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The Economic Consequences of Increased Motor Vehicle Theft Rates

Impact of Increased Insurance Claims On Households
and the Colorado Economy Resulting From Increased
Motor Vehicle Theft

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About the Authors



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2023 Owens – Early Criminal Justice Fellows



George Brauchler served as the elected District Attorney for the 18th Judicial District, Colorado's most populous district, which includes Arapahoe, Douglas, Elbert, and Lincoln counties, from 2013-2021. As a state prosecutor, he handled the felony cases from the Columbine High School mass shooting case, the Aurora Theater (Batman) mass shooting case, and more recently, the STEM Academy school mass shooting case.



Mitch Morrissey served as the elected District Attorney for the 2nd Judicial District covering Denver, Colorado from 2005-2017. Mitch is internationally recognized for his expertise in DNA technology and applying that technology to solve crimes. He has trained law enforcement officers and prosecutors throughout the United States, the Middle East, Central America, and Canada. He currently runs a company that solves Cold Cases with DNA and Investigative Genetic Genealogy.

ABOUT COMMON SENSE INSTITUTE

Common Sense Institute is a non-partisan research organization dedicated to the protection and promotion of Colorado's and Arizona's economies. CSI is at the forefront of important discussions concerning the future of free enterprise in Colorado and aims to have an impact on the issues that matter most to Coloradans and Arizonans. CSI's mission is to examine the fiscal impacts of policies, initiatives, and proposed laws so that Coloradans and Arizonans are educated and informed on issues impacting their lives. CSI employs rigorous research techniques and dynamic modeling to evaluate the potential impact of these measures on the Colorado and Arizona economies and individual opportunity.

TEAMS & FELLOWS STATEMENT

CSI is committed to independent, in-depth research that examines the impacts of policies, initiatives, and proposed laws so that Coloradans and Arizonans are educated and informed on issues impacting their lives. CSI's commitment to institutional independence is rooted in the individual independence of our researchers, economists, and fellows. At the core of CSI's mission is a belief in the power of the free enterprise system. Our work explores ideas that protect and promote jobs and the economy, and the CSI team and fellows take part in this pursuit with academic freedom. Our team's work is informed by data-driven research and evidence. The views and opinions of fellows do not reflect the institutional views of CSI. CSI operates independently of any political party and does not take positions.

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Introduction

In 2014, the Colorado legislature lowered the penalties for motor vehicle thefts and made the level of penalty dependent on the value of the vehicle stolen.¹ In 2014, Colorado was ranked 18th in the nation in motor vehicle thefts per 100,000 residents and the District of Columbia was 1st. By 2020 the motor vehicle theft rate in Colorado was the highest among all states, increasing 126% over 6 years. Colorado continued to lead the nation in motor vehicle thefts per resident in 2021 and 2022. In 2022, the motor vehicle theft rate reached an all-time high of 801.2 thefts per 100,000 residents. This is up 233% from the 2014 rate of 240.6 per 100,000 residents.

*The higher motor vehicle theft rate amounted to **46,568 vehicles** reported being stolen at an **estimated value of \$530M.***

The higher motor vehicle theft rate amounted to 46,568 vehicles reported being stolen at an estimated value of \$530M. While some vehicles are recovered, many are totaled, or have expensive damage covered by insurance companies. Insurance companies experiencing elevated claims related to motor vehicle theft respond by raising the cost of insurance for all drivers which increases costs for households and has economy wide repercussions. This report estimates the increased cost to households and the economic impact of increased motor vehicle insurance costs attributable to increased motor vehicle theft rates since 2014.

Key Findings

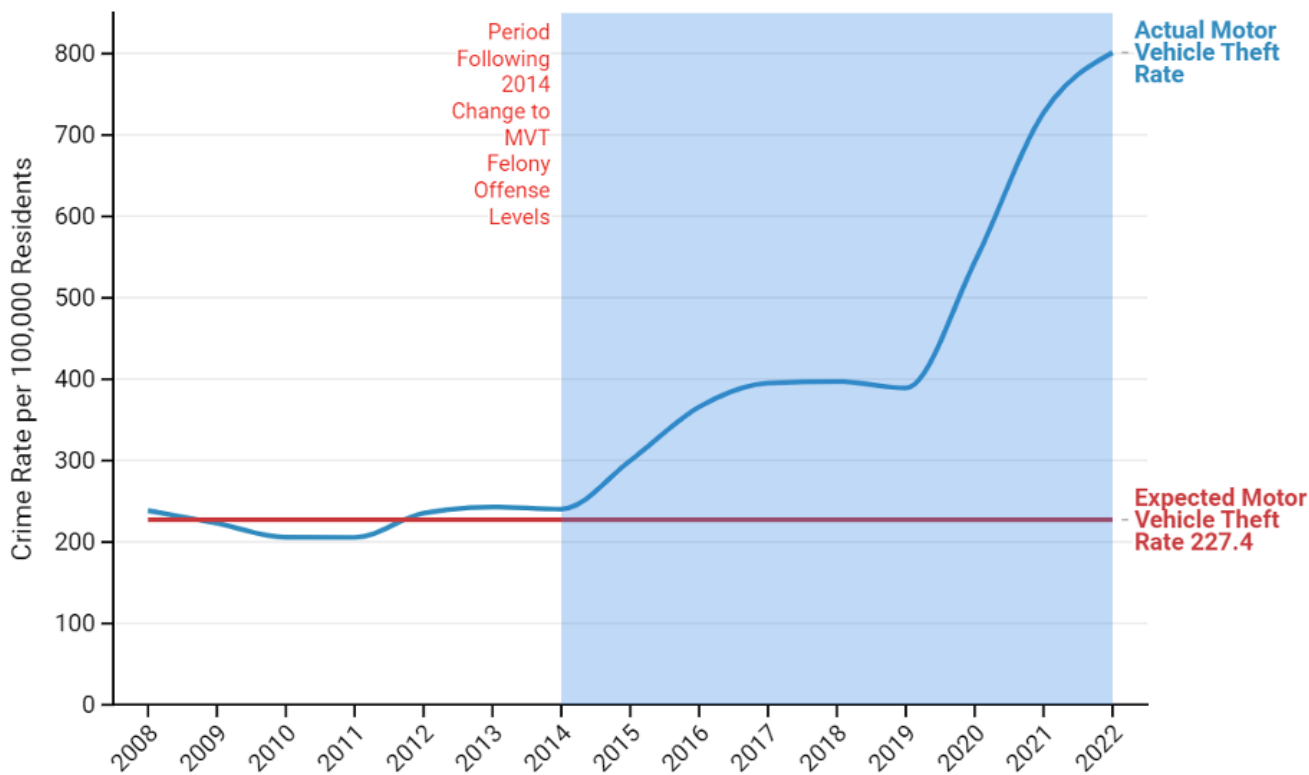
- **Since the passage of a 2014 law to reduce the penalties related to auto theft, the statewide average motor vehicle theft rate in Colorado has increased 233%. SB23-097, currently before the state legislature, proposes to revisit the reforms from nearly a decade ago, and increase the legal penalties surrounding motor vehicle theft.**
- **In 2022, the value of the 46,568 reported stolen motor vehicles in Colorado was \$530M, up 545% from \$82.1M in 2014.**
- **The financial and economic impacts of the increased motor vehicle theft rate in 2022 relative to 2014 include:**
 - **\$277M in increased motor vehicle insurance premiums. This amounted to \$239 per household for the year or \$19.93 per month.**
 - **1,530 fewer jobs statewide.**
 - **\$101M reduction in personal income.**
 - **\$158M reduction in state GDP.**
 - **0.11% increase in inflation.**

Motor Vehicle Related Crime Rates

See the following figure and **Table 1**, Motor vehicle theft crime rates began to increase dramatically in 2014. Much of the sudden increase in the crime rate beginning in 2014 and continuing through 2022 has been attributed to the increase in the motor vehicle theft rate. The crime rate for motor vehicle thefts reached an all-time high in 2022 at 801.2 thefts per 100,000. The average motor vehicle theft rate from 2008 to 2014 was 227.4 thefts per 100,000 residents. **The value of vehicles reported stolen in 2022 was \$529.5M, up 545% from \$82.1M in 2014.**

Motor Vehicle Theft Crime Rates

■ Actual Motor Vehicle Theft Rate ■ Expected Motor Vehicle Theft Rate 227.4



Source: Colorado Crime Stats

Table 1 – Motor Vehicle Related Crime Rates and Value of Stolen Vehicles

	2014	2015	2016	2017	2018	2019	2020	2021	2021
Motor Vehicle Theft	240.6	300.1	366.1	395.3	397.4	389.3	543.9	727.3	727.3
Value of Vehicles Stolen (in \$ Millions)	\$82.1	\$114.1	\$150.0	\$164.3	\$192.2	\$194.3	\$263.9	\$407.3	\$407.3

Value of Stolen Motor Vehicles and Increased Insurance Premiums Attributable to the Increase in Motor Vehicle Theft Rates

The value of motor vehicles stolen in 2022 was \$529.5M. The percentage of vehicles recovered based on value of recovered vehicles was 43 percent. Using this recovery percentage, the value of vehicles not recovered equals \$302M. There were 46,568 motor vehicles stolen in 2022. Of these, 60.8 percent were recovered, which equates to 28,313. About 1/3 of stolen vehicles or 9,340 recovered come back to their owners with \$1,000 worth of damage. One in three, 9,340 are estimated to come back beyond repair altogether and will be totaled.ⁱⁱ Summing up the value of vehicles not recovered with the value of vehicles recovered but totaled and total value of vehicles with \$1000 worth of damage gives a total loss due to stolen motor vehicles of \$386.4M

Table 2 shows the total value of losses and its components due to stolen motor vehicles for actual motor vehicle theft rates in 2022, expected based on 2014 motor vehicle theft rates, and those attributable to the increase in motor vehicle theft rates since 2014.

The value of losses attributable to the increase in motor vehicle theft rates since 2014 is \$379.4M. The increase in insurance claims is \$276.9M and the increase in household motor vehicle insurance is \$239.14 per year (\$19.93 per month).

Table 2 – Additional (Losses) of Insurance Claims for Stolen Motor Vehicles Attributable to the Increase in Motor Vehicle Theft Rates

	2022 Actual	2022 Expected Based on 2014 MVT Theft Rates	Attributable to Higher MVT Theft Rates Since 2014
Value of Vehicles Stolen	\$529.5M	\$150.1M	\$379.4M
Value of Vehicles Recovered	\$227.5M	\$64.5M	\$163M
Value of Vehicles not Recovered	\$301.9M	\$85.6M	\$216.3M
Cost of Recovered Vehicles that are Totaled	\$75.1M	\$21.3M	\$53.8M
Total Cost of Recovered Vehicles with \$1000 of Damage	\$9.3M	\$2.7M	\$6.7M
Total Loss (Increased Insurance Cost) Due to Stolen Motor Vehicles	\$386.4M	\$109.5M	\$276.9M
Total Loss (Increased Insurance Cost) per Registered Driver	\$87.6	\$24.8M	\$62.8M
Total Loss (Increased Insurance Cost) per Vehicle	\$258.2	\$73.2	\$185M
Total Loss (Increased Insurance Cost) per Household w/ Motor Vehicles (Based on 1.88 Vehicles per Household)	\$333.8	\$94.6	\$239.14
Total Increase in Household Monthly Motor Vehicle Insurance Premium	\$27.8	\$7.9	\$19.93

Economic Costs of Higher Motor Vehicle Insurance Attributable to Higher Motor Vehicle Theft Rates Since 2014

The impact of total losses of \$386.4M attributable to the increases in the motor vehicle theft rate since 2014 are modeled in REMI.ⁱⁱⁱ REMI is a dynamic model of the Colorado economy that is used to analyze the impact of policy. The assumption for modeling in REMI is that the costs of motor vehicle theft will be incurred by the insurance companies, and they will react by increasing motor vehicle insurance prices by an equal amount to cover the losses.

Table 3 shows the economic impact of actual motor vehicle theft rates in 2022, expected based on 2014 motor vehicle theft rates, and those attributable to increased motor vehicle theft rates since 2014. In 2022, the increase in motor vehicle thefts since 2014 lowered employment by 1,530, Colorado gross domestic product was lowered by \$158.4M, personal income was lower by \$101M, and inflation was higher by 0.11%.

Table 3 – Economic Impact of the Cost of Increased Motor Vehicle Theft Rates Since 2014

Category	2022 Actual	2022 Expected Based on 2014 MVT Theft Rates	Attributable to Higher MVT Theft Rates Since 2014
Total Loss Due to Motor Vehicle Theft	\$386.4M	\$109.4.3M	\$277.1M
Total Employment	-1,951	-421	-1,530
Gross Domestic Product	-\$221M	-\$62.6M	-\$158.4M
Personal Income	-\$141M	-\$40M	-\$101M
Disposable Personal Income	-\$120M	-\$34M	-\$86M
PCE-Price Index	0.16%	0.05%	0.11%

CONCLUSIONS

In 2022, the increased motor vehicle theft rate since 2014 resulted in lower employment by 1,530, Colorado gross domestic product was lower by \$158.4M, and personal income was lower by \$101M. The average household paid an additional \$19.93 per month for motor vehicle insurance, equivalent to \$239.14 per year.

The Colorado General Assembly has SB23-097 under consideration. The legislation would reverse the 2014 reduction in penalties. Specifically, SB23-097 would make penalties for motor vehicle theft no longer based on the value of the vehicle or vehicles stolen. Motor vehicle theft in the first-degree would-be a class 3 felony, motor vehicle theft in the second degree would be a class 4 felony, and motor vehicle theft in the third degree would be a class 5 felony.

REFERENCES

- i. Current law states vehicle theft is a class 3 felony if it's worth more than \$100,000; class 4 if more than \$20,000, but less than \$100,000; class 5 if \$20,000 or more; class 6 if \$2,000 or more, but less than \$20,000; and a class 1 misdemeanor if the value is less than \$2,000.

Prison sentences for class 3 to 5 felonies range from one to 12 years and penalties range from \$1,000 to \$750,000, according to the 2020 Colorado Crime Classification Guide.

- ii. <https://www.motorbiscuit.com/there-chance-car-back-stolen/>
- iii. <https://www.remi.com/>