the United States is being a driver who is pulled over in a traffic stop.[1] The more than 20 million people experiencing such stops[2] every year do not have equitable experiences with traffic enforcement, which is persistently discriminatory.[3] Inequitable traffic enforcement practices threaten public safety, especially for Black drivers. And enforcement is insufficient to confront the current public health crisis of traffic crashes. Creating safer roads requires investing in evidence-informed strategies to prevent dangerous driving, decrease the harms of normal human driving error, and address the disproportionate burdens of enforcement on Black drivers.

Black people are more likely to be stopped by police while driving,[4] to be searched once stopped,[5] to have force used against them,[6] and to be killed by police when unarmed.[7] One analysis of more than 20 million records of traffic stops in North Carolina from 2002 through 2016 found that Black people were 63% more likely than White people to be stopped while driving, despite being 16% less likely to drive.[8] Accounting for driving habits, Black drivers were 95% more likely to be stopped than White drivers.[9]

Racially biased enforcement sets into motion a cascade of interrelated harms for the millions of people subjected to it: unaffordable fines and fees, mounting debt, driver's license suspensions, lost employment, unnecessary arrests, criminalization, and even injury or death. Before being killed at a routine traffic stop, Philando Castile had been pulled over at least 46 other times and was subjected to more than $6,000 in fines.[10]

Despite robust police enforcement of traffic law violations, the number of traffic crash deaths in the United States is approximately 50% higher than in similar high-income countries.[11] According to the federal government, the number of car crashes decreased in the most recent year of available data, but deaths caused by traffic crashes are increasing in the U.S., with the highest number since 2007.[12] In contrast, road deaths in the European Union have dropped by 36% in the past decade.[13]

Because of disinvestment in road safety infrastructure and the legacy of racist federal transportation policies, racial disparities are also pronounced in traffic crashes.[14] Black and Native people are more likely than others to be killed in traffic crashes.[15] And from 2010 through 2019, Black pedestrians were killed by drivers at a rate 82% higher than for White pedestrians, while Native pedestrians were killed at a rate 221% higher.[16]

All communities deserve a broader and more just vision of public road safety. This requires investing in evidence-informed strategies to create a world where all people can drive and walk without fear of traffic crashes, racial profiling, or police violence. Redesigned traffic safety means ending the use of traffic enforcement as an excuse to conduct criminal investigations that are based on bias or guesswork rather than facts and evidence. It also requires investing in community-supported strategies to reduce traffic collisions and deaths that do not perpetuate systemic discrimination or rely on armed enforcement.

The recommendations in this report guide communities and policymakers on how to achieve this vision of traffic safety. They aim to address the physical, psychological, and economic harms caused by unjust and burdensome enforcement, including the preventable debt, justice system entanglement, and trauma that too often flow from a single routine traffic stop.

REDESIGNED TRAFFIC SAFETY MEANS ENDING THE USE OF TRAFFIC ENFORCEMENT AS AN EXCUSE TO CONDUCT CRIMINAL INVESTIGATIONS

End Pretextual Stops

A pretextual stop is when police pull someone over for a minor traffic violation so that they can investigate a crime for which they lack reasonable suspicion. In 1996, a unanimous Supreme Court ruled in *Whren v. United States* that a police officer's subjective intentions for pulling someone over—including racial bias—are irrelevant to the question of whether a stop violates the Fourth Amendment, which prohibits unreasonable searches and seizures. The Court held that pretextual stops do not violate the Fourth Amendment, as long as police officers have reasonable suspicion that a traffic law has been violated.[17]

Because minor traffic infractions are common, *Whren* allows police officers wide discretion to stop almost any driver they are willing to follow for a short distance.[18] Law enforcement agencies routinely encourage officers to use pretextual stops as an investigative tool.[19] Four years after the Whren decision, the International Association of Chiefs of Police created an award—Leadership in Looking Beyond the License Plate—to recognize officers who used traffic stops based on license plate violations to make arrests for more serious crimes.[20]

Institutional endorsement of pretextual stops allows and encourages the spread of racial profiling.[21] This practice permits officers to conduct investigatory stops that are justified by a traffic infraction but motivated by hunch or bias. Analyses of millions of U.S. traffic stop records have shown that Black drivers are stopped more often than White drivers[22] and that police require less suspicion to search Black drivers than they do white drivers.[23]

Pretextual stops do not improve traffic safety. They are an excuse to haphazardly search for evidence of criminal activity, rather than an effort to deter dangerous driving. Evidence shows that pretextual stops very rarely prevent or detect serious crime, frequently uncovering contraband in less than 1% of stops made.[24] Stops that are not based on any concrete evidence of serious criminal activity are less efficient and productive than stops made on the basis of specific information. Amid growing recognition of the role pretextual stops play in undermining safety and equity, President Biden's May 2022 executive order on policing called for "ending discriminatory pretextual stops."[25]

State and local policymakers should ban the use of pretextual stops and create robust safeguards against their use. The following recommendations highlight policy interventions from around the country that can support this goal.

1. Ban police stops for low-level violations not related to traffic safety.

Several jurisdictions have recently sought to address pretextual stops by preventing or disincentivizing officers from making traffic stops based on low-level traffic infractions that have no meaningful connection to road safety. In 2020, Virginia enacted legislation that prohibited officers from initiating traffic stops based solely on specific low-level traffic infractions unrelated to traffic safety, such as objects dangling from a rearview mirror, loud exhaust, tinted windows, a recently expired registration, or driving with a single headlight or brake light out.[26] The city of Philadelphia enacted a similar ordinance in 2021, followed by Pittsburgh, Memphis, and Ann Arbor.[27] A growing number of prosecutors have also announced that they will decline to prosecute cases in which evidence was obtained during a non-safety-related traffic stop.[28]

2. Prohibit officers from using traffic stops as a pretext for criminal investigation.

Recent evidence from Washington State indicates that legal rules allowing police officers to engage in pretextual traffic stops can contribute to increased racial profiling. Three years after *Whren*, the Washington State Supreme Court held in *State v. Ladson* that the state constitution prohibited police from conducting pretextual traffic stops. But in 2012, the court significantly undermined this restriction in *State v. Arreola*. An analysis of more than 8 million traffic stops conducted by the Washington State Patrol from 2008 through 2015 concluded that the *Arreola* decision was associated with a statistically significant increase in traffic stops of non-White drivers relative to White drivers.[29]

To promote compliance with a ban on pretextual stops, policymakers should adopt rules similar to those set by state courts in Oregon and Minnesota, which have held that their state constitutions prohibit officers from asking investigative questions unrelated to the initial reason for the stop unless they have independent cause to do so.[30]

3. Prohibit searches based on the driver's consent unless officers have independent cause for search.

Although police officers typically need probable cause or reasonable suspicion to search a vehicle during a traffic stop, the Supreme Court has held that this requirement does not apply when a person consents to a search.[31] Although courts have described consent searches as being an exception to the Fourth Amendment's probable cause requirement, they are now the rule rather than the exception. Overall, police departments document consent searches and requests for consent to search poorly, but the consensus among legal scholars is that most warrantless searches are conducted based on consent rather than probable cause.[32] The vast majority of these searches fail to produce any contraband.[33]

The Supreme Court allowed consent searches based on the idea that these searches are voluntary, but research indicates otherwise. In reality, most people "consent" to searches when law enforcement asks them to do so.[34] But in the context of a traffic stop, the power differential between an officer and the person being stopped is enormous. When a person has been pulled over by a uniformed police officer and is not free to leave, the line between "request" and "command" is often unclear, and most people feel compelled to comply.[35] Factors like language barriers and disability may heighten the coercive nature of these encounters.

Consent searches contribute to racial inequities in traffic stops and searches. Analyses in various jurisdictions around the country have found that police officers ask Black and Latinx drivers to consent to searches of their vehicles at a disproportionately high rate in comparison to White drivers, despite the fact that consent searches of Black and Latinx drivers are less likely to result in discovery of contraband than those of White drivers.[36] Some jurisdictions have also found that Black and Latinx drivers are disproportionately likely to comply with search requests.[37] The heightened power imbalance created by disparate rates of police force against Black and Latinx people likely contributes to racial disparities in rates of compliance with search requests.[38]

CONSENT SEARCHES CONTRIBUTE TO RACIAL INEQUITIES IN TRAFFIC STOPS AND SEARCHES

Multiple states have prohibited or placed significant restrictions on consent searches either through a state court decision or by statute.[39] The New Jersey Supreme Court, for example, held in 2002 that consent searches are not valid unless there is reasonable suspicion to believe that the driver or passenger has engaged in or is about to engage in criminal activity.[40] In 2019, the Oregon Supreme Court also found that suspicionless consent searches violated its state constitution.[41] The following year, the police department in Portland, Oregon, reported its lowest ever recorded search rate.[42] The rates of contraband found in searches increased during the same period.[43]

Requiring signed rather than verbal consent for searches is also a popular reform, but has shown mixed results. Fayetteville, North Carolina saw success with a policy requiring officers to inform people of their right to refuse a search and to obtain signed consent: Fewer consent searches were conducted and the rate of contraband found remained steady.[44] By contrast, when a similar reform was implemented in Durham, North Carolina, consent searches declined but were offset by an increase in probable cause searches. Some researchers have suggested that the difference in outcomes between these two cities may be because of differences in messaging from police leadership about the intention of this reform.[45]

Signed consent forms alone do not address the underlying issue of police officers asking Black and Brown drivers for consent to search at a disproportionate rate. Legal scholars question whether advising people about their rights and asking for signed consent adequately addresses the pressure to comply with a police search request. One laboratory experiment found that informing people of their right to refuse a search request did not significantly decrease rates of compliance or make them feel more free to refuse.[46]

4. Document and regularly analyze all recorded reasons for stops and searches.

Police departments should require officers to record a narrative description of the justification for each stop and search they conduct. These reports should be analyzed on a daily basis (for example, by supervisors) to make sure that stops are supported by reasonable suspicion or probable cause and are consistent with department policy. Evidence suggests that requiring officers to explain in detail the reason for their stops and searches may—when coupled with supervisor review or other accountability measures—increase officers' perception that their decisions are under scrutiny. This may discourage stops and searches based on an officer's hunch or bias rather than evidence. A similar policy was implemented by the New York Police Department in 2013, along with a number of other policy changes from *Floyd v. City of New York*, a class action lawsuit challenging the department's stop, question, and frisk policies. The new policy instructed officers to record detailed narrative notes on the reasoning for each of their stops, then submit these records to their supervisors for review after each shift. In the following months, the number of NYPD stops and searches that did not yield a weapon dropped sharply.[47] In the years that followed, racial disparities in who was subjected to being stopped, questioned, and frisked declined.[48]

Invest in Public Health Approaches to Road Safety

Traffic crashes are a serious public health problem. Traffic crashes are one of the leading causes of death in the United States for people ages 1 to 44,[49] and dangerous driving practices are the most common cause of crashes that lead to death. In 2020, among the 38,824 deaths from traffic crashes, 30% involved drunk driving, 29% involved speeding, 8.1% involved distracted driving, and 1.6% involved drowsy driving.[50] A recent analysis of national traffic crash fatalities showed that for each mile traveled, Black people were 4.5 more likely to be killed while biking, 2.2 times more likely to be killed while walking, and 1.8 times more likely to be killed while in a car than White people.[51]

Traffic enforcement aims to improve road safety by using stops to intervene in and deter dangerous driving practices. But enforcement is not the only–or event the best–tool to prevent traffic crashes. Many police stops focus on things unrelated to dangerous driving, like equipment violations, and research shows that more enforcement does not necessarily reduce crashes.[52] Even when targeting dangerous driving, increased enforcement as a crash prevention strategy has mixed evidence, and effects tend not to last.[53]

A public health approach to traffic safety focuses on creating environments that lead to safe driving. To do so, this approach aims to shift the focus of safety efforts from identifying and punishing individual reckless behaviors to establishing and enhancing the systems that determine traffic safety, including how cars and human-made surroundings are built.

The evidence base on public health interventions to promote traffic safety is robust. In recent decades, thousands of communities in the United States have adopted systemic public health approaches to traffic safety.[54] Other countries have also adopted public health approaches such as reducing reliance on cars through accessible public transportation, lowering speed limits, and creating up-to-date vehicle safety standards.[55] The following evidence-based strategies have been shown to effectively prevent traffic crashes without reliance on punitive and often inequitable enforcement strategies.

5. Invest in equitable infrastructure to reduce traffic crashes.

Traffic safety is shaped by the design of human-made parts of our surroundings, including buildings, parks, streets, bridges, sidewalks, and roads. Making evidence-informed investments and changes to these features can have a dramatic positive impact on road safety by creating safe transit systems for all road users, rather than focusing on unsafe driver behavior after it happens.

To maximize improvements to both safety and equity, infrastructure improvement plans should prioritize neighborhoods most affected by systemic racism. Because of racist transportation policies and inequitable infrastructure investment, Black neighborhoods often have roads that are structurally less safe.[56] These neighborhoods often lack basic infrastructure needed for safe mobility, such as continuous sidewalks,[57] bike infrastructure,[58] adequate lighting,[59] functioning drainage systems,[60] or paved streets.[61] Black neighborhoods also lack adequate public transportation options: Black workers are three times as likely as White workers not to have a vehicle, and are overrepresented among workers with long commutes.[62]

Pedestrians are killed nearly three times as often in low-income neighborhoods than in high-income neighborhoods.[63] One recent study found that race is a significant predictor in crash risk for low-income areas. The authors hypothesize that this is because the built environment in neighborhoods with higher shares of non-White residents were designed with less regard for safety.[64] The Bipartisan Infrastructure Law of 2021 created several new grant opportunities for local communities to address the impact of historic transportation infrastructure policy on Black communities, including the Safe Streets and Roads for All and the Reconnecting Communities Pilot programs.[65]

Speeding was a contributing factor in 29% of traffic fatalities in 2020.[66] One effective way to reduce these is investing in "traffic calming" engineering measures, such as speed bumps[67] or raised crosswalks,[68] to slow down driving and make cars less likely to crash. Traffic calming engineering has been shown to result in fewer crashes, fewer deaths, and less severe injuries.[69] These strategies are also associated with increased levels of walking, bicycling, and transit use.[70]

Examples include:

- **Roundabouts.** Roundabouts encourage slowing down and yielding. Their circular design does not allow certain kinds of collisions, such as right-angle crashes, to take place. Research has shown that single-lane roundabouts reduce pedestrian crashes by 75%[71] and deadly crashes by 50% to 70%.[72]
- **Turning lanes.** Adding and improving turning lanes can also slow down driving. Multiple studies on turning lanes have demonstrated significant reductions in all types of crashes (ranging from 18% to 77%).[73]
- **Yellow light length.** Increasing the length of yellow lights has been shown to reduce drivers running red lights (by 36% to 50%).[74]
- **Increased signage.** For example, Seattle lowered its speed limits citywide and invested in more speed limit signs to notify drivers (without increased enforcement) and saw a 22% reduction in crashes.[75]

Any traffic calming engineering approach should include a combination of strategies that take into consideration the area being targeted and how drivers will respond to the change.

Other infrastructure strategies help reduce danger when dangerous driving situations, like sudden turns or braking, inevitably happen. For example, high-friction surface treatments on roads help prevent skidding or loss of control in these risky situations, and are particularly useful for roads with sharp curves or slopes that cannot be redesigned.[76]

Public health interventions have long identified built environments as one of the many socio-environmental factors—like the availability of housing and education—that contribute to the long-term health and well-being of community members. Investing in equitable infrastructure can promote both community wellness and traffic safety.

Complete Streets and Vision Zero as Holistic Approaches to Traffic Safety

In recent years, two frameworks—Complete Streets and Vision Zero—have promoted a holistic approach to traffic safety through systems design rather than regulating individual behavior alone. These approaches have been adopted by many U.S. cities; both rely on bringing together a diverse set of stakeholders, and champion many traffic calming measures described here.

Complete Streets is an approach to transportation networks that aims to deliver safe streets for all people who use them, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.[77] As of 2020, nearly 1,600 communities at the local, regional, and state levels had implemented Complete Streets policies. This process and approach to street design uses different elements in each project (such as sidewalks, bike lanes, and crosswalks) to achieve a connected network that is safe and effective for all modes of travel. A distinguishing feature of Complete Streets is a focus on equity, emphasizing the needs of communities with the least investment and fewest services, and those with unmet transportation needs. The approach also emphasizes street design that places safety above all else, especially speed. Complete Streets initiatives have been shown to reduce pedestrian, bicycle, and car crashes; reduce speeding; and increase transportation access.[78]

Vision Zero is a transportation approach developed in the 1990s to eliminate deaths and injury in Sweden. More than 45 communities in the United States have been recognized as part of this network.[79] Vision Zero's strategy, also known as a Safe System approach, aims to shift the responsibility of safety from people using roads to those who are designing them, with the ultimate goal of zero traffic deaths and severe injuries and increased safe, healthy, equitable mobility for all.[80] Vision Zero programs may include many elements, but have historically emphasized an increase in traffic enforcement. This has prompted criticism from racial justice advocates who are concerned about Vision Zero's potential to perpetuate the harms of traffic enforcement.[81] Vision Zero advocates and practitioners have recently been calling for reconsideration of this approach, instead focusing on minimizing the need for enforcement and centering equity as a key component of improving traffic safety.[82]

6. Expand access to new safety technology to reduce traffic crashes.

By preventing dangerous driving before it happens, technology has a significant impact on road safety. All drivers should have access to and be able to afford new road safety technology that effectively prevents crashes. Drivers should also know that any new or existing technology has been thoroughly tested for accuracy, and that safeguards are in place to protect their privacy. Such systems should not collect any data that is not necessary to operate the system, nor should the data be stored any longer than necessary.

Technology in cars can prevent crashes by notifying drivers about dangerous situations. Such advanced driver assistance systems are effective when used properly—when drivers keep the alerts enabled and respond to them.

- **Rearview camera systems** are effective at reducing crashes,[83] and those that go beyond standard regulation requirements and automatically brake the car from backing into an object are even more effective: Cars with both rear vision cameras and parking sensors reduced crash rates by 42%, but when automatic braking was included, those rates were reduced by 78%.[84]

- **Front crash prevention systems** use alerts to notify drivers when a car is too close to an object in front of it, and will sometimes use low-speed automatic braking if the driver does not respond.[85] Cars with front-end warnings alone had rear-end crashes reduced by 27%, compared to 50% for cars with both warnings and automatic brakes.[86]
- **Lane departure warning and prevention systems** track a car's position on the road and use visual, audio, or sensory/vibration alerts if a car strays outside its lane. Some advanced systems can direct the car back into the lane through minor steering adjustments or braking. Lane departure systems have been shown to reduce the rates of sideswipes and head-on collisions.[87]
- **Blind spot warning systems** show a visual alert in the side mirror if an approaching vehicle is in a blind spot, and make an audible alert to warn of a potential collision. Blind spot detection is offered as a standard feature on some new cars,[88] and has led to lower insurance claims for vehicle damages[89] and reduced lane-change collisions by 14 percent.[90]
- **Intelligent speed assistance (ISA) systems** provide information to the driver about the car's speed relative to the posted speed limit, which is detected via GPS or cameras that detect relevant signs. Some ISA systems simply provide alerts, while others introduce resistance to gas pedals or limit gas flow to engines to restrict the ability to speed. ISA has been shown to significantly reduce speeding.[91]

Most of these advanced driver assistance technologies are optional features for manufacturers rather than required. The Bipartisan Infrastructure Law mandated that all new passenger cars and large trucks be equipped with some of this technology: forward collision warning and automatic emergency braking systems, as well as lane-departure warning and prevention systems.[92]

Even though such technology is offered on some new vehicles, it can be prohibitively expensive for drivers to upgrade older cars or trucks to include these features. Policymakers could help incentivize the adoption of these and future technologies by helping with cost and consumer awareness. For example, they could offer rebates for both new and used vehicles purchased with advanced driver assistance technology, similar to what some states[93] or the federal government[94] have offered to encourage transitioning to electric or fuel-efficient vehicles. And the National Transportation Safety Board has called for regulators to improve consumer awareness about all available collision-avoidance systems.[95]

ALL DRIVERS SHOULD HAVE ACCESS TO AND BE ABLE TO AFFORD NEW ROAD SAFETY TECHNOLOGY THAT EFFECTIVELY PREVENTS CRASHES

Other road safety technology targets the estimated one-third of traffic-related deaths in the United States related to intoxicated drivers.[96] Alcohol ignition interlock programs are used to monitor people who have been convicted of driving while intoxicated, with the aim of preventing that behavior in the future. The programs require drivers to have a device installed in their cars that uses a breathalyzer test to register blood alcohol content results below the legal limit in order to start the engine. When this ignition interlock device is installed, these programs have been shown to reduce repeat offenses of people arrested for alcohol-impaired driving by about 70%.[97]

Although every state has an interlock program in place, only about 20% of people arrested for alcohol impared driving have interlocks installed.[98] These programs are not always affordable or accessible, creating barriers to program effectiveness: People who cannot afford the devices may choose to drive unlicensed or not drive. One reason for program unaffordability is the fees associated with the monthly maintenance needed to ensure that devices are properly working.[99] A *New York Times* investigation on the reliability of police breathalyzer tests found that state courts had thrown out more than 30,000 flawed tests in a one-year period.[100] Interlock devices use cheaper technology than standard police tests, and can also produce false results. Because some programs require testing after the engine is on, using the device may lead to distracted driving.[101] To address affordability barriers, some states have programs to help people pay for the devices, but drivers in the states where funding is available may be unaware of that option.[102]

Emerging impaired driving prevention technology aims to build alcohol detection technology into all new cars rather than adding a separate device to designated cars. Driver Alcohol Detection System for Safety (DADSS) is a program researching the possibility of developing technology to prevent cars from being driven by drivers displaying signs of intoxication.[103] The program's exploratory research has found that non-invasive touch-based and breath-based sensors are effective, and is now focusing on how to deploy these technologies more broadly.[104] The Bipartisan Infrastructure Law mandated that the National Highway Traffic Safety Administration should evaluate such options and set the standard for incorporating this technology into all new vehicles by 2024.[105] Impaired driving prevention technology has potential to improve traffic safety, especially if it is made affordable. But some options raise accuracy and privacy concerns—for example, new technology that relies on automatic video analytics to detect intoxication.[106] Any required DADSS systems should operate only as a means to prevent drunk driving and not as tools to identify or prosecute people who drive under the influence.

38 States

DO NOT REQUIRE COURTS TO CONSIDER SOMEONE'S ABILITY TO PAY WHEN ASSIGNING FINES AND FEES

Limit Use of Fines and Fees

When police stop people for traffic violations, they frequently issue fines by giving out traffic tickets. Fines are intended to deter and punish people for traffic violations, and the amount is usually based on the seriousness of the offense. After a person has received a traffic fine, they may also be assessed fees, which are automatically issued at different stages of processing a traffic-related offense. Fees can be issued, for example, if a person contests a ticket in court. Although punitive in their effect, the primary purpose of fees is to raise money for the government.[107]

Thirty-eight states do not require courts to consider someone's ability to pay when assigning fines and fees, and as a result, they are routinely unaffordable.[108] Unpaid legal debt erodes the traditional terms of citizenship, making rights and protections conditional for those who cannot or do not pay it off.[109]

Fines and fees work together to create systems that trap people who are unable to make an initial payment into cycles of punishment, criminal legal system involvement, debt, and bankruptcy.[110] For example, a single unpaid traffic ticket can lead to further fees, driver's license suspension, loss of voting rights, loss of employment, a lowered credit score, arrest, or incarceration.[111] These systems disproportionately burden low-income, Black, and Brown people. In several cities, low-income and predominantly Black and Brown communities experience higher rates of ticketing than White neighborhoods,[112] and Black people are more likely to face incarceration as a result of unpaid fines and fees.[113] These harms also contribute to toxic stress in Black and Brown communities, negatively impacting residents' health and quality of life.

Beyond the financial burdens and related harms that fall on individuals, the use of money from fines and fees creates economic incentives that undermine safety and justice. In some communities, revenue from traffic tickets is used to fund city government and police departments themselves.[114] After police killed Michael Brown in Missouri in 2014, protests brought nationwide attention to how the Ferguson Police Department had abused its system of fines and fees, routinely issuing unaffordable court debt as a strategy to pay for basic government functions. In 2013, Ferguson's municipal court issued 32,975 arrest warrants for minor offenses despite governing only 21,000 residents.[115]

Money collected from fines, fees, and property seized by law enforcement made up less than 1% of total state and local general revenue in 2019.[116] But in more than 730 municipalities nationwide, 10% of the local budget was generated from fines and fees,[117] and in 17 states, portions of speeding ticket revenues go to courts or law enforcement funds.[118] Reliance on fines and fees for a portion of revenue creates an incentive to issue tickets to meet quotas rather than focus on efforts to protect road safety. Research has shown that more traffic tickets are issued following a decline in revenue, suggesting that traffic tickets are used at least in part to generate money.[119] And because many people cannot afford the fines and fees charged, local governments can end up spending a significant portion of—or even more than—the original desired amount simply from chasing and punishing people for nonpayment.[120] Cities and states can take steps to undo the harmful cycles of debt and punishment created by excessive fines and fees, instead prioritizing and properly funding programs to address road safety issues.

RELIANCE ON FINES AND FEES FOR A PORTION OF REVENUE CREATES AN INCENTIVE TO ISSUE TICKETS RATHER THAN PROTECT ROAD SAFETY

7. End financial conflicts of interest in traffic enforcement.

No money collected from traffic fines should go to law enforcement agencies, police certification bodies, or basic government operating costs. Instead, all money collected through traffic fines should go toward investing in public health approaches to road safety or to nonessential programs that benefit community members, such as a scholarship fund. Use of traffic fees and civil asset forfeiture should be ended.

8. End debt-based driver's license suspensions for debt or failure to appear in court.

Although data are not complete, at least 11 million driver's licenses are suspended each year for court debt.[121] These suspensions often have nothing to do with a person's ability to drive, but happen for reasons such as falling behind on child support payments. Even in the case of fines originally related to traffic safety, driver's license suspensions routinely punish poverty. For example, a speeding ticket that is easily paid by some people may be impossible to afford for others, who ultimately lose their licenses not because of their driving practices but because of fees associated with the original ticket. Taking away the ability to drive legally forces people to choose between essential needs—such as travel to employment—or driving without a license, which can spur further debt and involvement in the criminal legal system.

Driver's license suspensions and the associated consequences disproportionately and overwhelmingly harm non-White people, who are more likely to be pulled over when driving. An analysis found that the driver's license suspension rate in New York State zip codes with high concentrations of non-White people was two to four times higher than zip codes with high concentrations of White people.[122] Similarly, driver's license suspension rates in California's predominantly Black and Latinx neighborhoods are as high as five times the state average.[123] License suspensions are associated with loss of employment and income,[124] so their disproportionate impact on Black and Latinx communities already marginalized by systemic racism exacerbates the financial inequality at the root of many such suspensions.

Driver's license suspensions for court debt also work against public safety: An estimated 75% of drivers with suspended licenses continue to drive, meaning that law enforcement resources are diverted to ticketing and even arresting drivers because of debt, rather than focusing on dangerous driving.[125]

Debt-based driver's license suspensions should be eliminated through changes to state law and local license restoration programs. Policymakers should repeal state laws that automatically suspend licenses for failing to pay a fine or appear in court for a traffic ticket. Lawmakers should also repeal any laws that suspend licenses for reasons not directly to traffic safety, such as for unpaid child support. Legislatures should invest in effective non-punitive ways to encourage court attendance instead of license suspensions, such as creating or improving reminder letters, calls, and texts.[126] Any legislative effort to repeal license suspensions should automatically clear existing suspensions and include efforts to notify and assist people of the change, to help the millions of drivers who are experiencing license loss from debt.

Many states have already begun such efforts, with positive results. Since 2017, at least 22 states passed legislation to limit debt-based driving restrictions.[127] The year after California ended driver's license suspensions for failure to pay, their collection rates increased, likely due to an increase in employment from valid driver's licenses as well as practices to help make fines affordable, such as ability-to-pay determinations.[128]

Local efforts can also drive change for people who have not yet become eligible for license restoration through legislation. For example, in North Carolina, the Durham Expunction and Restoration program (DEAR) has helped restore licenses for more than 11,000 drivers using a unique approach: The district attorney's office identifies collective categories of court debt to potentially erase—based on the underlying low-level traffic offense driving the debt—and then either dismisses the charge or asks the court to waive the fee.[129] This approach has the advantage of granting many people relief from debt and suspensions at once, rather than on a case-by-case basis. Like state level legislative reforms, local restoration initiatives should consider how to reach people who are eligible for or have received a license reinstatement, but who may not still live at the address on register for the license.

DRIVER'S LICENSE SUSPENSION RATES IN CALIFORNIA'S PREDOMINANTLY BLACK AND LATINX NEIGHBORHOODS ARE AS HIGH AS FIVE TIMES THE STATE AVERAGE

9. Address financial barriers to meeting equipment and paperwork requirements.

Imposing financial penalties on people who cannot afford required registration fees or equipment repairs deepens patterns of inequity and does nothing to improve road safety. Rather than relying on fines and fees to incentivize compliance with equipment and paperwork standards, state and local policymakers should instead explore opportunities to help people correct them. More data is needed on the efficacy of specific interventions, but many opportunities exist that support people to correct these problems. Policymakers should consider opportunities to reduce or eliminate unnecessary fines and fees through state legislation reform. For example, Michigan permanently ended driver responsibility fees, which could be issued for driving without a valid license or failing to produce proof of insurance. The reform also erased $637 million in current debt owed by 350,000 drivers for such fees.[130]

- **Vehicle registration reforms** can help people overcome barriers to proper registration of their cars. To minimize financial hurdles to registration, lawmakers could provide registration fee waivers based on income or car value, or require dealers to register vehicles instead of owners. They can also incentivize desired behavior by sending car owners reminder letters, emails, and texts about expired registrations.
- **Equipment violation reforms** can minimize the need for enforcement related to needed vehicle repairs or other equipment issues that may be unrelated to public safety. Lawmakers should repeal traffic code provisions that make equipment issues without a substantial connection to public safety illegal (such as objects dangling from a rearview mirror). They could also help people afford necessary equipment repairs by sending warning letters along with a voucher for headlight, taillight, brake light, or turn-signal light repairs redeemable at local auto repair centers.[131]
- Finally, lawmakers can enact **insurance reforms** by repealing laws making it illegal to fail to provide proof of insurance (a distinction from having insurance and proving it at a later point) and setting up programs to help provide low-cost insurance.

STATE AND LOCAL POLICYMAKERS SHOULD CONSIDER AUTOMATICALLY ADJUSTING TRAFFIC TICKET FINES BASED ON A PERSON'S INCOME

10. Adopt income-based repayment for traffic tickets.

Traffic courts should have the power to waive fines and fees entirely when a person cannot pay. States should also allow people to appear in traffic court virtually, and should allow them to request reduction of traffic ticket fines either in person or online. For example, California is piloting an online tool that lets people look up a traffic ticket and request a reduction in the amount owed, a payment plan, more time to pay, or the option of doing community service. As of January 2021, the tool had saved more than $4 million in reduced fines and fees for participants, 85% of whom reported incomes below the poverty line.[132] State and local policymakers should also consider the possibility of automatically adjusting traffic ticket fines based on a person's income, a practice—commonly known as "day fines"—used in many other countries and increasingly in the United States.[133]

Pilot Alternatives to Armed Enforcement

When someone is pulled over for a traffic violation, no matter how small, the responding police officer is almost always armed. Police training often portrays traffic stops as very dangerous, but evidence shows that they are not: The fatality rate for a police officer making a routine stop has been estimated to be one in 6.5 million.[134] The default of an armed response to a traffic stop coupled with the misguided perception among officers that such stops are inherently dangerous may contribute to the real danger of such stops for drivers, especially Black drivers.[135] The recent tragic deaths of Black drivers including Daunte Wright, Sandra Bland, and Philando Castile—all pulled over for minor traffic violations—have brought attention to the danger of armed police response to traffic stops and the urgency of changing this norm.[136]

Nonviolent violations of the law, such as a broken taillight, deserve a nonviolent response. Communities reconsidering the role of police in traffic stops are developing options for traffic enforcement that do not rely on armed responses. Some are exploring the possibility of using unarmed civilian traffic agents to respond to traffic violations rather than armed police. Most proposals for moving traffic enforcement away from police rely in part on automated traffic enforcement systems such as red light cameras or speeding cameras as an alternative. The following summarizes what we know about new civilian response programs and the evidence on automated traffic enforcement.

NONVIOLENT VIOLATIONS OF THE LAW, SUCH AS A BROKEN TAILLIGHT, DESERVE A NONVIOLENT RESPONSE

11. Pilot non-police alternatives for low-level traffic offenses that do not threaten road safety.

Several U.S. cities are exploring the possibility of transferring some or all traffic enforcement responsibility away from police to unarmed non-police traffic agents. These programs have the potential to reduce contacts between armed police and members of the public based on low-level traffic infractions that do not pose an immediate threat to road safety.

Non-police traffic response programs do not yet have an evidence base, and robust data collection and analysis will be crucial to ensuring that they have their intended effects on racial equity and public safety. Municipalities piloting civilian enforcement models should be mindful that civilian enforcement systems are also vulnerable to the effects of systemic and individual racism. For example, an analysis showed that among 11 states that changed cannabis possession from a criminal offense to a civil penalty, there were only modest effects on racial disparities in arrests of adults for cannabis possession and no effect on racial disparities in arrests of youth.[137] Other research has shown that in some jurisdictions, racial disparities increased following decriminalization.[138] Municipalities should use comprehensive data collection practices to carefully monitor whether civilian enforcement systems are reducing, replicating, or exacerbating racial disparities in traffic enforcement, particularly with respect to issuing fines and fees.

- **Berkeley, California.** In July 2020, the Berkeley City Council directed city staff to study how to enact a pilot program that would prohibit city police officers from conducting most traffic stops and instead train unarmed civilian officials to pull over drivers.[139] In its resolution, the council cited a policy report from the Center for Policing Equity finding that Black and Latinx drivers and pedestrians are stopped by Berkeley police officers at much higher rates than their White neighbors.[140] The pilot program would create a department of transportation ("BerkDOT") responsible for parking enforcement, school crossing-guard management, collision response, and most traffic enforcement.[141] Berkeley is also working to overcome a legal hurdle: Like some other states, California does not currently allow civilians to conduct traffic enforcement.[142]

- **Brooklyn Center, Minnesota.** In May 2021, the City Council of Brooklyn Center, Minnesota approved a resolution to create an unarmed civilian Traffic Enforcement Department that will be responsible for enforcing all nonmoving traffic violations.[143] The department will be part of a new Department for Community Safety and Violence Prevention responsible for overseeing all city agencies dealing with public safety issues, including the police department, the fire department, and a new team of unarmed mental health first responders.[144] Until the Traffic Enforcement Department is launched and operating, police officers enforcing nonmoving traffic infractions and non-felony offenses will be required to issue citations only; consent searches and custodial arrests will be prohibited for these low-level offenses.[145]
- **Washington, D.C.** In October 2019, the mayor of Washington, D.C. transferred control of the city's traffic cameras from the Metropolitan Police Department (MPD) to the District Department of Transportation (DDOT).[146] In April 2021, the District of Columbia Police Reform Commission proposed that the city council also transfer authority to enforce traffic violations "that do not imminently threaten public safety" from the MPD to the DDOT.[147]
- **New York City, New York.** New York City passed a bill in 2021 making the Department of Transportation, rather than the police department, the lead agency for investigating traffic crashes.[148]

Are automated traffic enforcement systems good alternatives to police enforcement?

Automated traffic enforcement (ATE) is not a new strategy: As of July 2021, communities in 22 states were using red light cameras and communities in 16 states were using speeding cameras.[149] In total, nearly 350 U.S. communities were using red-light cameras[150] and more than 150 communities used cameras to enforce speed laws.[151] Both kinds of cameras are illegal in several states.[152]

Automated traffic enforcement is controversial. Some legal scholars and advocates have argued that ATE should be used in place of traffic stops.[153] These scholars argue that equitably placed red-light cameras eliminate the possibility of racial profiling and prevent direct encounters between armed police and members of the public.[154] As T. J. Grayson and James Foreman Jr. argue in the *Washington Post*, "at least we know cameras don't demean, pepper spray, or kill."[155]

ATE programs pose serious due process and equity risks.

Automated traffic enforcement programs rely on traffic cameras that use license plate readers to issue tickets to owners of cars, regardless of whether they were the ones driving. These programs can create serious problems with respect to equity, due process, and community trust.[156] Weeks may pass before the owner receives a ticket in the mail, making it difficult for drivers to remember the incident and defend themselves.[157]

Studies have found that red light camera enforcement[158] and red light camera ticket debt[159] disproportionately burden Black drivers.[160] Law enforcement agencies—including those in sanctuary cities—have shared data captured by license plate readers with Immigration and Customs Enforcement to help them find undocumented people living in the United States.[161]

Red-light cameras are often administered by private contractors, who may take up to 50% of the revenue generated from enforcement. This creates a conflict of interest and may incentivize the placement of cameras for purposes of revenue collection regardless of safety benefit. In Illinois, a state senator was convicted of accepting hundreds of thousands of dollars in bribes from a red light camera company in exchange for advocating for expanded placement of traffic cameras in the state.[162] Technological errors are also a concern: In 2014, *Chicago Tribune* journalists found that red light cameras in Chicago incorrectly identified thousands of drivers over a seven-year period due to an unnoticed technological malfunction.[163]

Evidence does not support use of red light camera programs and they should end.

There is not substantial evidence of a safety benefit for red light cameras. Of the 36,096 traffic fatalities in 2019,[164] only 846, or 2.3%, involved red light running crashes.[165] Speeding, by contrast, was implicated in 9,478, or 26.3%, of traffic fatalities in 2019.[166] Some studies on the effectiveness of red light cameras have found that they increase red light crashes,[167] while others show decreases[168] or no significant effect.[169] Multiple studies have found that red light cameras reduce the risk of T-bone crashes, but increase the risk of rear-end crashes due to an increase in people slamming on their brakes to avoid a ticket.[170] Because T-bone crashes are more likely to cause injury than rear-end crashes are, the overall effect of red light cameras may be to reduce the number of crashes involving injuries.[171] Other studies have found no decrease in T-bone crashes at intersections with red light cameras.[172] The efficacy of red light cameras may depend in part on where they are placed. A 2017 *Chicago Tribune* report, for example, found that more than half of red light cameras approved by the Illinois Board of Transportation were placed at safe intersections that did not have red light crash problems.[173]

Speed cameras are more promising than red light cameras, but should be considered only in the context of a holistic, racial-justice-focused redesign of traffic enforcement.

Available evidence suggests that speed cameras reduce road traffic collisions.[174] A review of research showed that speeding cameras are consistently associated with fewer crashes resulting in death or serious injury, with most studies reporting reductions of 30% to 40%.[175]

As explained above, however, speed cameras also pose significant concerns related to racial equity and due process. Municipalities that use speeding cameras should carefully study their effects on racial equity, privacy, traffic safety, due process, and community trust. At a minimum, speed camera programs should do the following:

- place cameras only at locations with crash histories and with community consent;
- notify drivers of the presence of speed cameras using clearly visible signs;
- be operated by a non-police government agency rather than police or private contractors, to prevent conflicts of interest;
- have strong due process protections, including effective appeals processes and requirements that tickets be issued within a certain time frame;
- prohibit sharing of traffic camera data and license plate reader data with law enforcement or immigration officials; and
- have a scaled fine structure, with warning letters or a low fine for first-time offenses.

To maximize effectiveness of any speed camera system, speed limits should be set according to an evidence-based system that takes into consideration crash statistics and the safety of all road users, including pedestrians and bicyclists.[176]

KEY QUESTIONS TO ASK WHEN CONSIDERING SPEED CAMERAS

Racial Equity

- Are speed cameras placed disproportionately in Black and low-income communities?
- Do speeding tickets from cameras disproportionately burden Black and low-income communities?
- Has use of cameras been correlated with any decrease in the number of traffic stops conducted by police officers?
- Have cameras reduced or increased the number of speeding tickets issued?

Traffic Safety

- Are speed limits at (and not below) the level required for safety?
- Is the program reducing traffic collisions, injuries, and fatalities?
- Are all speeding cameras placed at locations with histories of injury crashes?
- Are speed limits set below the level required by safety?

Due Process and Integrity

- Can speed cameras be used without relying on private contractors that charge based on revenue collected?
- Are there adequate systems for drivers to challenge tickets?
- How often are camera systems audited for accuracy?

Community Trust

- Do residents of neighborhoods with speed cameras support their use?
- Do Black, Brown, and low-income communities support the use of cameras?
- Can cameras be administered by non-police government employees to prevent use of license plate reader data for investigative purposes?
- Are license plate reader data protected from being shared with external entities like ICE?

Improve Data Collection and Transparency

Data analysis is a powerful tool to help shed light on how traffic stops are affecting a community, including measuring racial disparity in enforcement. By pinpointing issues driving inequity and opportunities to redirect resources to better achieve public safety, data can help build evidence for future changes. Complete data on traffic stops are also key to ensuring that redesign efforts are effective because they provide valuable information on whether a new policy is achieving its intended goal of equity and safety.

Nationwide, approximately half of all states require any police data collection about traffic stops. Departments that do collect data do so in different ways: Some departments collect data with key information missing or in a way that makes useful information difficult to analyze. Other departments do not make their data public. Mandating the collection of comprehensive transparent data on traffic stops made by police or other agencies can provide communities and policymakers with information that can support the design of safe and equitable traffic safety systems.

12. Report all traffic stops and searches.

Every stop of a vehicle—whether made by a member of a police department or another agency—should be recorded. Stop records should be stored electronically in a spreadsheet or database format.

For vehicle stop data to be analyzed to answer questions about racial disparities in enforcement, the data must include key information about what happened. For example, accurate stop location data makes it possible to analyze enforcement at the neighborhood level. Analyzing the reasons for stops can help identify which ones are for violations related to safety, such as speeding, and which ones may be pretextual stops, such as equipment violations. In order to be used for detailed analysis, all stop records should include the following:

- the detailed location of the stop;
- demographic information about the stopped driver, including the person's perceived racial group, age, and gender;
- the reason for the stop;
- the outcome of the stop, such as citation or arrest; and
- whether any searches were conducted, including the outcome of the search, such as whether contraband was found.

A complete list of the information needed to collect meaningful stop data is available on CPE's Justice Navigator platform at justicenavigator.org/for-law-enforcement/collect-data. For more detailed guidance on traffic stop data, including how to address common technical limitations to data collection, see CPE's report *Collecting, Analyzing, and Responding to Stop Data: A Guidebook for Law Enforcement Agencies, Government, and Communities*.

COMPLETE DATA ON TRAFFIC STOPS ARE KEY TO ENSURING THAT REDESIGN EFFORTS ARE EFFECTIVE

13. Ensure that traffic stop data are linkable to calls for service data through a unique ID number.

Data on calls for service (such as 911 or 311 calls) allow analysts to measure community requests for public safety needs. Analysis of these data, along with stop data, can help communities understand what types of activity the police are being asked to do, what types of activities officers are initiating themselves, and how much of officers' time is spent on community requests versus officer-initiated activity. With this information, communities can make better-informed decisions about where they should invest their resources to maximize public safety.[177] To analyze stop data and calls for service data together, all data collection systems should make it possible to tell which stops are related to which calls for service. This can be accomplished either by using the same unique identifier (or number) to label the same specific incident, or if systems use different identifiers, including a column in the stop data set that shows the call-for-service incident number associated with each stop incident.

14. Create data quality assurance procedures to ensure that stop data are recorded completely and consistently.

When data are collected inconsistently, they are difficult to use to answer questions about traffic stops. For example, if officers do not consistently record demographic information and stop outcomes, the data will not reflect patterns in racial disparities in traffic enforcement that might be related to pretextual stops (such as revealing disproportionate stops of Black people that end in searches with no contraband found).

Police departments and other agencies conducting traffic stops should train all officers on collecting stop data. Training should include the intended uses for stop data, which information to collect, when to collect it, and how to enter data into the system. Supervisors should review records regularly, to make sure that officers are completing them properly. Departments should have clear procedures in place to audit data; some parts of the review process can be automated, such as having a computer system notify supervisors when officers have not submitted stop data forms by the end of their shifts. Any uncovered errors should be addressed immediately, including through retraining, policy changes, or disciplinary measures to prevent the same issue from recurring.[178]

POLICE DEPARTMENTS AND OTHER AGENCIES CONDUCTING TRAFFIC STOPS SHOULD TRAIN ALL OFFICERS ON COLLECTING STOP DATA

15. Document any strategic shifts or changes in traffic enforcement and analyze their effects on equity.

To uncover the most useful insights from stop data, police departments and city governments should clearly document the start dates of any strategic shifts or changes in traffic enforcement. These may include local policy changes such as a "click-it or ticket" seat belt enforcement initiative or a department order to deprioritize particular types of stops. Police departments and city governments should also record dates of special events (such as sports events or holidays) and seasonal changes (such as the start of a new school year) that may affect traffic enforcement needs or priorities. This information can help analysts better understand the factors that contribute to or detract from traffic enforcement patterns over time.

16. Collect data, including demographic data, to assess the impact of fines, fees, and related suspensions.

Fines, fees, and related driver's license suspensions are used widely by local governments, but information about how they are used and whom they affect is scarce. A recent report found that 27 states could not provide an estimate of the amount of traffic court debt owed to governments.[179] And states do not consistently track driver's license suspensions for court debt.[180] Accurate measurements of how fines and fees are used and their impacts can help policymakers take steps to end their harmful consequences. For example, knowing how much revenue is generated from fines and fees would help estimate how much revenue should be replaced to end any reliance on such fees. Local and state governments should collect and analyze data on the amounts of fines and fees issued, the amounts collected, and the racial demographics of the people who are charged. They should collect similar data on license suspensions, and include whether a suspension was for failure to pay or failure to appear in court.

Conclusion

The current crises of inequitable traffic crashes and enforcement demand a thorough re-examining of the systems that work together for road safety. The recommendations in this report provide many options for starting on a path to achieve a more just traffic safety system: one where all users of the road–including drivers, pedestrians, and cyclists–are safe from injury, harassment, and profiling.

Communities who want to redesign their traffic safety systems can begin with gathering key information that would shape and help prioritize which recommendations they implement. This could include pinpointing where crashes and traffic stops are occurring, and where infrastructure failures have happened as a result of disinvestment driven by systemic racism, like redlining policy. It could also mean examining which enforcement activities are contributing to traffic safety, and which might be driving inequity. This information can be used to answer questions such as: Where should communities prioritize investments in infrastructure to prevent crashes and the need for enforcement? Where are police responding to traffic issues where no response is needed? Where are police responding to traffic issues where an unarmed response could be effective? And what legal and other reforms are required to stem systemic drivers of traffic enforcement?

As community advocates, elected leaders, police departments, transportation officials, and other stakeholders grapple with these important questions, it is critical that they center, engage, and seek leadership from those most affected by disparities in their current systems. People directly impacted by existing systems have long known that feeling safe requires equal access to resources as well as equitable treatment. Their expertise is fundamental to redesigning a broader and more just vision of traffic safety.

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