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The Cost of Juvenile Crime and its Economic Impact on Colorado

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About the Authors



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2024 Public Safety Fellow

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About Common Sense Institute

Common Sense Institute is a non-partisan research organization dedicated to the protection and promotion of our economy. As a leading voice for free enterprise, CSI's mission is to examine the fiscal impacts of policies, laws, and to educate voters on issues that impact their lives.

CSI's founders were a concerned group of business and community leaders who observed that divisive partisanship was overwhelming policymaking and believed that sound economic analysis could help people make fact-based and common sense decisions.

CSI employs rigorous research techniques and dynamic modeling to evaluate the potential impact of these measures on the Colorado economy 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 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. CSI's 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. The CSI 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.

TABLE OF CONTENTS

About the Authors.....	1
About Common Sense Institute.....	2
Teams & Fellows Statement.....	2
The Impact on the Economy.....	5
Key Findings.....	6
Overview of the Juvenile Population in Colorado.....	7
Data on Juvenile Crime Rates.....	9
Juvenile Crime Rates in Colorado.....	12
Juvenile Crime Concentration by County.....	14
Number of Juvenile Crimes by County.....	16
The Cost of Juvenile Crime.....	17
Economic Impact of Crime.....	19
Incarcerated Population Becomes Zero.....	21
Cost of Crime Related to Quality of Life Decreases to Zero.....	22
Impact of Decreased Insurance Premium Related to Tangible Cost of Crime Becoming Zero.....	23
Economic Combined Impact of Zero Cost of Crime.....	24
Juvenile Arrests and the Colorado Division of Youth Services.....	25
Colorado Division of Youth Services Budgets.....	27
Concluding Remarks.....	28

FIGURES

Figure 1 – Juvenile and Adult Share of Colorado’s Population	7
Figure 2 – Age Distribution of Juvenile Population.....	8
Figure 3 – Female vs. Male Share of Juvenile Population ages 10 to 17	8
Figure 4 – Number of Reported Crimes (Under 18, 18 and over, and Total – all Offenders ages).....	9
Figure 5 – Share of Juvenile and Adult Crime Over Time 2010 - 2023.....	10
Figure 6 – All Delinquency Offenses by Sex (Nationally).....	11
Figure 7 – Juvenile Crime Rate –All Offenses	12
Figure 8 – Adult and Juvenile Crime Rates by Category of Crime	13
Figure 9 – County Juvenile Crime Concentration.....	15
Figure 10 – Number of Juvenile Crimes by County	16
Figure 11 – Cost of Juvenile Crime in 2022.....	18
Figure 12 – Employment Impact of Zero Prison Population	21
Figure 13 – Economic Impact of the Cost of Quality of Life Due to Zero Crime	22
Figure 14 – Employment Impact of a 25% Decrease of Insurance Premiums.....	23
Figure 15 – Total Employment Impact of Crime Decreasing to Zero.....	24
Figure 16 – Colorado Juvenile Arrests by Sex.....	25
Figure 17 – Average Daily Population Colorado Division of Youth Services	26
Figure 18 – Budget, FTEs, and Supervised Population in the Division of Youth Services.....	27

Cost of Juvenile Crime and Its Economic Impact on Colorado:

The Impact on the Economy

Few people in Colorado have not directly experienced crime. From property offenses to violent crimes, every crime leaves a traumatized victim. Whether the wounds are physical, psychological, or financial, it is important to acknowledge the profound effects that a crime can have on its victims. At Common Sense Institute, our goal is to address the economic impact of crime while remaining conscious of the suffering that it causes.

This report analyzes the cost of juvenile crime in Colorado and its economic impact. This study encompasses the period of 2010 to 2023 and the data comes from Colorado Crime Statistics (2023).

Colorado's juvenile crime trends tell a mixed story. On the one hand, youth crime rates have fallen in the last 15 years as property crime rates fall, follow. On the other hand, violent youth crime has risen. Meanwhile, the number of juveniles arrested and detained has fallen from a combination of alternative sentencing, diversion programs, and increased parole.

It is violent crime that costs more.

Juvenile crime results in direct or tangible costs including unrecovered stolen property, damaged property, victims' out-of-pocket medical expenses, the cost of police, courts and correctional institutions, and lost earnings by both victims and juvenile perpetrators who are arrested and convicted.

Juvenile crime also inflicts indirect or intangible costs like the pain and suffering of victims, reduced quality of life for everyone, and lower levels of investment and lower property values.¹ Intangible costs are difficult to measure with precision but, among those who have estimated them, there is a consensus that the intangible cost of juvenile crime far exceeds the tangible cost.

Reducing current rates of murder, rape, assault, theft, and robbery by juveniles would produce a wide range of savings and other benefits to families, individuals, property owners and taxpayers. All estimates of the cost of crime in this report are adjusted for inflation and are reported in 2020 dollars so that costs can be compared across years. In 2021, after an extraordinary rise in crime, CSI estimated a total cost of crime of \$3.3 billion.

Key Findings

- **The juvenile crime rate in Colorado was 29.7 % lower in 2022 than in 2008 (see Figure 8).**
- **Since 2010, juvenile crime rates have decreased overall but have increased for crimes against person: murder (210%), aggravated assault (17%), and robbery (12.3%).**
- **The total cost of police-reported juvenile crime is \$1.03 billion, and the total cost of all juvenile crime is \$3.31 billion (see the following graph).**
 - › **Tangible police-reported juvenile crime: \$333 million**
 - › **Tangible total juvenile crime: \$445 million**
 - › **Intangible police-reported juvenile crime: \$693.1 million**
 - › **Intangible total juvenile crime: \$2.86 billion**
- **The total cost of juvenile crime in 2023 was equivalent to \$566 per Coloradan.**
- **For every 1% decrease in the number of crimes committed by juveniles, the state adds:**
 - › **57 jobs**
 - › **\$6.5 million to GDP**
- **If the population of the Department of Youth Services (DYS) were set to zero (no one is sentenced to the DHS), total employment would fall by 183 jobs and GDP would fall by \$20 million.**
- **If juvenile crime were to decrease to zero, the economic impact of increased quality of life would add \$308 million to GDP and increase employment by 2,978.**
- **If insurance premiums were to decrease by 2.6% as a result of juvenile crime falling to zero, consumers would have \$113.8 billion more in their pockets to spend. It would also add 2,977 jobs and increase GDP by \$366 million.**
- **The total impact of zero crime would be an increase of 5,722 jobs and a \$654 million increase in GDP.**
- **The highest concentration of juvenile crime (share of juvenile crime/share of juvenile population) is highest in Adams County, followed by Fremont, Jefferson, Mesa, and Boulder.**
- **Adams , El Paso, Jefferson, and Denver Counties combined account for 58% of all juvenile crimes but only 44% of the state’s population.**
- **The number of supervised individuals by the Division of Youth Services has declined 70% since 2010.**

Overview of the Juvenile Population in Colorado

Figure 1 shows the share of the juvenile and adult population from 2010 to 2022 based on U.S. Census data. The share of the juvenile population has decreased from 24.4% in 2010 to 20.7% in 2022.

Figure 1 – Juvenile and Adult Share of Colorado's Population

Juvenile and Adult Share of Colorado's Population

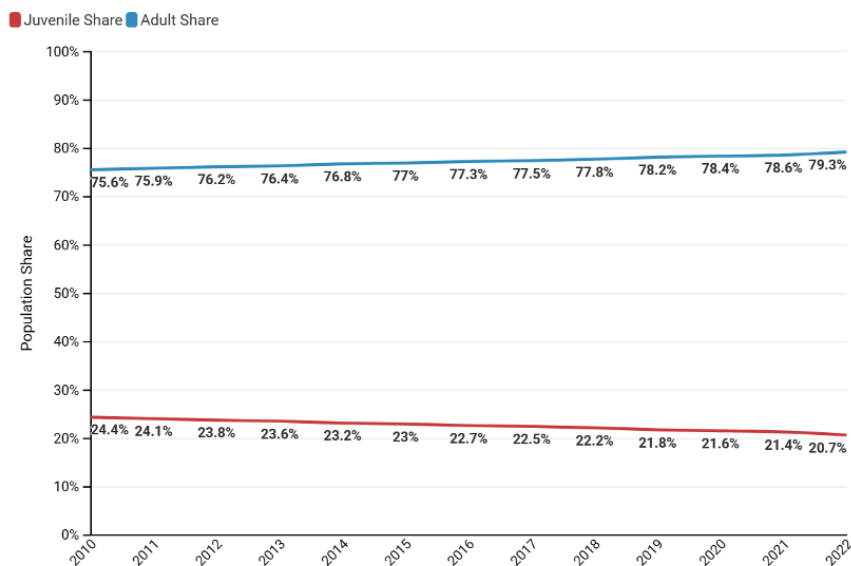


Figure 2 shows the age distribution of the juvenile population over time. The juvenile population for ages 0 to 9 has gone from 56.8% in 2010 to 52% in 2022 while ages 10 to 17 has increased from 43.2% in 2010 to 48% in 2022. The juvenile population ages 15 to 17 has increased from 16.5% to 18.2%.

Figure 2 – Age Distribution of Juvenile Population

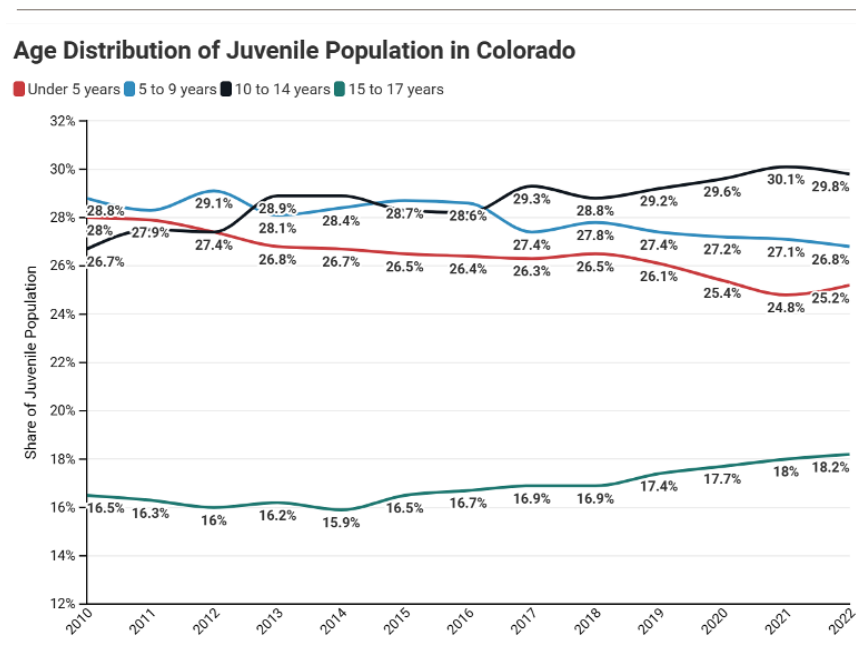
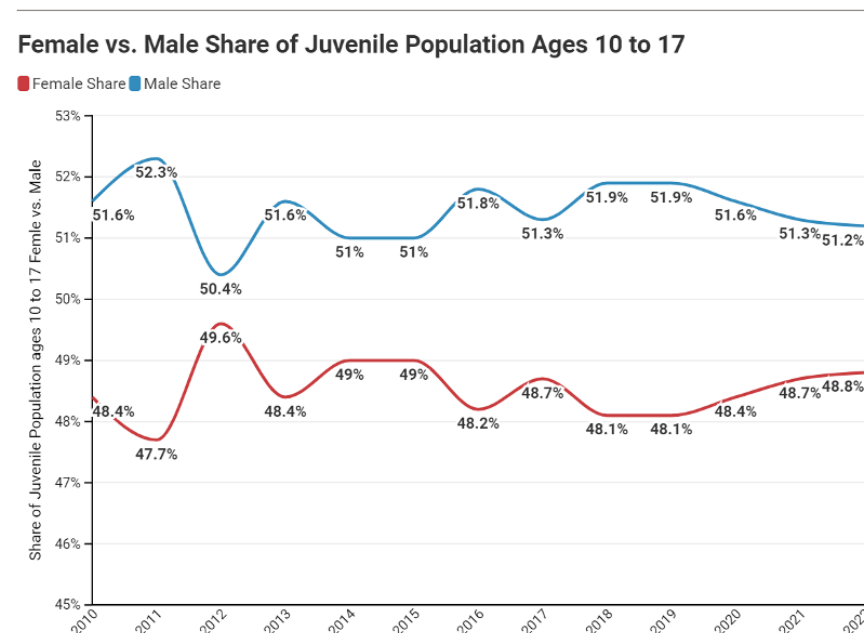


Figure 3 shows the share of male and female juveniles ages 10 to 17. The distributional share of females and males has shifted slightly since 2010, with a four percentage point decrease in the male share from 51.6% to 51.2% and a four percentage point increase in the female share from 48.4% to 48.8%.

Figure 3 – Female vs. Male Share of Juvenile Population ages 10 to 17



Data on Juvenile Crime Rates

Juvenile crime data for this report comes from the Colorado Bureau of Investigation.ⁱⁱ Estimates of the number of juvenile crimes are most likely underestimated by as much as 51% due to missing and unknown data related to the age of offenders. **Figure 4** shows the number of reported crimes for ages under 18 and 18 and over, as well as the total for all ages. Assuming that the remainder of reported crime, 186,510 was distributed between under 18 and 18 and over, there would be 37,670 crimes committed by under 18 and 327,993 by 18 and over, each 51% larger than the reported number of crimes for the two age groups. However, there is no evidence to support the assumption that the missing and unknown data is distributed in the same way as those under 18 and 18 and over reported crimes, therefore this report relies on the reported crimes by age.

Figure 4 – Number of Reported Crimes (Under 18, 18 and over, and Total – all Offenders ages)

NUMBER OF CRIMES 2023						
	Total -All Offender Ages	Under 18	18 and over	Sum of Under 18 and 18 and over	Remainder	Juvenile Share of Total Crime
As Reported	365,663	18,456	160,697	179,153	186,510	10.3%
Scaled up to Account for Missing and Unknown	365,663	37,670	327,993	365,663		
Difference between Reported and scaled up.		19,214	168,448			
Percentage Difference between Reported and scaled up.		51%	51%			

Figure 5 shows the share of adult and juvenile crime over the period 2010 through 2023. The share of adult crime has increased from 83.2% in 2010 to 90% in 2023, and similarly juvenile crime has decreased from 16.8% in 2010 to 10% in 2023. Some of this change in the share of crime committed is the result of the share of the juvenile population decreasing over time from 24.4% in 2010 to 20.7% in 2023. Another contributing factor could be that violent juvenile crimes are primarily committed by males and the share of male juveniles has declined slightly from 51.6% in 2010 to 51.2% in 2023.ⁱⁱⁱ Additionally, a study by the U.S. Department of Justice Office of Juvenile Justice and Delinquency Prevention shows that juvenile delinquency for both males and females have been in long term decline, see Figure 6.^{iv}

Figure 5 – Share of Juvenile and Adult Crime Over Time 2010 - 2023

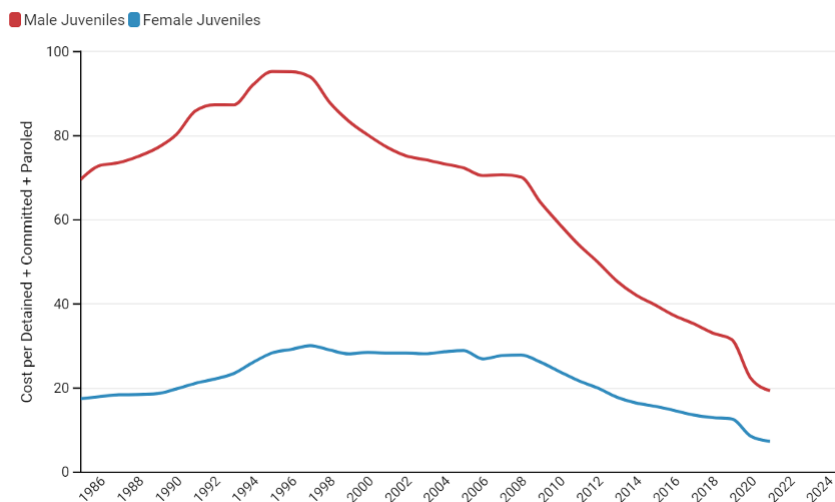
SHARE OF ADULT (OVER 18) AND JUVENILE (UNDER 18) CRIME, ALL OFFENSES 2010 TO 2023				
	Under 18 - All Offense Types	18 and Over - All Offense Types	Under 18 Share All Offense	18 and Over Share of Adjusted All Offense
2010	21,938	108,319	16.8%	83.2%
2011	21,124	113,292	15.7%	84.3%
2012	22,907	132,238	14.8%	85.2%
2013	21,946	129,136	14.5%	85.5%
2014	22,702	137,287	14.2%	85.8%
2015	22,383	148,463	13.1%	86.9%
2016	21,571	158,770	12.0%	88.0%
2017	21,674	165,137	11.6%	88.4%
2018	21,463	170,521	11.2%	88.8%
2019	21,307	171,882	11.0%	89.0%
2020	14,096	164,995	7.9%	92.1%
2021	15,404	168,102	8.4%	91.6%
2022	17,583	169,613	9.4%	90.6%
2023	18,465	161,109	10.0%	90.0%

Colorado is experiencing the same declines in juvenile crime as the nation. **Figure 6** shows the national delinquency offenses per 1,000 youth ages 10 and upper by sex. Nationally, for both males and females, the delinquency case rate increased from 1985 through the mid-1990s. For males, the rate increased 37% to reach a peak in 1995 then fell 80% by 2021. Comparatively, the female rate reached a peak in 1997, 72% above the 1985 rate. This increase was followed by a 76% decline between 1997 and 2021. Rates in 2021 for both males and females were at their lowest level since at least 1985.

The disparity between male and female delinquency case rates declined between 1985 and 2021. In 1985, the delinquency case rate for males was 4 times greater than the rate for females. By 2021, the male rate was 2.6 times the female rate (19.37 compared with 7.34).

Figure 6 – All Delinquency Offenses by Sex (Nationally)

All Delinquency Offenses (National) - Cases per 1,000 Youth Ages 10 and Upper by Sex



Source: U.S. Dept. of Justice (Office of Juvenile Justice and Delinquency Prevention)

Juvenile Crime Rates in Colorado

From 2010 through 2023 the juvenile crime rate (ages under 18) has steadily declined 29.7% overall while the adult crime rate (ages 18 and over) has increased 28.8%, see **Figure 7**.

Figure 7 – Juvenile Crime Rate –All Offenses

Crime Rate - All Offenses, Juvenile and Adult

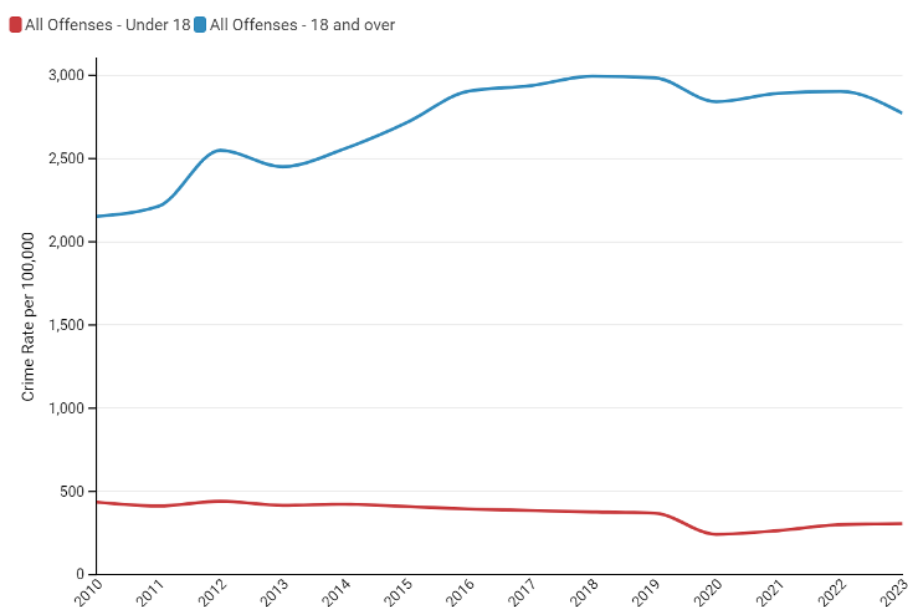


Figure 8 shows crimes rates for juveniles and adults. Since 2010, juvenile crime rates have decreased overall but have increased for crimes against person (16.6%), violent crime (7%), murder (210.4%), aggravated assault (17.1%), and robbery (12.3%). Juvenile crime decreased for crimes against property (-48.2%), crimes against society (-43%), and non-consensual sex offenses (-7.6%).

Figure 8 – Adult and Juvenile Crime Rates by Category of Crime

ADULT AND JUVENILE CRIME RATES			
	2010	2023	2010 – 2023
All Offenses - Under 18	436.1	306.5	-29.7%
All Offenses - 18 and over	2152.9	2772.0	28.8%
Crimes Against Person - Under 18	115.8	135.0	16.6%
Crimes Against Person - 18 and over	659.7	945.4	43.3%
Crimes Against Property - Under 18	210.6	109.1	-48.2%
Crimes Against Property - 18 and over	1002.3	1265.0	26.2%
Crimes Against Society - Under 18	109.6	62.4	-43.0%
Crimes Against Society - 18 and over	491.0	561.6	14.4%
Violent Crime - Under 18	48.7	52.1	7.0%
Violent Crime - 18 and over	261.4	361.7	38.4%
Murder - Under 18	0.2	0.5	210.4%
Murder - 18 and over	1.6	4.1	150.0%
Aggravated Assault - Under 18	22.9	26.8	171%
Aggravated Assault - 18 and over	151.2	254.3	68.3%
Non-consensual Sex Offenses - Under	20.1	18.5	-7.6%
Non-consensual Sex Offenses - 18 and	66.8	62.6	-6.2%
Robbery - Under 18	5.6	6.3	12.3%
Robbery - 18 and over	41.8	40.7	-2.7%

Juvenile Crime Concentration by County

Crime concentration is calculated as a county's share of total crime in Colorado divided by that county's share of juvenile population. Colorado's juvenile crime concentration is 1 because 100% of the juvenile crime takes place in Colorado and the state has 100% of the state's juvenile population.

Figure 9 shows the juvenile crime concentration for each of Colorado's 64 counties for total crime.

Adams County has the state's highest juvenile crime concentration at 2.12. El Paso County has the largest share of the juvenile population, but the juvenile crime concentration is below the state average at 0.95. Arapahoe County has the state's second largest share of juvenile population but has a crime concentration of 0.35. Juvenile crime is concentrated in nine counties. Only nine counties have a juvenile crime population higher than the state average, Adams, Fremont, Jefferson, Mesa, Boulder, Archuleta, Alamosa, Weld, and Larimer.

Fifty percent of the juvenile crime concentration occurs in 15 counties, Adams, Fremont, Jefferson, Mesa, Boulder, Archuleta, Alamosa, Weld, Larimer, Gunnison, Routt, El Paso, Denver, Denver, Crowley, and Douglas counties.

Figure 9 – County Juvenile Crime Concentration

Juvenile Crime Concentration by County							
County	Share of Under 18 Years	Share of Juvenile Crime	Juvenile Crime	County	Share of Under 18 Years	Share of Juvenile Crime	Juvenile Crime
Adams	10.72%	22.76%	2.12	Morgan	0.61%	0.31%	0.52
Fremont	0.64%	1.04%	1.63	Huerfano	0.09%	0.04%	0.49
Jefferson	8.90%	12.25%	1.38	La Plata	0.82%	0.33%	0.40
Mesa	2.64%	3.49%	1.32	Pitkin	0.22%	0.09%	0.39
Boulder	4.80%	5.55%	1.16	Grand	0.22%	0.08%	0.37
Archuleta	0.19%	0.21%	1.10	Prowers	0.25%	0.09%	0.37
Alamosa	0.32%	0.35%	1.10	Arapahoe	12.06%	4.23%	0.35
Weld	6.86%	6.91%	1.01	Las Animas	0.21%	0.07%	0.33
Larimer	5.45%	5.47%	1.00	Eagle	0.93%	0.30%	0.32
Gunnison	0.22%	0.21%	0.98	Rio Blanco	0.13%	0.04%	0.30
Routt	0.35%	0.34%	0.95	Chaffee	0.24%	0.06%	0.25
El Paso	13.84%	13.10%	0.95	Clear Creek	0.09%	0.02%	0.24
Denver	10.71%	9.47%	0.88	Custer	0.07%	0.02%	0.24
Crowley	0.07%	0.06%	0.88	Kiowa	0.03%	0.01%	0.21
Douglas	7.10%	6.20%	0.87	Park	0.21%	0.04%	0.21
Montezuma	0.44%	0.37%	0.83	San Miguel	0.11%	0.02%	0.20
Dolores	0.03%	0.02%	0.80	Elbert	0.45%	0.08%	0.17
Bent	0.08%	0.06%	0.79	Saguache	0.10%	0.02%	0.16
Pueblo	3.01%	2.28%	0.76	Yuma	0.21%	0.02%	0.10
Rio Grande	0.19%	0.15%	0.75	Baca	0.06%	0.01%	0.09
Garfield	1.22%	0.92%	0.75	Lincoln	0.08%	0.01%	0.07
Summit	0.40%	0.29%	0.73	Conejos	0.16%	0.01%	0.03
Logan	0.33%	0.23%	0.70	Cheyenne	0.03%	0.00%	0.00
Montrose	0.71%	0.50%	0.70	Costilla	0.05%	0.00%	0.00
Delta	0.49%	0.34%	0.68	Gilpin	0.08%	0.00%	0.00
Otero	0.35%	0.24%	0.68	Hinsdale	0.01%	0.00%	0.00
Broomfield	1.28%	0.80%	0.62	Jackson	0.02%	0.00%	0.00
Kit Carson	0.15%	0.09%	0.59	Mineral	0.01%	0.00%	0.00
Teller	0.33%	0.20%	0.58	Ouray	0.05%	0.00%	0.00
Washington	0.09%	0.05%	0.57	Phillips	0.09%	0.00%	0.00
Lake	0.10%	0.05%	0.54	San Juan	0.01%	0.00%	0.00
Moffat	0.27%	0.14%	0.52	Sedgwick	0.04%	0.00%	0.00

Number of Juvenile Crimes By County

Figure 10 – Number of Juvenile Crimes by County

NUMBER OF JUVENILE CRIMES IN 2023							
	No. of Juvenile Crimes		No. of Juvenile Crimes		No. of Juvenile Crimes		No. of Juvenile Crimes
Colorado	18,456	Alamosa	64	Grand	15	Baca	1
Adams	4,200	Delta	62	Elbert	14	Conejos	1
El Paso	2,417	Routt	62	Las Animas	13	Kiowa	1
Jefferson	2,261	La Plata	60	Bent	11	Lincoln	1
Denver	1,747	Morgan	58	Chaffee	11	Cheyenne	0
Weld	1,276	Eagle	55	Crowley	11	Costilla	0
Douglas	1,145	Summit	54	Lake	10	Gilpin	0
Boulder	1,025	Otero	44	Washington	9	Hinsdale	0
Larimer	1,009	Logan	43	Huerfano	8	Jackson	0
Arapahoe	781	Archuleta	39	Park	8	Mineral	0
Mesa	644	Gunnison	39	Rio Blanco	7	Ouray	0
Pueblo	421	Teller	36	Clear Creek	4	Phillips	0
Fremont	192	Rio Grande	27	Dolores	4	San Juan	0
Garfield	170	Moffat	26	San Miguel	4	Sedgwick	0
Broomfield	147	Prowers	17	Yuma	4		
Montrose	92	Kit Carson	16	Custer	3		
Montezuma	68	Pitkin	16	Saguache	3		

The Cost of Juvenile Crime

The inputs to the model are the number of crimes for the following categories of police-reported crime: murder, rape, sexual assault, robbery, assault, arson, burglary, larceny/theft, motor vehicle theft, fraud, buying stolen property, vandalism, prostitution/pandering, drug possession/sales, gambling violations, weapons violations, liquor law violations, drunkenness, disorderly conduct, vagrancy, and curfew/loitering violations. Statistics for these crime categories were obtained from Colorado Crime Statistics.^v

Many crimes go unreported to the police. This analysis accounts for this by inflating police-reported crime values based on national statistics on the ratio of unreported to reported crimes. The tangible cost of crime is the sum total of the following categories of cost: medical, mental health, lost productivity, property loss, public services related to crime, adjudication and sanctioning, and perpetrators' lost work. The intangible cost of crime is defined as costs related to quality-of-life losses. The total cost of crime is the sum total of tangible and intangible costs.

Figure 11 shows the costs of crime by category of police-reported crime and total crime. The tangible cost of police-reported juvenile crime is \$332.7 million, the intangible (quality of life) cost is \$693.1 million, and the total cost is \$1.03 billion. The tangible cost of all crime, which includes police-reported crime and non-police-reported juvenile crime, is \$445.4 million, the intangible cost is \$2.9 billion, and the total cost is \$3.3 billion (\$566 per Coloradan).

Figure 11 – Cost of Juvenile Crime in 2022

2023 Total Cost of Juvenile Crime in Colorado, (Millions of 2020 Dollars)										
PR = Police-reported	Medical	Mental Health	Productivity	Property Loss	Public Services *	Adjudication & Sanctioning	Perpetrator Work Loss	Subtotal: Tangible Costs	Quality of Life	Total Cost
Murder	\$0.38	\$0.40	\$51.50	\$0.01	\$5.86	\$1702	\$1.25	\$76.41	\$169.68	\$246.09
Rape	\$18.79	\$46.25	\$43.97	\$2.14	\$0.09	\$2.54	\$0.25	\$114.03	\$2,380.98	\$2,495.00
Rape (PR)	\$4.24	\$770	\$726	\$0.23	\$1.22	\$54.66	\$5.46	\$80.76	\$373.16	\$453.93
Other Sexual Assault (PR)	\$0.03	\$0.08	\$0.08	\$0.00	\$0.00	\$0.02	\$0.00	\$0.22	\$4.20	\$4.42
Robbery	\$0.96	\$0.12	\$1.82	\$1.01	\$0.60	\$8.81	\$0.89	\$14.21	\$8.08	\$22.29
Robbery (PR)	\$0.71	\$0.08	\$1.35	\$0.55	\$0.67	\$5.86	\$0.59	\$9.81	\$5.77	\$15.58
Assault	\$23.17	\$2.61	\$13.85	\$0.69	\$36.26	\$48.36	\$4.50	\$129.45	\$298.13	\$427.57
Assault (PR)	\$12.72	\$2.70	\$11.16	\$0.57	\$37.11	\$41.17	\$3.83	\$109.25	\$139.53	\$248.78
Arson	\$0.31	\$0.01	\$0.34	\$2.45	\$0.50	\$0.33	\$0.02	\$3.96	\$0.80	\$4.76
Burglary	\$0.00	\$0.00	\$0.06	\$5.48	\$0.93	\$2.87	\$0.87	\$10.22	\$0.00	\$10.22
Burglary (PR)	\$0.00	\$0.00	\$0.02	\$1.62	\$0.38	\$0.40	\$0.12	\$2.53	\$0.00	\$2.53
Larceny/Theft	\$0.00	\$0.00	\$0.35	\$13.44	\$3.71	\$37.66	\$0.80	\$55.95	\$0.00	\$55.95
Larceny/Theft (PR)	\$0.00	\$0.00	\$0.07	\$2.90	\$2.92	\$6.80	\$0.14	\$12.84	\$0.00	\$12.84
Motor Vehicle Theft	\$0.00	\$0.00	\$0.06	\$4.45	\$0.46	\$707	\$0.68	\$12.72	\$0.00	\$12.72
Motor Vehicle Theft (PR)	\$0.00	\$0.00	\$0.08	\$6.11	\$0.69	\$1.58	\$0.15	\$8.61	\$0.00	\$8.61
Fraud (TC)	\$0.00	\$0.00	\$0.00	\$0.01	\$0.00	\$0.00	\$0.00	\$0.01	\$0.00	\$0.01
Fraud (PR)	\$0.00	\$0.00	\$0.01	\$0.37	\$0.02	\$0.01	\$0.00	\$0.41	\$0.00	\$0.41
Buying Stolen Property	\$0.00	\$0.00	\$0.00	\$0.00	\$0.27	\$0.93	\$0.06	\$1.26	\$0.00	\$1.26
Vandalism	\$0.00	\$0.00	\$0.00	\$0.92	\$0.06	\$1.62	\$0.12	\$2.71	\$0.00	\$2.71
Prostitution/Pandering	\$0.00	\$0.00	\$0.00	\$0.00	\$0.02	\$0.06	\$0.01	\$0.09	\$0.00	\$0.09
Drug Possessions/Sales	\$0.00	\$0.00	\$0.00	\$0.00	\$11.02	\$7.86	\$0.76	\$19.65	\$0.00	\$19.65
Gambling Violations	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Weapons Carrying	\$0.00	\$0.00	\$0.00	\$0.00	\$0.07	\$2.35	\$0.23	\$2.65	\$0.00	\$2.65
Liquor Laws	\$0.00	\$0.00	\$0.00	\$0.00	\$0.06	\$0.96	\$0.09	\$1.11	\$0.00	\$1.11
Drunkenness	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Disorderly Conduct	\$0.00	\$0.00	\$0.00	\$0.00	\$0.01	\$0.18	\$0.02	\$0.21	\$0.00	\$0.21
Vagrancy	\$0.00	\$0.00	\$0.00	\$0.00	\$0.01	\$0.09	\$0.01	\$0.10	\$0.00	\$0.10
Curfew/Loitering (PR)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.01	\$0.09	\$0.01	\$0.10	\$0.00	\$0.10
All PR Crime	\$18.39	\$10.96	\$71.85	\$15.73	\$60.90	\$141.99	\$44.87	\$332.70	\$693.14	\$1,025.84
All Crime CO TC Crime	\$43.64	\$49.45	\$112.03	\$30.98	\$59.96	\$138.74	\$1,367.14	\$445.37	\$2,861.87	\$3,306.83

Economic Impact of Juvenile Crime

Although the cost of all Colorado juvenile crime in 2022 was \$3.31 billion, that amount does not describe the totality of crime's economic impact in the state. There is a large body of research concerning the connection between crime and the economy that has produced widely varying results.

Mincer (1981) showed that acquired abilities of individuals are the ones which have an impact on economic growth. Together with an increase in physical capital, they create the framework of the aggregate production function, and yield higher economic growth.^{vi}

An economy that attracts and maintains its human capital stock and encourages investment in physical capital (businesses, factories, infrastructure, universities and so on) will have higher economic growth if its crime rate is under control. High crime rates can discourage businesses and citizens, leading them to relocate to areas that they perceive are safer. This phenomenon has been demonstrated repeatedly here in the United States. Many crime-ridden city centers have deteriorating local economies. St. Louis, San Francisco, Portland (Oregon), and Seattle are prime examples.

For instance, as crime increased, since 2019, based on publicly available data on businesses filing changes of address with the U.S. Postal Service, 2,692 businesses in downtown Portland's have left the area's five zip codes.^{vii} In San Francisco, out of 203 retailers that were open in 2019, only 107 are still operating in the downtown area.^{viii}

The counterargument to the causality described in the previous paragraph is that a deteriorating economy and the loss of jobs causes crime to increase. Undoubtedly, this is true; there are many examples throughout the Rust Belt of factory closures gutting cities and causing crime to rise dramatically.

There is a statewide industry that manages crime including the criminal justice system, public defenders, the Division of Youth Services, and communities and businesses that provide services to the Department of Youth Services. In order to evaluate the benefits of reducing crime, it is necessary to look at the economic benefits that this industry provides to the economy. The difficulty of determining the net economic impact of reducing crime can best be illustrated by the following scenario. Hypothetically, it is assumed that resources are put into effect that reduce crime to zero and the population in the Division of Youth Services (incarceration and parole) becomes zero.

Some of the benefits of this are: 1) Former juvenile offenders are released and they re-enter the labor force and increase gross income in the economy. 2) The youth correctional facilities are closed, so the cost of maintenance and upkeep is reduced to zero and the facilities can be repurposed. 3) Government budgets targeting crime prevention and policing can be spent in other areas like infrastructure or education and/or taxes can be lowered.

Some of its detriments are: 1) disemployment of the police, Division of Youth Services personnel, parole officers, lawyers, district attorneys, bail bondsmen, etc., who may have to be retrained and educated or may never be gainfully employed again. 2) Closures of juvenile facilities currently serving as major employers in the community will cause a decrease in demand for services that support the operations and the workers who are employed at the facilities.

CSI regularly utilizes the REMI PI+ dynamic economic model to assess the economic impact of policy initiatives, changes to tax law, economic subsidies, and the like. It was used for this report to examine the impact of reducing crime to zero: the economic cost of the juvenile offender population vanishing alongside the economic benefits of restoring crime's \$2.86 billion of quality-of-life costs to the state and reducing insurance premiums by 2.6%. The impacts of these three components are presented separately and in combination

Incarcerated Population Becomes Zero

According to the Colorado Division of Juvenile Services there are 550 juveniles in total that are detained, committed, or on parole. In the REMI model, there is a policy variable called “Prison Population.” Changing this variable affects the stock of incarcerated people in state, federal, and local jails. Reducing Colorado’s juvenile offender population by 550 has the following economic impact: employment decreases by 183, GDP decreases by \$20 million, and personal income falls by \$25 million. The impact on individual industries is shown in Figure 12. The services sector experiences the largest decrease in jobs followed by state and local government, construction, and retail/wholesale trade.

Figure 12 – Employment Impact of Zero Prison Population

EMPLOYMENT IMPACT OF ZERO JUVENILE YOUTH SERVICES POPULATION	
Industry	Change in Jobs
All Industries	-183
Natural Resources	-1
Construction	-30
Manufacturing	-4
Retail and Wholesale	-24
Transportation and Public Utilities	-5
Services	-82
State and Local Government	-37

Cost of Crime Related to Quality of Life Decreases to Zero

The largest component of the total cost of juvenile crime is quality-of-life cost (totaling \$2.86 billion). In REMI, the policy variable “Non-pecuniary (Amenity) Aspects” represents a quality-of-life measure; an area with a positive amenity is considered to have a high quality of life rating relative to the nation. Quality of life refers to things like weather, air quality, crime rates, etc.— attractiveness of an area not explained by economic costs. An amenity increase perceived as a real compensation gain makes a region more attractive, so a greater number of economic migrants enter the region.

The economic impact of a \$2.86 billion increase in quality of life (because crime has vanished) results in an increase of 2,978 jobs and a \$308 million increase in GDP. **Figure 13** shows the employment impacts in the Denver metro region and the rest of Colorado by industry. The Denver metro area realizes 61% of the employment increase.

Figure 13 – Economic Impact of the Cost of Quality of Life Due to Zero Crime

EMPLOYMENT IMPACT OF INCREASE IN THE QUALITY OF LIFE DUE TO ZERO CRIME			
Industry	Denver Metro	Rest of Colorado	Statewide
All Industries	1,807	1,171	2,978
Natural Resources	11	6	17
Construction	264	189	453
Manufacturing	49	28	77
Retail and Wholesale	183	129	312
Transportation and Public Utilities	68	26	94
Services	882	469	1351

Economic Impact of Decreased Insurance Premiums Related to Tangible Cost of Crime Being Zero

The primary assumptions of CSI’s insurance premium modeling are that \$455.4 million of tangible crime is reported to the insurance industry and that insurance companies respond by increasing premiums by 2.6% of what they would be otherwise. There is support for these assumptions: the Colorado Department of Insurance reported that, from January 2019 to December 2022, homeowners insurance rates increased by 51.7% on average.^{ix} Health insurance premiums have increased by 19.56% from 2022 to 2023 according to a report by Value Penguin.^x Premiums would increase by \$113.8 billion to cover the submitted claims of about \$19.49 per Coloradan. If crime were to vanish, however, this would leave more in consumers’ pockets to spend. In this scenario, consumer spending is increased by \$113.8 billion and the price of insurance decreases by 2.6% which is 10.3% of the 25% increase. This was chosen because juvenile crime makes up 10.3% of total crime. The impact on employment is an increase of 2,977 , and the GDP impact is an increase of \$366 million. **Figure 14** shows the employment impact by industry and region.

Figure 14 – Employment Impact of a 25% Decrease of Insurance Premiums

EMPLOYMENT IMPACT OF A 25% DECREASE OF INSURANCE PREMIUMS			
Industry	Denver Metro	Rest of Colorado	Statewide
All Industries	2112	865	2,977
Natural Resources	10	6	16
Construction	342	170	512
Manufacturing	49	21	70
Retail and Wholesale	228	107	335
Transportation and Public Utilities	65	17	82
Services	1,322	491	1,813
State and Local Government	96	53	149

Economic Combined Impact of Zero Cost of Crime

Combining the three previous scenarios and modeling the impact of crime decreasing to zero produces the following results: Employment increases by 5,722 and GDP increases by \$654 million. **Figure 15** shows the employment impact by industry.

Figure 15 – Total Employment Impact of Crime Decreasing to Zero

COMBINED IMPACT OF CRIME DECREASING TO ZERO			
Industry	Denver Metro	Rest of Colorado	Statewide
All Industries	3,603	1,919	5,722
Natural Resources	20	12	32
Construction	596	339	935
Manufacturing	97	46	143
Retail and Wholesale	403	221	624
Transportation and Public Utilities	131	40	171
Services	1,850	911	2,761
State and Local Government	506	350	856

Juvenile Arrests and the Colorado Division of Youth Services

Figure 16 shows the number of juvenile arrests from 2010 through 2023. The number of arrests for female juveniles has fallen 38% since 2010. Arrests of male juveniles has dropped 49% since 2010. Overall, for all genders the number of arrests has declined 46% since 2010.

Figure 16 – Total Employment Impact of Crime Decreasing to Zero

ARRESTS – UNDER AGE 18							
	2010	2011	2012	2013	2014	2015	2016
All Genders	15,856	15,147	15,728	14,923	15,528	14,458	13,259
Female	4,803	4,556	4,643	4,460	4,945	4,488	4,286
Male	11,053	10,591	11,085	10,463	10,583	9,970	8,973

	2017	2018	2019	2020	2021	2022	2023
All Genders	12,625	11,938	11,721	6,319	6,254	7,755	8,578
Female	3,830	4,009	3,832	1,768	1,965	2,584	2,973
Male	8,795	7,929	7,889	4,551	4,289	5,171	5,605

With the decline in juvenile crime and the number of juvenile arrests, it is surprising to see the large decrease in the population of juveniles under the supervision of the Colorado Division of Youth Services. Figure 17 shows the average daily population of juveniles who are detained, committed residential, paroled, and the sum total.

Total detained are juveniles awaiting court ordered hearings, these have decreased 45% since 2010. Total committed residential are juvenile serving sentences, these have declined 75% since 2010. Total paroled youth are those juveniles on supervised parole, these have dropped 78% since 2010. Overall, the population of juveniles in the Division of Youth Services has fallen 70%.

According to the Division of Youth Services, “The shrinking juvenile justice population involves all aspects of the system, including but not limited to declining arrests, juvenile delinquency court filings, new probation intakes, as well as detention admissions and new commitments.”^{xi}

Juvenile detention populations – According to the Division of Youth Services, a significant factor in the decline of the detention population is the result of the passage of Senate Bill 19-108, which limits the use of detention to only those children who either pose a substantial risk of serious harm to others, or that are a flight risk from prosecution.

Juvenile commitments – Senate Bill 19-108 created the Juvenile Justice Reform Committee. The committee is tasked with developing assessment and screening tools for criminogenic risk and needs, mental health needs, and diversion program eligibility. The bill also required the adoption of an actuarial risk assessment and the implementation of a length of stay matrix and release guidelines for those under the custody of the Division of Youth Services. According to the Colorado Division of Criminal Justice, these changes, along with increased use of diversion programs and alternative sentencing options, will result in a reduction of detention and commitment populations.

Probation - In April of 2020 the Division of Youth Services responded to orders issued by the Governor giving the Division of Youth Services the authority to place youth on juvenile parole without approval from the Juvenile Parole Board. Per the Division of Youth Services, “An unprecedented number of youth were subsequently released from residential placement to parole.”

Figure 17 – Average Daily Population Colorado Division of Youth Services

AVERAGE DAILY POPULATION COLORADO DIVISION OF YOUTH SERVICES (Data Source :Division of Criminal Justice/ Office of Research and Statistics)				
	Total Detained	Total Committed Residential	Total Parole Youth	Total Detained + Committed + Parole
2010	345.4	1054.6	437.6	1837.6
2011	325.4	1005.6	385.5	1716.5
2012	308.4	875.2	360.3	1543.9
2013	295	807.5	284.8	1387.3
2014	288.2	757	243.4	1288.6
2015	274.9	711.6	241.6	1228.1
2016	254.8	645.4	238.3	1138.5
2017	265.4	647.3	210.1	1122.8
2018	257.8	602.4	214.5	1074.7
2019	239.4	492.3	205.2	936.9
2020	151.7	367.8	195	714.5
2021	158.1	296.9	112.8	567.8
2022	173.5	263.2	112.7	549.4
2023	190.2	263.8	98.5	552.5
% Change 2010 -2023	-44.9%	-75%	-77.5%	-69.9%

Colorado Division of Youth Services Budgets

CSI pulled budget data for the Colorado Division of Youth Services from reports to Joint Budget Committee Department of Human Services (Division of Child Welfare and Division of Youth Services) to determine the cost per supervised juvenile, either detained, committed, or paroled.

Figure 18 shows the fiscal year budgets beginning in 2010-11 through 2022-23. Over this period, the budgeted dollars are basically unchanged, but has decreased in real terms as measured in 2010 dollars by 27.8%. The number of full time employees has increased 16.3% while the number of supervised individuals (detained, committed or on parole) has decreased 70%. The estimated real budget per supervised individual has increased 141.6%.

Figure 18 – Budget, FTEs, and Supervised Population in the Division of Youth Services

BUDGET FOR THE DIVISION OF YOUTH SERVICES					
	Total Budget Division of Youth Services	Total Budget Division of Youth Services in 2010 Dollars	Total FTE's	Total Detained + Committed + Parole	Real Budget per Supervised Juvenile
FY 2010-11	\$ 134,678,334	\$ 134,678,334	998.4	1837.6	\$ 73,290
FY 2011-12	\$ 132,272,757	\$ 130,060,706	998.4	1716.5	\$ 75,771
FY 2012-13	\$ 117,611,031	\$ 112,266,342	937.8	1543.9	\$ 72,716
FY 2013-14	\$ 118,630,629	\$ 111,364,164	937.8	1387.3	\$ 80,274
FY 2014-15	\$ 108,023,178	\$ 99,851,012	944	1288.6	\$ 77,488
FY 2015-16	\$ 112,282,784	\$ 104,027,562	998.7	1228.1	\$ 84,706
FY 2016-17	\$ 118,359,331	\$ 108,316,926	1034.2	1138.5	\$ 95,140
FY 2017-18	\$ 128,250,160	\$ 114,494,294	1140.6	1122.8	\$ 101,972
FY 2018-19	\$ 133,331,303	\$ 116,523,648	1225.9	1074.7	\$ 108,424
FY 2019-20	\$ 142,236,199	\$ 122,483,940	1218.5	936.9	\$ 130,733
FY 2020-21	\$ 130,385,189	\$ 108,020,075	1161.1	714.5	\$ 151,183
FY 2021-22	\$ 132,069,218	\$ 101,715,606	1161.1	567.8	\$ 179,140
FY 2022-23	\$ 134,328,670	\$ 97,267,489	1161.1	549.4	\$ 177,043
% Change 2010-11 to 2022-23	-0.3%	-27.8%	16.3%	-70%	141.6%

Concluding Remarks

Despite the high collective value of the many businesses and services that comprise the industry dedicated to crime management in Colorado, the cost of crime as a whole is far greater. Determining the value of a total reduction in crime, though unrealistic, illustrates the enormous burden crime imposes on our economy and citizens. The goal of policymakers who want to see Colorado thrive should be to take immediate steps to further reduce juvenile crime. There are massive economic benefits to all Coloradans when crime is low. Policy, despite its intention to create a more humane criminal justice system, has instead adversely affected the quality of life enjoyed by the state's law-abiding majority. Victims should be prioritized, not juvenile perpetrators. It is time for legislators and leaders to act to reverse current trends, recognize the need to punish illegal behavior, and impose strong penalties on criminals at all levels of crime. Failure to do so will only cause Colorado to become a less attractive location for people and businesses.

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