Trends in At-Risk Behaviors of Youth in Washington

A Report to the Washington State Legislature

As Directed In RCW 70.190.050

January 1996

Steve Aos, Roxanne Lieb, and Robert Barnoski

Washington State Institute for Public Policy

The Evergreen State College
Seminar 3162, MS: TA-00
Olympia, Washington 98505
(360) 866-6000, ext. 6380
Fax (360) 866-6825

Washington State Institute for Public Policy

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The Washington Legislature created the Washington State Institute for Public Policy in 1983. A Board of Directors—representing the Legislature, the governor, and public universities—governs the Institute, hires the director, and guides the development of all activities.

The Institute's mission is to carry out practical research, at legislative direction, on issues of importance to Washington State. The Institute conducts research activities using its own policy analysts, academic specialists from universities, and consultants. New activities grow out of requests from the Washington Legislature and executive branch agencies, often directed through legislation. Institute staff work closely with legislators, as well as legislative, executive, and state agency staff to define and conduct research on appropriate state public policy topics.

Current assignments include projects in criminal justice, youth violence, social services, K-12 education, and state government organization.

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EXECUTIVE SUMMARY

The 1994 Washington Legislature passed Engrossed Second Substitute House Bill 2319, a wide-ranging Act whose purposes are to achieve measurable, cost-effective, reductions in criminal violence and other "at-risk" behaviors of youth. The Act adopted a number of policies designed to reduce eight specific behaviors or outcomes:

1. Violent criminal acts
2. Teen substance abuse
3. Teen pregnancy and male parentage
4. Teen suicide attempts
5. Dropping out of school
6. Child abuse or neglect
7. Domestic violence
8. State-funded out-of-home placements

The Legislature directed the Washington State Institute for Public Policy to evaluate whether these policies achieve a measurable reduction in violence and the rate of at-risk youth in Washington. This report highlights the "big picture" trends in six of the eight at-risk behaviors identified by the Legislature.[1] These data help establish part of the **long-run, baseline information** necessary to assess statewide progress in achieving the goals of the Act.

This report does **not** evaluate whether the Act's policies are achieving its goals—it is too early to make that assessment. Rather, the information provides a long-term perspective on the at-risk behaviors identified in the Act. Data in this report are current through 1994, the latest year data are available. The Institute will update this information as 1995 data are released.

Findings

The juvenile population in Washington is growing rapidly in the 1990s. After declining during the last two decades, the 10- to 17-year-old population has grown by 105,000—or 20 percent—in the first half of the 1990s. It is expected to increase by another 75,000 by the turn of the century. This fact alone will mean a larger volume of at-risk behaviors of youth compared to earlier years.

This report, however, focuses on the rate at which juveniles today—versus those in previous years—are involved in at-risk behaviors. Data show that the rates of some of the problem behaviors have worsened, some have improved, and some have changed little.

These two factors—the growth in the number of juveniles and the rate at which some problem behaviors have worsened and some have improved—combine to determine the total magnitude of the juvenile at-risk behaviors facing Washington State.

The following page summarizes the more detailed statistics presented in the report.

Summary of Trends in Rates of At-Risk Behaviors in Washington

Criminal Violence: *Increasing for Juveniles, Stabilizing for Adults*

- The rate of juvenile violence in Washington increased substantially over the last decade. From 1983 to 1994, the arrest rate of youth for violent offenses increased 165 percent. In 1983, there were 1.9 arrests per thousand 10- to 17-year-old juveniles. That rate increased to 5.2 arrests for violent offenses for every thousand youths in 1994.
- The rate of adult criminal violence also increased, but at a slower rate. For adults, the violence arrest rate increased by 42 percent between 1983 and 1994. There were 1.9 arrests for every thousand adults in 1983 and 2.7 arrests for violent offenses in 1994.
- Unlike the rising rate of juvenile *violence*, the rate at which juveniles were arrested for *property* offenses (burglary, theft) has not increased since 1983.

Teen Substance Abuse: *Decreasing or No Clear Long-Run Trend*

- The juvenile arrest rate for *liquor law* violations and for *driving under the influence* violations declined, respectively, 30 and 38 percent between 1983 and 1994.
- No clear long-run trend appears in the juvenile arrest rate for *drug law* violations. The arrest rate in 1993 was about the same as it was ten years earlier in 1983. The rate for 1994, however, increased and was 43 percent higher than the level in 1983.

Teen Birth Rates: *Stable; Unmarried Percentage Increasing*

- For 15- to 17-year-old females in Washington, the birthrate in 1994 was about the same as it was 35 years earlier in 1960. There were 32 births per thousand females 15- to 17-years old in 1960, and 30 births per thousand in 1994. The lowest birthrate for this group occurred in 1984 at 23 births per thousand. From 1992 to 1994, the birthrate dropped 10 percent.
- The major demographic shift has been a sharp increase in the percentage of births to unmarried women. In 1960, 18 percent of 15- to 17-year-old females giving birth were unmarried; by 1994, 87 percent of females in this age group were unmarried when giving birth.

Teen Suicides: *Stable*

- In 1994, 61 teen-age deaths were recorded as suicides—about one every six days. The average number of teen suicides has leveled off in the last decade. The number of teen suicides averaged 46 per year during the 1980s and 47 per year from 1990 to 1994.

Dropping Out of School: *Stable*

- About 20 to 25 percent of 17- and 18-year olds fail to complete their high school education in their teen years. That percentage has changed very little in the last 35 years, after falling steadily from 1920 to 1960.

Domestic Violence: *Increasing*

- From 1985 to 1994, the arrest rate for domestic violence incidents increased 140 percent. This trend could be measuring an increased likelihood of people to report offenses or an actual increase in the prevalence of domestic violence itself—or some combination of the two.

Trends in At-Risk Behaviors of Youth in Washington

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INTRODUCTION

BACKGROUND

The 1994 Washington Legislature passed Engrossed Second Substitute House Bill 2319, a wide-ranging Act intended to achieve measurable reductions in criminal violence and other "at-risk" behaviors of youth, and to reduce the fiscal and social impact of violence.[2] The Act identified the following eight behaviors or outcomes to be reduced:

1 Violent criminal acts
2 Teen substance abuse,
3 Teen pregnancy and male parentage
4 Teen suicide attempts
5 Dropping out of school
6 Child abuse or neglect
7 Domestic violence
8 State-funded out-of-home placements of youth

To accomplish these reductions, the Legislature adopted three broad policy approaches:

1. The Act expanded the category of **juveniles subject to adult prosecution**, increased certain **criminal penalties**, and changed other policies concerning **public safety, education, and the media**.
2. State agencies and local communities were directed to take a **"public health" approach** in controlling and preventing the eight problem behaviors listed above. The Legislature wanted to reduce youth violence and other at-risk behaviors using the same approach that public health agencies have taken "to control other problems such as infectious disease, tobacco use, and traffic fatalities."[3] In particular, the Legislature wanted the state to reduce those "risk factors"—and increase those "protective factors"—that are "empirically linked" to youth violence and other at-risk behaviors.
3. The Legislature instructed **local communities**, as opposed to state agencies, to take a larger role in planning and implementing prevention activities. To do this, the Legislature created a new entity—Community Public Health and Safety Networks. The Networks must establish plans for their local communities and, potentially, implement those plans through coordination of some of the publicly-funded prevention activities in their jurisdictions.

The Legislature directed the Washington State Institute for Public Policy to evaluate whether these policies achieve a measurable reduction in violence in Washington. The Institute was also instructed to evaluate whether the Community Public Health and Safety Networks reduce the rate of at-risk youth by lowering "risk factors" and increasing "protective factors" associated with the eight outcomes. As the state agencies and Community Networks implement the policies in the Act over the next few years, the Institute will present to the Washington Legislature individual reports on the costs and effectiveness of the policies adopted in the Act.[4]

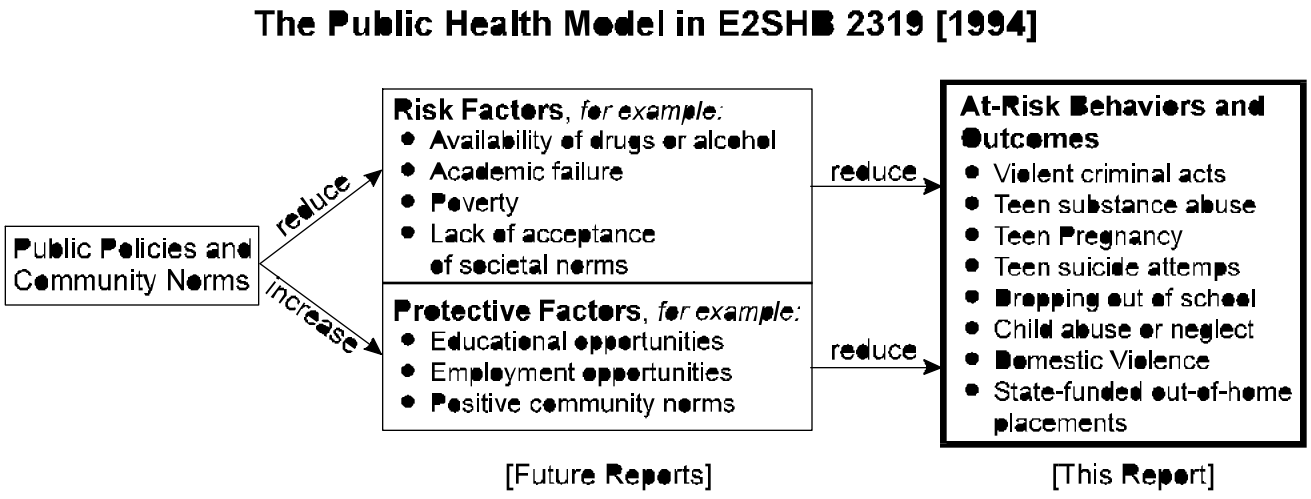
THE FOCUS OF THIS REPORT

This report highlights the "big picture" trends in six of the at-risk behaviors identified by the Legislature in E2SHB 2319.[5] It does not evaluate whether the 1994 Act's policies are achieving its goals—it is too early to make that assessment. Rather, the data presented here help establish part of the **long-run, baseline information** necessary for monitoring statewide progress in reducing the at-risk behaviors listed in the Act.

In 1995, the Washington State Department of Health, in cooperation with the Department of Social and Health Services, published the *Youth Risk Assessment Database.*[6] That report contains information, for each of the State's Community Public Health and Safety Networks, on the at-risk behaviors. Data presented in the Department's report generally begin in 1988 or 1990 and end in 1993. Whether the rate of at-risk behaviors are getting better or worse is difficult to tell with only a few years' data. This report supplements the Department of Health's statewide data with information covering many more years.

Trends in Problem Behaviors and Outcomes

The subject of this report is the at-risk behaviors identified in the 1994 Act. The public health approach the Legislature adopted assumes that the most effective way to reduce the eight problem behaviors and outcomes is to focus public policies and community norms on empirically-related "risk" and "protective" factors. The following figure shows this logic:



Information on the long-run trends in some of the risk and protective factors—the middle boxes in the figure—will be analyzed in future reports. This report highlights statistics on the at-risk behaviors and outcomes shown in the right-hand box.

The Use of RATES in This Report

In this report, information is presented on long-run trends in the at-risk behaviors of the juvenile population in Washington. Most of the data are presented as "rates" per thousand juveniles. Rates are calculated in a straightforward manner: the number of measured occurrences of a particular behavior in a year are divided by the relevant total juvenile population in the state in the same year.

The purpose of reporting rates is to make long-run comparisons of at-risk behaviors more meaningful.

For example, in 1994, 3,040 births occurred to females aged 15 to 17 in Washington. In the same year, an estimated 102,665 15- to 17-year-old females resided in the state. Thus, the 1994 birthrate for 15- to 17-year-old females in Washington was 30 births per thousand females in that age group (3,040 divided by 102,665 times 1,000).

In 1960, on the other hand, far fewer births to 15- to 17-year-old females occurred in the state (2,124), but there were also far fewer females in that age group (67,423). The rate for 1960 was, thus, 32 births per thousand females in that age group.

How can the teen behaviors in these two years be compared? By looking at birthrates in these two years, as opposed to the total number of births, it is possible to assess more accurately long-run trends. The 1994 rate of 30 births for every thousand 15- to 17-year-old females can be more meaningfully compared to 1960's rate of 32 births per thousand than by simply comparing the total number of births in these two years. Calculating rates makes it possible to compare trends over time, even when the size of the juvenile population changes significantly—as it has in Washington in the last several decades, and as it is expected to do in the years ahead (see Chart 1).

To help standardize the presentation of data in this report, all of the rates are expressed as a rate per thousand. In some publications, rates are stated in terms of rates per hundred-thousand. We think it is easier to grasp the magnitude of the at-risk behaviors by thinking of a thousand, rather than a hundred-thousand, juveniles. For example, in assessing the magnitude of the rate of youth violence, we think it is easier to visualize a high-school of a thousand juveniles than a city of a hundred-thousand youths.

All of the population denominators used in this report come from the U.S. Bureau of Census or the latest estimates from the state Office of Financial Management.

GROWTH IN WASHINGTON'S JUVENILE POPULATION: 1950 to 2020

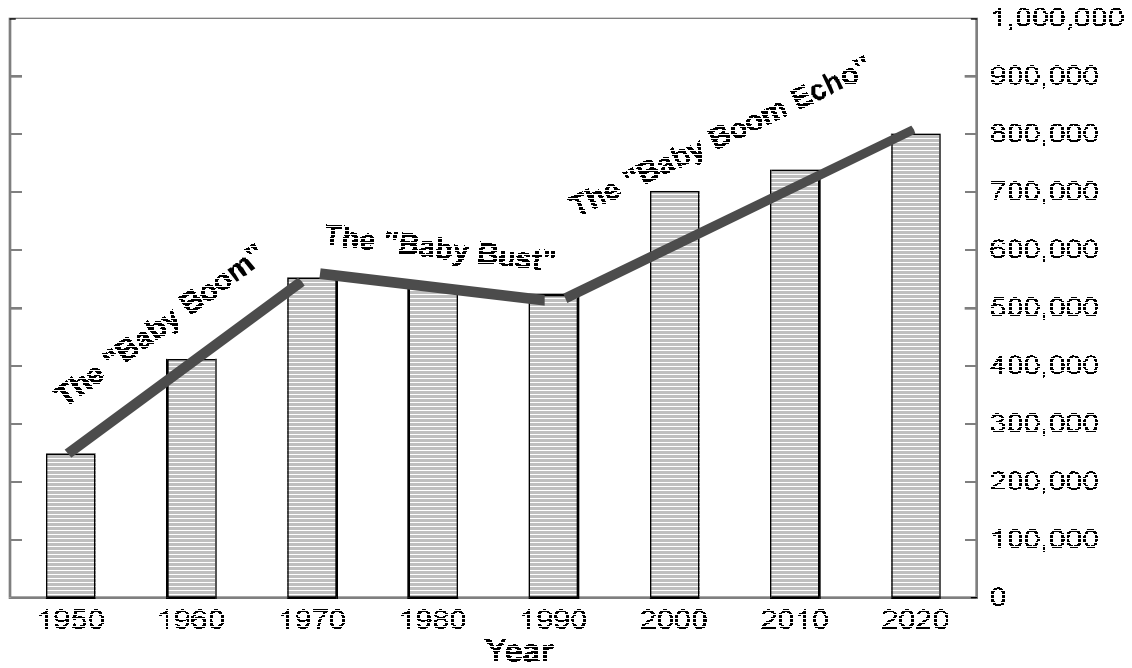
This report examines at-risk behaviors of youths between the ages of 10 and 17. How Washington's **total** population in this age group has changed in recent decades—and how it is expected to change in the years ahead—are important patterns to understand first.

Chart 1 highlights three distinct periods for Washington's population of 10- to 17-year olds over the years 1950 to 2020. The first growth period was the post-World War **II "baby boom**" which affected the 10- to 17-year-old population roughly between 1950 and 1970. Then, from 1970 to 1990, the size of the juvenile population actually fell slightly in Washington. This period is sometimes labeled the "**baby bust**." Finally, in 1990, the size of the 10- to 17-year-old population began to increase rapidly once again. This recent surge in the juvenile population has been dubbed the "**baby boom echo**" and is largely made up of the offspring of the original "baby boomers."

Chart 1

Washington's Juvenile Population: 10- to 17-Year Olds

Census Data: 1950 to 1990, OFM Forecast: 2000 to 2020



Data Sources: U.S. Bureau of Census, Washington Office of Financial Management.

The juvenile population in Washington has grown rapidly thus far in the 1990s. Between 1990 and 1995, the number of juveniles aged 10 to 17 grew by 104,600—a 20 percent increase, or about 3.7 percent per year. The Office of Financial Management's latest forecast anticipates the 10 to 17 population to continue to grow, but at slower rates in the years ahead. OFM expects an additional 75,000 10- to 17-year olds by the year 2000 (2.3 percent per year), another 36,000 by 2010 (0.5 percent per year), and an additional 62,000 by 2020 (0.8 percent per year).

TRENDS IN CRIMINAL VIOLENCE IN WASHINGTON: 1983 to 1994

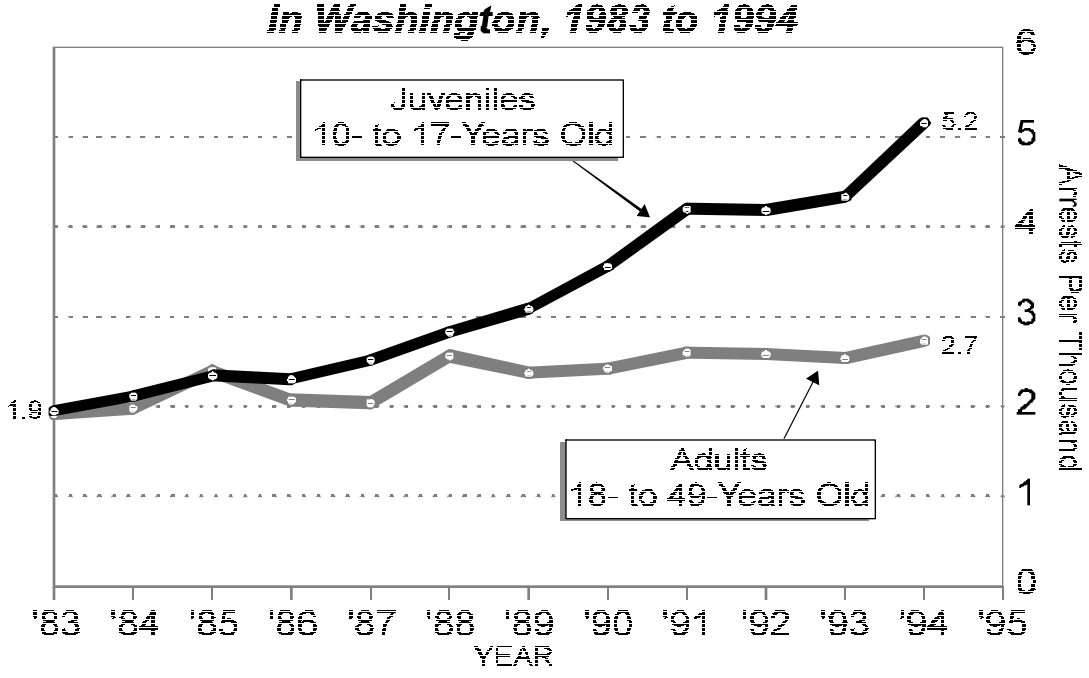
Divergent Trends: Adult and Juvenile Criminal Violence[7]

- ***The violence arrest rate among juveniles aged 10 to 17 increased 165 percent between 1983 and 1994***. Chart 2 shows that in 1983 there were about 1.9 arrests for violent offenses for every thousand 10- to 17-year-old youths. The rate in 1994 was 5.2 arrests for every thousand in that age group. Trends in the rate of juveniles convicted for violent offenses follow the same pattern as those for juveniles arrested for violent offenses.[8]
- ***For adults aged 18 to 49, the violence arrest rate increased by 42 percent between 1983 and 1994***.[9] Chart 2 illustrates that in 1983 adults and juveniles had the same violent crime arrest rate: for both age groups, there were 1.9 arrests for every thousand adults or juveniles. The rate for adults, however, has not increased as fast as the juvenile rate; in 1994, the adult rate was 2.7, while the juvenile rate was 5.2.

- **Since 1988**, the divergent trends in juvenile and adult violence arrest rates have been more pronounced: juvenile arrest rates increased 82 percent, while adult rates grew 7 percent, between 1988 and 1994.

Chart 2

Juvenile and Adult Arrest Rates for Violent Offenses In Washington, 1983 to 1994



Data Sources: Washington Association of Sheriffs and Police Chiefs, Washington State Office of Financial Mangement. All calculations made by the Washington State Institute for Public Policy.

Types of Violent Offenses

Chart 2 portrays the trends in arrests for **all** violent offenses. The FBI's definition of "violent crime" includes the separate offenses of murder, rape, robbery, and aggravated assault. Chart 3 plots the separate trends for these four violent crimes from 1983 to 1994. As with the information on Chart 2, juvenile arrest rates cover ages 10 to 17 while adult rates cover ages 18 to 49.

- ***MURDER:*** The first panel of Chart 3 shows that, despite an upturn in 1994, the arrest rate for murder by adults has generally declined since 1983. The arrest rate for murder by juveniles, on the other hand, has generally increased over those same years. In 1994—for the first time—the juvenile murder arrest rate exceeded that of adults.

- ***RAPE:*** Since 1989, the juvenile arrest rate for rape has exceeded the adult rate. In the last six years, the juvenile arrest rate for rape has increased 42 percent while the adult arrest rate has been essentially stable.

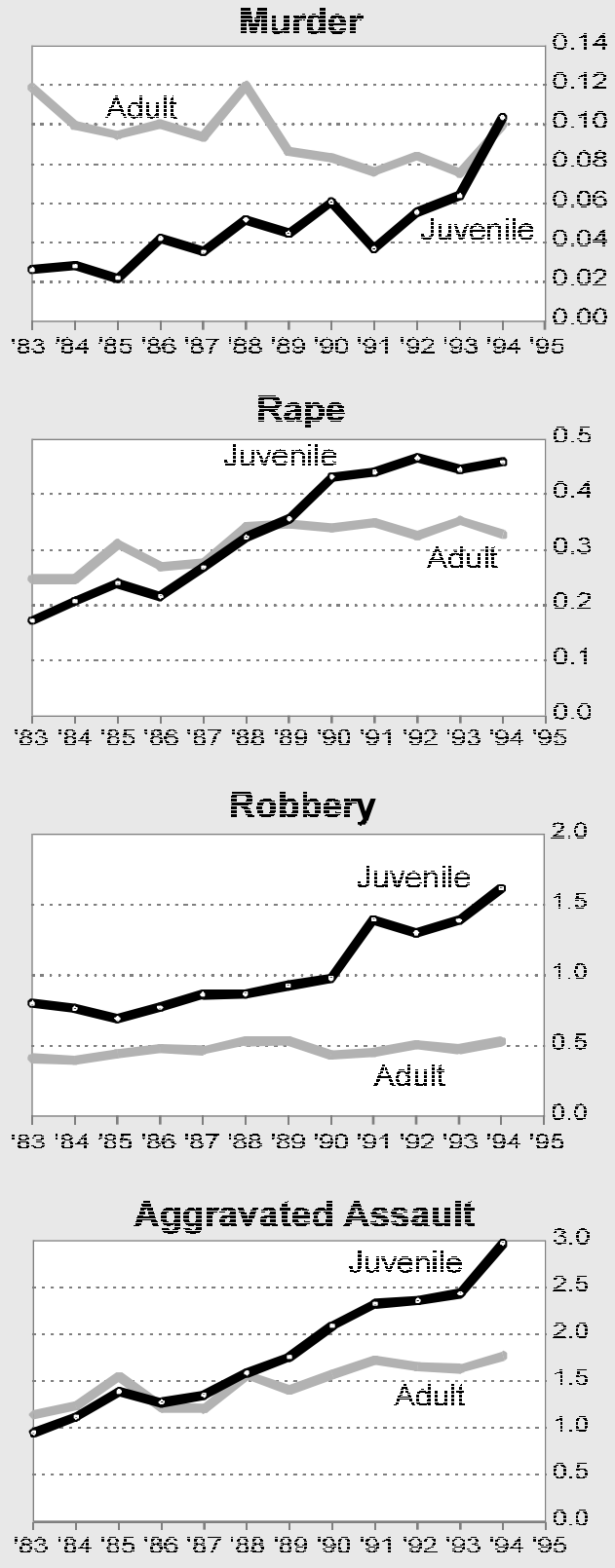
- ***ROBBERY:*** Juveniles have higher arrest rates for robbery than adults. In recent years, however, the "gap" has widened. The rate of juvenile arrests for robbery has increased 65 percent since 1990 while the adult rate has leveled off.

- ***AGGRAVATED ASSAULT:*** The change in the rate of aggravated assaults resembles the changes for rape and robbery. Since 1983, the arrest rate for juvenile aggravated assault has increased 214 percent while the adult rate has increased 55 percent. Over the last few years, in particular, the adult rate has grown more slowly while the juvenile arrest rate has increased more rapidly. Aggravated assaults include offenses where an individual intentionally inflicts great or substantial bodily harm on another.

Chart 3

Types of Violent Offenses

Washington Juvenile and Adult Arrest Rates
(Number of Arrests Per Thousand, 1983 to 1994)



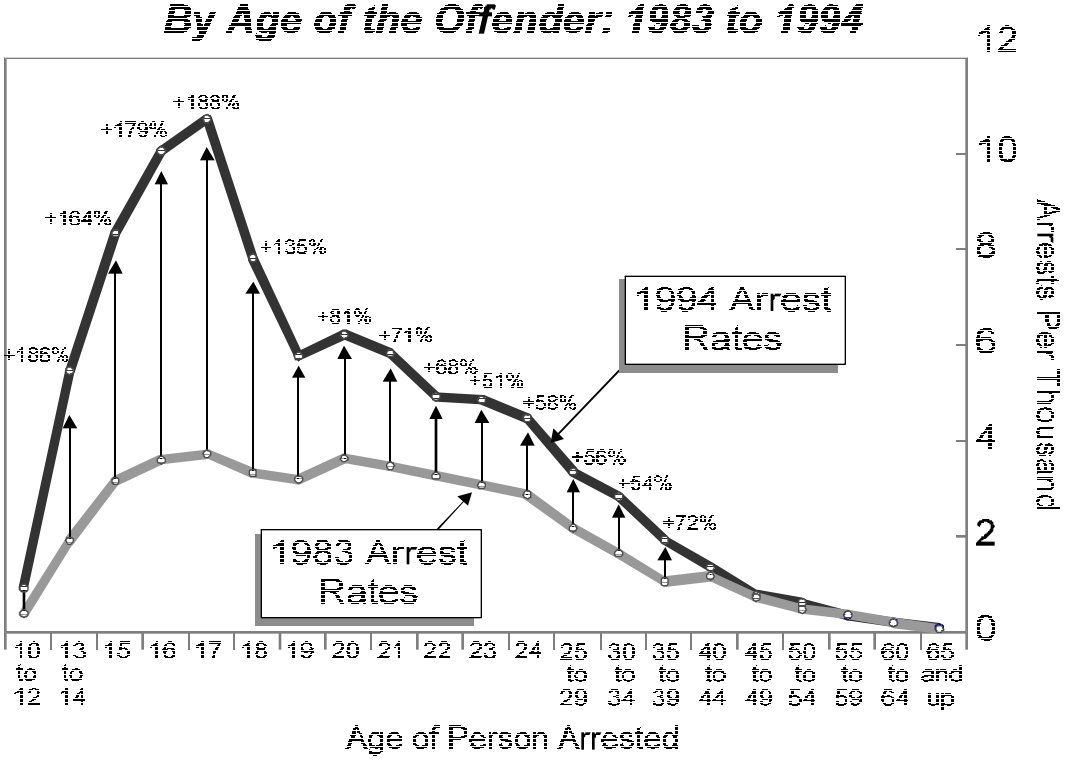
Criminal Violence by Specific Ages

The divergent trends in juvenile and adult violence are more evident when arrest rates for individual age groups are examined. Chart 4 shows how arrest rates changed between 1983 and 1994 for each specific age group. The lower line on Chart 4 shows the violent arrest rates for 1983. The top line shows the arrest rates for the same ages during 1994. The difference in the general shape of these two lines provides more detailed evidence of the large growth in violence in the younger age groups.

- During the eleven years between 1983 and 1994***, the rate of arrests for violent offenses increased for all age groups, ages 10 through 55.***
- ***The largest rates of increase, however, were for the younger ages in the population***.
- ***The rate of arrests for violent offenses declines with age.*** The data for both 1983 and 1994 reveal that as individuals in Washington age beyond their teen years, the probability of being arrested for a violent offense declines. The arrest rate for those over 40 years old is much lower than for people in their teens or twenties.

Chart 4

The Change in Arrest Rates for Violent Offenses By Age of the Offender: 1983 to 1994



Data Sources: Washington Association of Sheriffs and Police Chiefs, Washington State Office of Financial Mangement. All calculations made by the Washington State Institute for Public Policy.

Trends in Juvenile Violence Compared to Juvenile Property and Drug Offending

To examine the overall criminal activity of juveniles, the increase in the juvenile violence arrest rate can be compared to juvenile arrests for property offenses and for drug law violations. Property offenses include arrests for burglary, larceny (theft), and motor vehicle theft. Drug law violations include all arrests for the sale, manufacture, and possession of illegal drugs. Chart 5 plots the trends in juvenile arrest rates for these three offense categories, expressed as a cumulative percentage change since 1983.

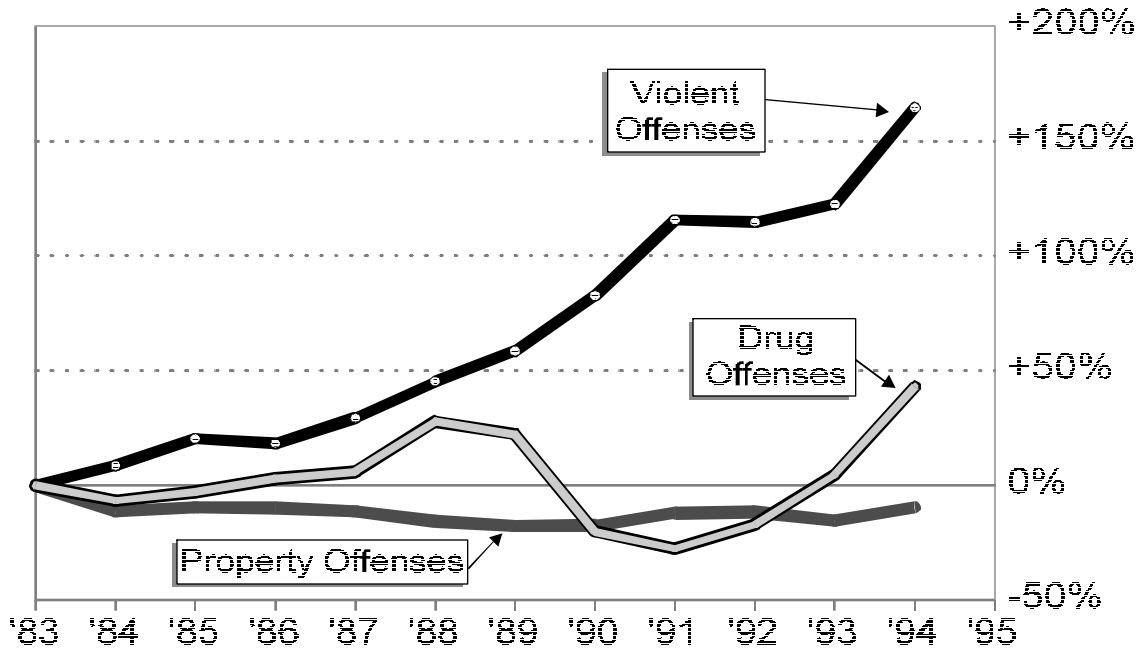
- As of 1994, the arrest rate for **juvenile violent offending was up 165 percent** from 1983's rate.

- **No long-term upward trend in the rate of juveniles arrested for property offenses has occurred**. The chart shows that the arrest rate for juvenile property offending has been quite constant over the 1983 to 1994 period.

- **For drug law violations, the change in juvenile arrest rates since 1983 has been erratic, both up and down**. As of 1993, the rate was just 5 percent above the 1983 rate. In 1994, however, there was a substantial increase in reported arrests for drug offenses for juveniles, pushing the 1994 rate 43 percent higher than the 1983 level.

Chart 5

The Change Since 1983 in Juvenile Arrest Rates for Violent, Drug, and Property Offenses



Data Sources: Washington Association of Sheriffs and Police Chiefs, Washington State Office of Financial Mangement. All calculations made by the Washington State Institute for Public Policy.

Comparing Juvenile Criminal Violence in Washington to National Trends

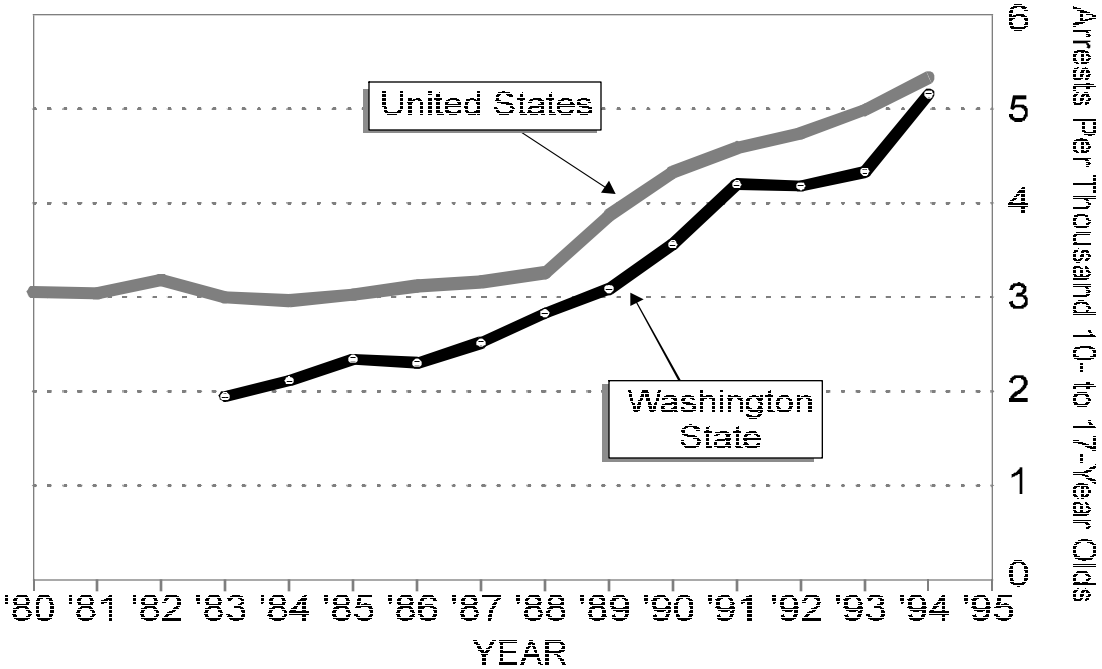
Historically, Washington has had a lower rate of juvenile arrests for violent offenses than the United States as a whole, but Washington's relative ranking has worsened over the last decade. Today, Washington's rate of juvenile violence is very close to the national average. Chart 6 plots juvenile arrest rates for violent offenses from 1980 to 1994 for the Untied States, and rates for Washington beginning in 1983 (as noted elsewhere, consistent statewide data for Washington are not available prior to 1983).

- Washington's juvenile arrest rate for violent offenses has been growing faster than the rest of the United States. In 1983, Washington's rate of 1.9 arrests per thousand juveniles was 36 percent below the national average of 3.0 arrests per thousand. Eleven years later, in 1994, Washington's rate was just 2 percent below the rate for the entire United States.

- In 1994, the national juvenile arrest rate for violent crimes was 5.3 arrests for every thousand juveniles aged 10 to 17 while Washington's rate was 5.2 arrests per thousand juveniles.

Chart 6

Comparing Juvenile Arrest Rates for Violent Offenses For the United States and Washington State



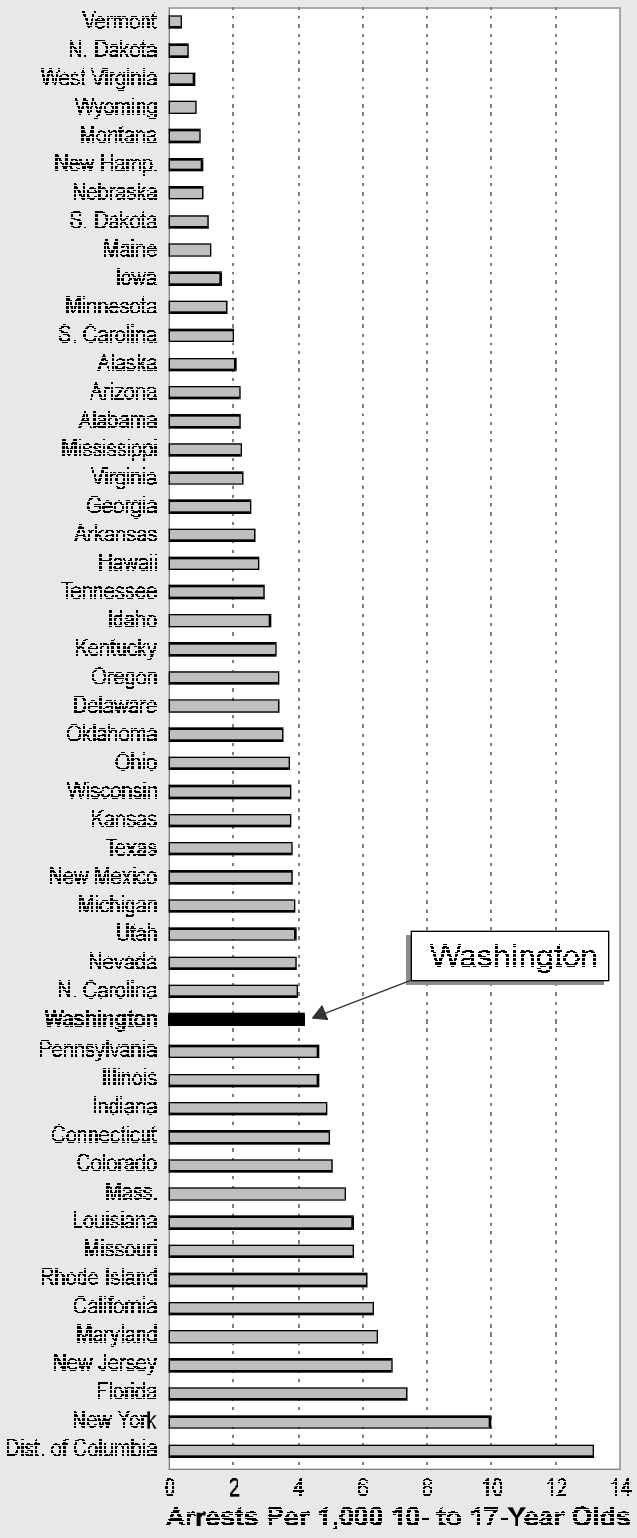
Data Sources: FBI, Washington Assn. of Sheriffs and Police Chiefs, Washington State Office of Financial Mangement. All calculations made by the Washington State Institute for Public Policy.

- **Juvenile Violence:** A recent study by the U.S. Department of Justice compared juvenile violent crime arrest rates for all 50 states and the District of Columbia for 1992. Chart 7 shows these rates. Vermont had the lowest rate at well under one arrest per thousand juveniles aged 10 to 17. The District of Columbia had the highest rate at over 13 arrests for violent offenses per thousand juveniles. Washington's 1992 arrest rate for violent offenses was 4.2 arrests out of every thousand juveniles. In general, the more populous urban states had the higher violent arrest rates for juveniles.

- **Juvenile Property Offending:** The same Justice Department study showed that the national rate of juvenile property offending has been stable between the mid-1980s and 1992, the latest year in the national study. Washington's rate of juvenile property offending has also been stable over these same years (see Chart 5).

- **Juvenile Drug Violations:** The Department of Justice study concludes that the "juvenile arrest rate for drug abuse violations in 1992 was far below the levels of the 1970s and near the low point of the mid-1980s."[10] The data for Washington (see Chart 5) follow a trend similar to the national data.

Chart 7



Source: U.S. Dept. of Justice, (August, 1995), "Juvenile Offenders and Victims: A National Report."

TEEN SUBSTANCE ABUSE

Juvenile alcohol and drug abuse are multi-faceted problems and few consistent data are available to measure how these behaviors have changed over time. The most often cited statistics on the long-term trends in juvenile substance abuse are the number of arrests for drug and liquor law violations. The Washington State Department of Health uses drug and liquor arrest data in its *Youth Risk Assessment Database*. These arrest data are recorded by police departments and sheriff offices in Washington.

Juvenile Drug and Alcohol Arrest Rates

- **Drug Law Violations:** In 1983, there were about 3.1 drug law arrests for every thousand 10- to 17-year-old juveniles in Washington. A decade later, in 1993, that number was virtually the same at 3.2 per thousand juveniles. Chart 8 illustrates that the arrest rate for drugs stayed quite constant over the 1983 to 1993 period. The rate for 1994, however, was up sharply from the rate in the previous four years and was even up slightly from the previous highs hit in 1988 and 1989. The drug arrest data for 1995 will help determine if 1994's increase was a temporary change, or the continuation of an upward trend that may have begun in 1992.

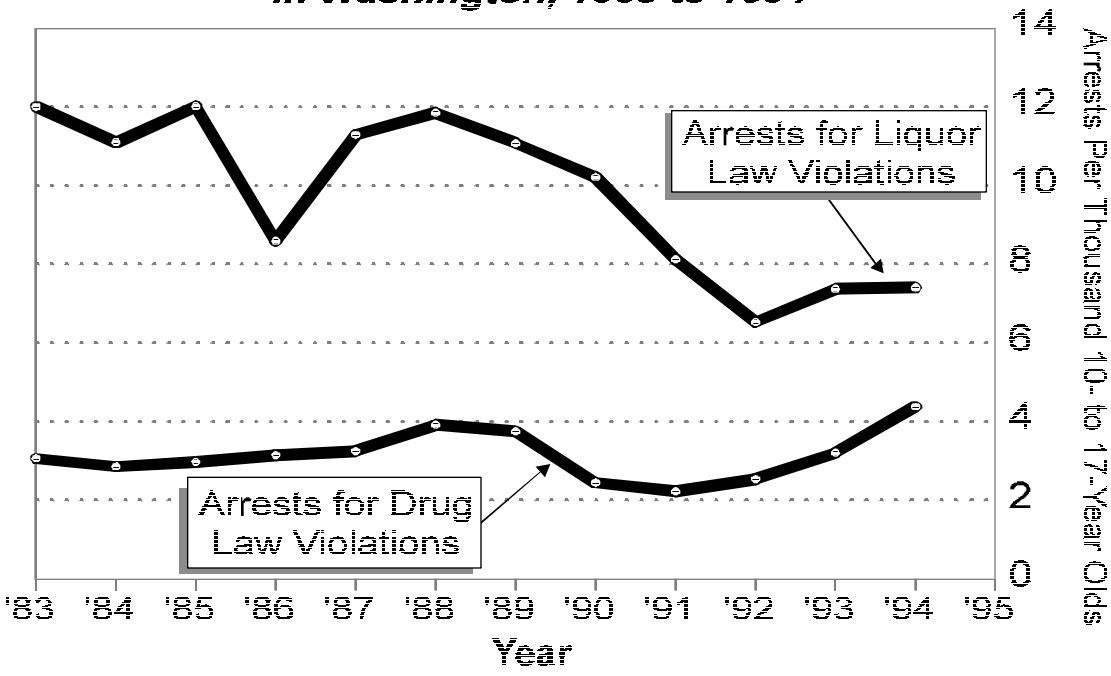
- **Liquor Law Violations:** Chart 8 also shows data on the juvenile arrest rate for liquor law violations. **The arrest rate for these offenses has declined since 1983**. The rate for 1994—7.4 arrests for every one thousand juveniles aged 10 to 17—is down 38 percent from the 1983 rate.

Juvenile DUI Violations

- The juvenile arrest rate for driving under the influence (DUI) is plotted on Chart 9. As with the data for liquor law violations, the **juvenile DUI arrest rate in Washington has generally declined over the last eleven years**. In 1983, there were 3.8 DUI arrests for every thousand juveniles aged 16- and 17-years old. By 1994 the DUI arrest rate had declined to 2.7 per thousand juveniles, down 30 percent from the 1983 level.

Chart 8

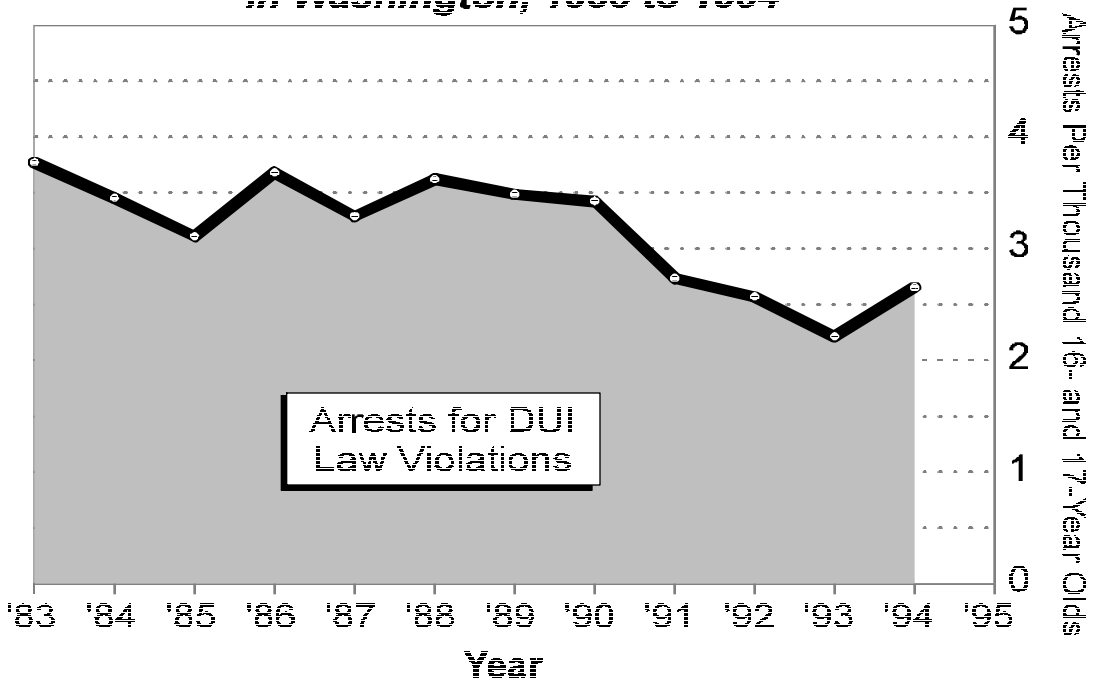
Juvenile Drug and Liquor Arrest Rates in Washington, 1983 to 1994



Data Sources: Washington Association of Sheriffs and Police Chiefs, Office of Financial Mangement.
All calculations made by the Washington State Institute for Public Policy.

Chart 9

Juvenile DUI Arrest Rates in Washington, 1983 to 1994



Data Sources: Washington Association of Sheriffs and Police Chiefs, Office of Financial Mangement.
All calculations made by the Washington State Institute for Public Policy.

TEEN PREGNANCY: 1960 to 1994

"*Teen pregnancy and male parentage*" were listed by the Washington Legislature in the Act as two at-risk behaviors of youth. A practical way to measure the long-term trends in these behaviors is to compare teen birthrates over time.

Teen Birthrates by Age Group

- **The birthrate of 18- and 19-year-old teens has decreased significantly since the 1960s**. Chart 10 shows that in 1960 there were 191 births for every thousand females 18- and 19-years old. The rate in 1994 was substantially lower at 85 births per thousand. During the early 1990s the 18- to 19-year-old birthrate rose slightly from the lower rates of the 1980s—the 1994 rate was 13 percent higher than the average rate during the 1980s.
- **For teens 15- to 17-years old, the birthrate over the last 35 years has been more steady than for older teens**. In 1960 there were 32 births for every thousand females aged 15 to 17. The 1994 rate was slightly lower at 30 births per thousand. The rate for 15- to 17-year-old teens increased in the early 1990s to 33 births per thousand in 1992. The rate for 1994 was 10 percent lower than the high point reached in 1992.
- **The lowest 15- to 17-year-old rate occurred in 1984** when there were 23 births per thousand. If the lowest-ever (1984) rate had prevailed in 1994, there would have been a *total* of 666 fewer births to 15- to 17-year-old females in Washington. Similarly, if the lowest birthrate for 18- to 19-year olds (1983) had happened in 1994, there would have been 800 fewer births to 18- to 19-year-old females in Washington.
- **For females under the age of 15, the birthrate is too low to be plotted on Chart 10, but it is increasing**. In 1960 there were 0.6 births for every thousand females aged 12 to 14. In 1994, the birthrate stood at 1.3 per thousand. There were a total of 151 births in 1994 to these young teens.
- In 1970, teenage births represented 16 percent of all births in Washington. By 1980, that percentage had decreased to 12 percent and, by 1994, teenage births represented 11 percent of all births in Washington.

Marital Status of Mothers

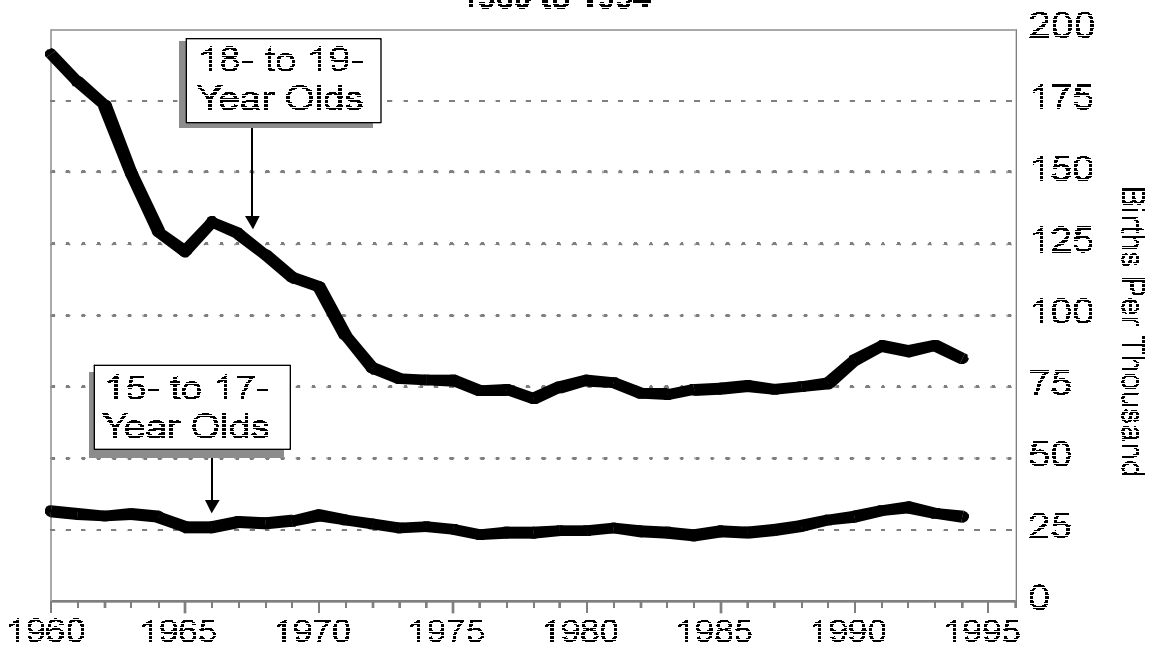
Chart 11 shows that the marital status of females at the time of giving birth has changed substantially in Washington over the last 35 years. For all age groups of females, there is now a higher likelihood of the mother being unmarried at the time of birth. In all time periods, older women giving birth have a greater chance of being married than do younger women.

- **For 15- to 17-year-old females** giving birth in 1960, 18 percent were not married. By 1994, the unmarried rate had climbed to 87 percent in this age group.
- **For 18- and 19-year-old females** giving birth in 1960, 6 percent were not married. In 1994, 66 percent were not married.
- **For women 20 years and older**, 2 percent were not married in 1960 when they gave birth. In 1994, 20 percent were not married.

Chart 10

Teen Birthrates in Washington

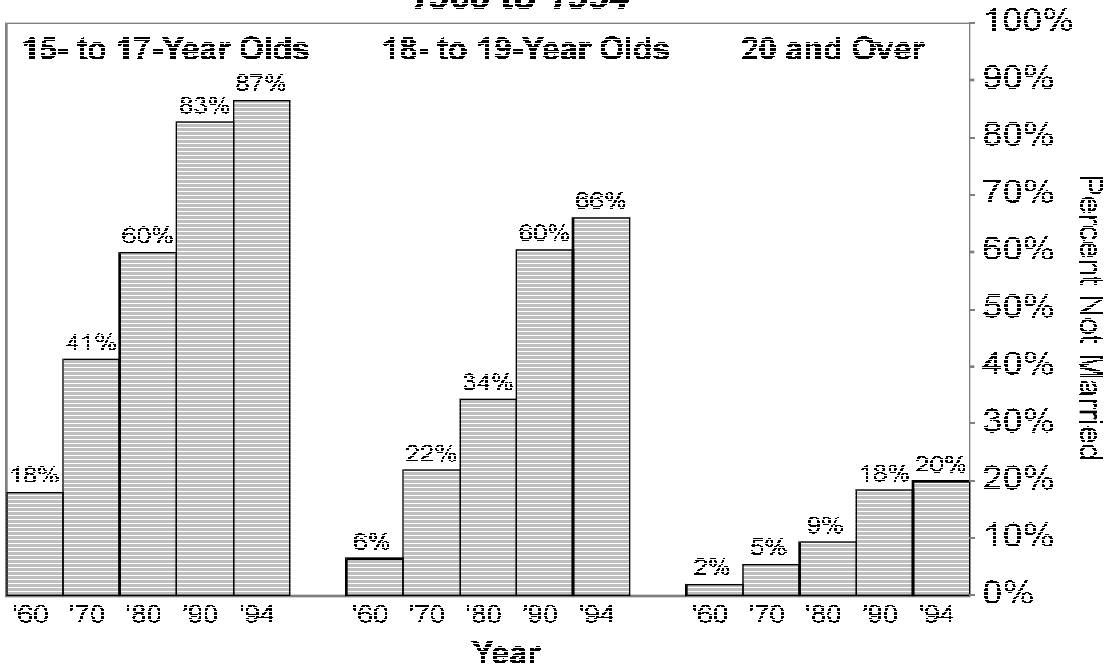
Births Per 1,000 15- to 17 and 18- to 19-Year-Old Females, 1960 to 1994



Data Sources: Washington Department of Health and the Washington State Office of Financial Mangement. All calculations made by the Washington State Institute for Public Policy.

Chart 11

For Females Aged 15 to 17, 18 to 19, and 20 and Over, the Percentage Not Married at the Time of Giving Birth: 1960 to 1994



Data Source: Washington Department of Health. All calculations made by the Washington State Institute for Public Policy.

TEEN SUICIDES: 1970 to 1994

In E2SHB 2319, the Washington Legislature listed "*teen suicide attempts*" as an at-risk behavior of youth. There are no consistently-measured, long-run data on the number of attempted suicides. The only reliable longitudinal measure of this behavior are statistics reported on actual teen suicide deaths. The determination that a death is a suicide is made by county coroners and reported to the Washington State Department of Health on death certificates.[11] Not all suicide attempts end in a suicide. Assuming that the rate of attempted suicides resulting in death has remained constant over time, then examining trends in suicide deaths provides a practical way to track this at-risk behavior.

The Annual Number of Teen Suicides

- There were 61 teen-age deaths recorded as suicides in 1994—about one every six days. That number was up from 1993 when there were 35 teenage suicides. Chart 10 shows a history of the actual number of recorded teen suicides in Washington from 1970 to 1994.

- The highest number of teen suicides was recorded in 1988 when there were 69 suicides by 13-to-19 year olds. The number of teen suicides averaged 46 per year during the 1980s and 47 per year from 1990 to 1994.

Comparing Adult and Teen Suicides Rates

Chart 11 plots suicide rates from 1970 to 1994 for teens and adults in Washington. The rates measure the annual number of suicides out of one thousand people in the teen or adult age groups.

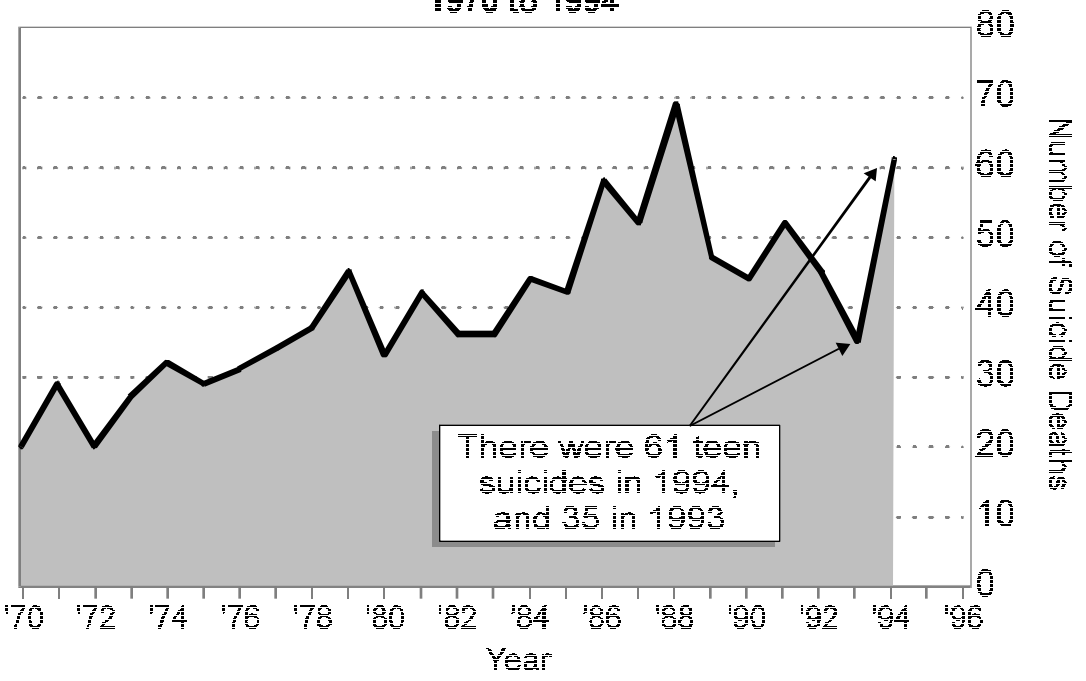
- **The rate of suicide for adults** in Washington has stayed virtually the same since 1980, and is down slightly from suicide rates of the 1970s. In 1994 there was a total of 694 adult suicides—a little less than two a day. The population in Washington over the age of 19 in 1994 was 3.8 million. Thus, about 0.18 per every one thousand adults committed suicide in Washington in 1994.
- **For teenagers**, the historical rate of suicide has been less than that of adults, although the "gap" has narrowed in recent years. The teen suicide rate in 1994 was 0.12 per one thousand 13- to 19-year olds.

Technical Note: the suicide rates reported here are expressed as the number of suicides per 1,000 population. Because there are relatively few suicides in the population, suicide rates are most often reported as rates per 100,000. We report them as rates per 1,000 to be consistent with the other at-risk behaviors in this report. The 1994 adult and teenage suicide rates per 1,000 reported here at 0.18 and 0.12, would be 18 and 12 per 100,000, respectively.

Chart 12

The Number of Teen Suicides in Washington

Total Suicide Deaths for 13- to 19-Year-Old Youths, 1970 to 1994

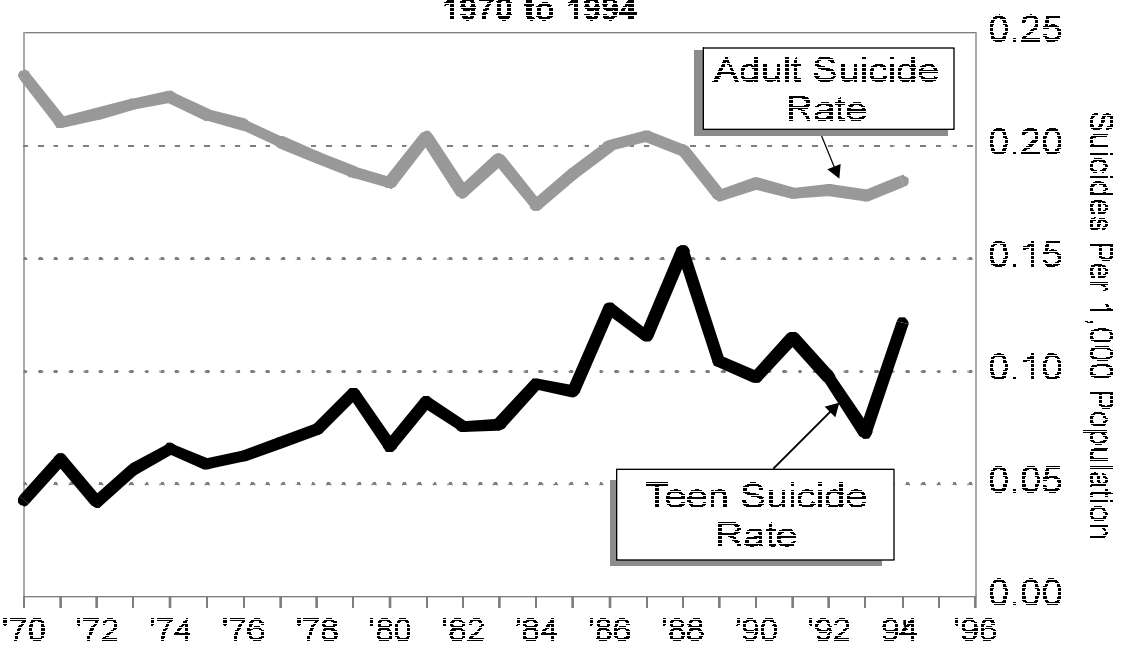


Data Sources: Washington Department of Health.

Chart 13

Teenage and Adult Suicide Rates

1970 to 1994



Data Sources: Washington Department of Health and the Washington State Office of Financial Mangement. All calculations made by the Washington State Institute for Public Policy.

DROPPING OUT OF SCHOOL: 1970 to 1994

"Dropping out of school" is an at-risk behavior of youth identified by the Legislature. Tracking this behavior over past decades is difficult because of changes in the definition of a "dropout" and a lack of consistent and timely data.[12]

One way to overcome these measurement difficulties is to compare the number of high school graduates to the overall size of the 17- or 18-year-old population in the state. If a student has not graduated from high school "on time," then the likelihood of being a dropout at least some of the time during the teen-age years increases.

High School Graduation Rates

- **For the United States**, the rate of "on-time" high-school graduation increased substantially from 1920 to 1960 but has remained quite constant in the last 35 years. Chart 14 shows that in 1920, only 17 percent of the eligible teen population graduated from high school. That number increased in the next four decades so that by 1960, roughly 70 percent of 17- or 18-year olds graduated from high school on time. Since 1960, however, the graduation rate has leveled off. In 1995, 73 percent graduated on-time—about the same percentage as in the early 1960s.

- **The graduation data for Washington** are available only from the early 1960s. Chart 14 shows that Washington's on-time high-school graduation rate closely follows national trends. Today's rate of on-time high school graduation is about the same as it was in the early 1960s and is down slightly from the peak years around 1970. Today, about 75 percent of 17- or 18-year olds graduate from public and private high schools on-time, slightly above the national rate. This means that about 25 percent of 17- and 18-year olds do not graduate on time.

The GED Certificate

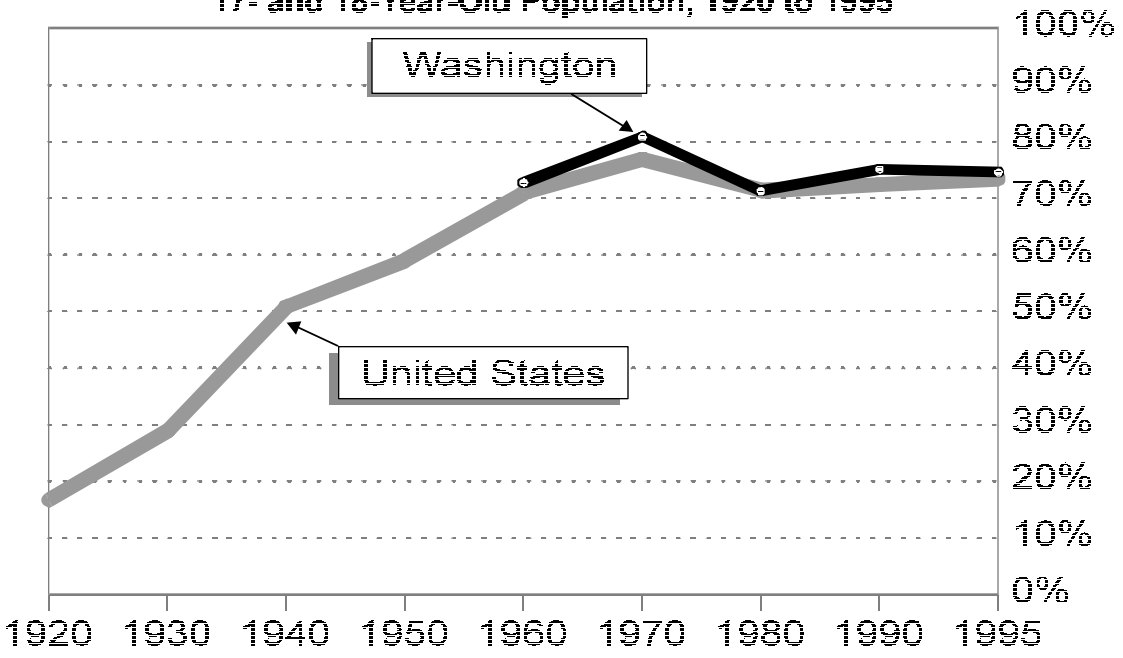
- An alternative to graduating from high school is earning a General Educational Development (GED) certificate. Chart 15 shows the approximate percentage of 17- or 18- year olds in Washington who either graduated from high-school on time or received a GED certificate before the age of 20. The percentage opting for the GED has increased in the last 25 years—from just one percent of teens in the early 1970s to about seven percent in 1994.

Overall, Charts 14 and 15 show that 20 to 25 percent of 17- and 18-year olds fail to complete their high school education in their teen years and that the percentage has remained relatively stable in the last quarter century.

Chart 14

"On Time" High School Graduation

High School Graduates as a Percent of the 17- and 18-Year-Old Population, 1920 to 1995

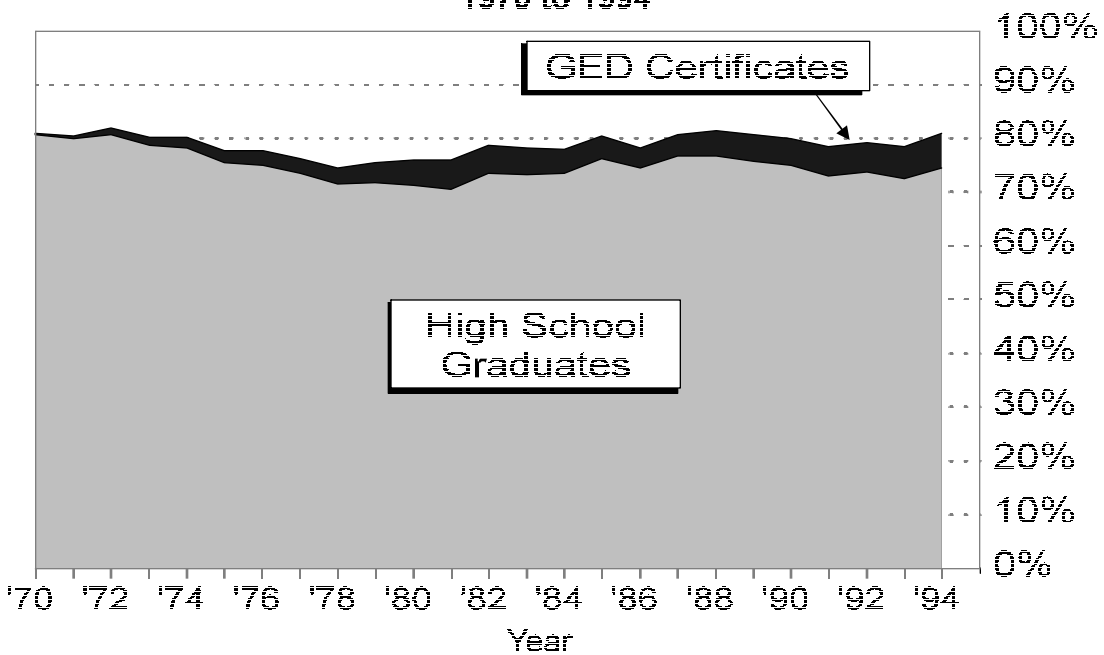


Data Sources: Office of Superintendent of Public Instuction, Office of Financial Mangement, U.S. Department of Education. All calculations made by the Washington State Institute for Public Policy.

Chart 15

High School Graduates and GED Certificates Issued

as a Percent of the 17- to 18-Year-Old Population in Washington, 1970 to 1994



Data Sources: Office of Super. of Public Instuction, St. Brd. for Community & Technical Colleges, Office of Financial Mangement, U.S. Dept. of Education. Calculations made by the Washington State Institute for Public Policy.

DOMESTIC VIOLENCE: 1985 to 1994

No data track actual, long-term, trends in domestic violence in Washington. Two measures provide some information. One source is the Washington Office of the Administrator for the Courts. This information includes the number of petitions filed with a court for domestic violence and civil-harassment protection orders. The second source is adult arrest data for domestic violence incidents as reported to the Washington State Patrol by local police departments and sheriffs' offices. These arrest data broadly define domestic violence to include violence among spouses, ex-spouses, other persons with a child in common, and other persons who reside in the same household.

Trends in these data need to be observed cautiously. Over time, as the awareness of domestic violence has changed, people may have become more willing to report domestic violence incidents to police or to seek court protective orders. Thus, statistical trends over the last decade could be measuring either an increased likelihood to report offenses, an actual increase in the prevalence of domestic violence itself, or some combination of the two.

Domestic Violence-Related Protection Orders Filed and Arrests

- **Protection Orders Filed:** In 1994, there were 30,099 petitions filed with the courts for domestic violence and civil-harassment protection orders—about 82 a day. When divided by the 1994 adult population in Washington, the petition rate was 7.7 petitions for every thousand adults. Chart 16 shows the trend in these petition rates from 1985 to 1994. The rate of protective order filings increased from 3.0 per thousand adults in 1985 to 7.7 in 1994—a 161 percent increase over the nine-year period.

- **Domestic Violence Arrests:** Chart 16 plots the domestic violence arrest rates since 1985. Between 1985 and 1994, the arrest rate increased from 2.9 arrests per thousand adults, to 6.9 arrests—a 140 percent change. The trend in these arrest rates closely follows the trend for protection order filings.

- Of all domestic violence arrests in 1994, 81 percent of those arrested were male, 19 percent were female.

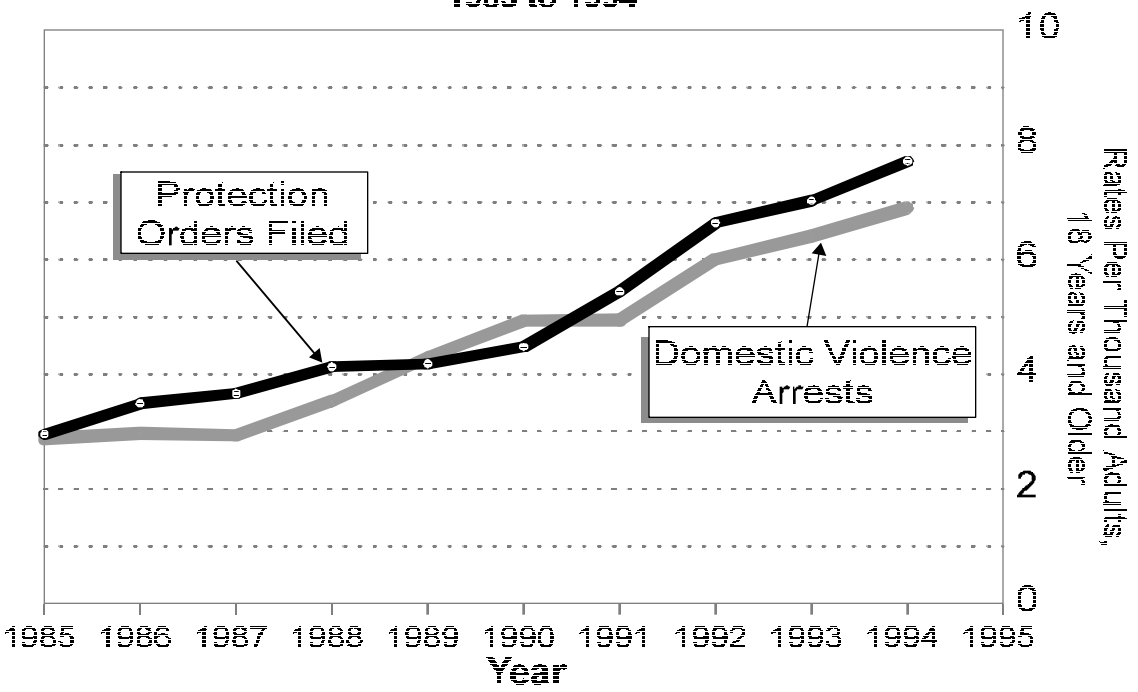
- 4 percent of the 1994 domestic violence arrests were for felony offenses; the remaining 96 percent were arrests made for gross misdemeanor or misdemeanor offenses.

- The information on Chart 17 shows the 1994 domestic violence arrest rate by the age of the person arrested. The arrest rates are the highest for those in their twenties, and begins to drop for those in their late-thirties and forties.

Chart 16

Domestic Violence Protection Orders and Arrests in Washington

1985 to 1994

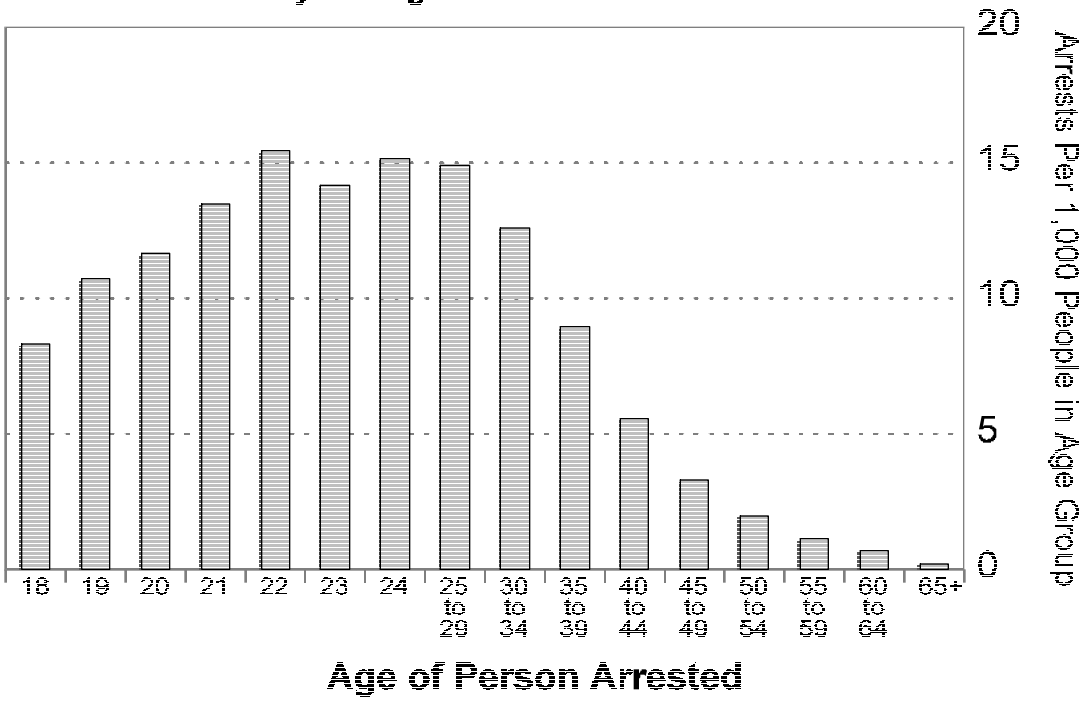


Data Sources: Washington State Patrol, Office of the Administrator for the Courts, Office of Financial Mangement. All calculations made by the Washington State Institute for Public Policy.

Chart 17

1994 Domestic Violence Arrest Rates in Washington

By the Age of the Person Arrested



Data Sources: Washington State Patrol, Office of Financial Mangement. All calculations made by the Washington State Institute for Public Policy.

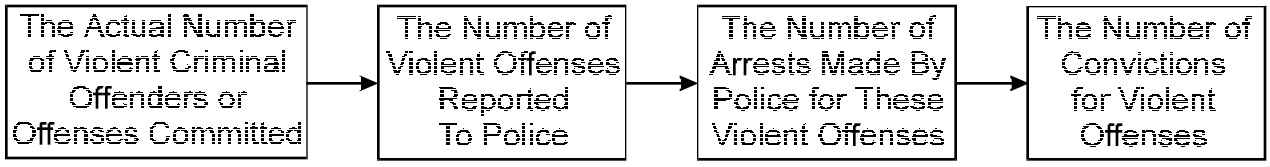
APPENDIX: *USING JUVENILE ARREST DATA TO TRACK JUVENILE VIOLENCE*

In this report, long-term trends in juvenile and adult criminal violence are assessed using data on the number of arrests made by local and state law enforcement agencies. These data are collected at the state level by the Washington Association of Sheriffs and Police Chiefs (WASPC) which follows the Uniform Crime Reporting System of the FBI. The state-wide data from WASPC go back, reliably, as far as 1983.

Not all law enforcement agencies report to WASPC every year. The agencies that report arrest data to WASPC collectively serve an average of about 90 percent of the entire population in the state.[13] This degree of reporting of arrest data has stayed very stable over the 1983 to 1994 period. For juvenile arrest data, the coverage has varied between 88 percent and 93 percent; for adult arrest data, the percentage has fluctuated between 89 percent and 96 percent. Specific year-by-year coverage ratios for both juveniles and adults were calculated and used by the Institute to adjust the reported arrest numbers and produce state-wide estimates of the number of arrests. For that portion of the state where law enforcement agencies did not report to WASPC, it was assumed that their arrest rates matched those in the rest of the state that did report.

How well do arrest data track trends in actual criminal violence?

Conceptually, there are four factors to consider in answering this question: the actual number of violent offenders and the actual amount of violent crime they commit; the proportion of those violent offenses that get reported to police; the number of arrests made for the reported violent offenses; and the number of convictions. Because the available data on arrests and convictions are at the end of this chain, they offer an indirect way to measure overall trends in violence. The following diagram illustrates the links between these factors:



No statewide data exist on the first factor—the actual amount of juvenile and adult violent crime in Washington—because some unknown amount of crime goes unreported. WASPC has information on the second and third of these four factors: the volume of violent crime reported to police departments, and the number of adult and juvenile arrests made by the police. Until an arrest is made, it is not always known by police if a reported alleged crime was committed by an adult or an arrest. The Washington State Office of the Administrator for the Courts maintains data on the fourth factor of interest in studying trends in youth violence: the number of juvenile convictions for violent offenses.

One of the primary purposes of the Institute's study is to assess trends in juvenile criminal violence. To use juvenile arrest or conviction data—the third and fourth factors—as reliable

ways to measure trends in juvenile violent criminal activity—the first factor—it is necessary to assume three things. First, that people in Washington have, over time, reported a reasonably consistent proportion of actual violent crimes to police. Second, that police have, over the same time, arrested a reasonably consistent proportion of reported violent crimes committed by juveniles. Third, that the relationship between the number of juveniles arrested for violent crimes and the number actually convicted for those offenses has also remained stable. If these assumptions are approximately correct, then juvenile arrest or conviction data offer a practical way to gauge the 1983-to-1994 trend in the overall level of juvenile violence in Washington.

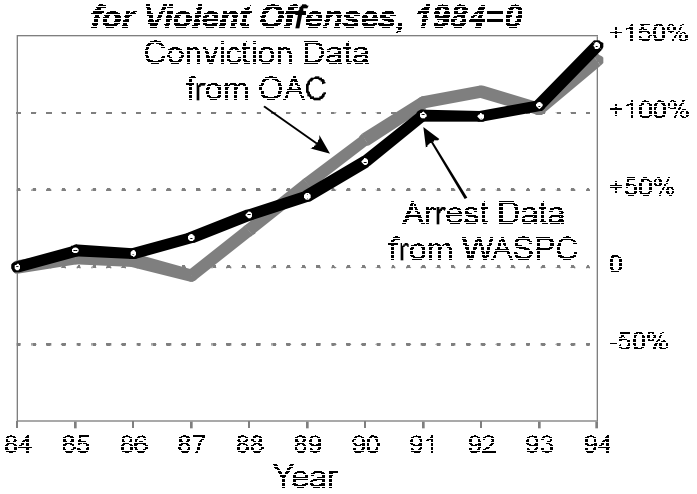
How reasonable are these three assumptions? The first assumption—*that people have been consistent in reporting violent crime to police*—appears reasonable. According to the conclusion drawn by the U.S. Department of Justice from its annual National Crime Victimization Survey, "over time the reporting rate (of crime victims to police) for violent crime has remained stable."[14] Nationwide, there has been a long-term trend for increased reporting of non-violent, household crimes, but the reporting of violent crimes has been more stable over the last two decades. It is not known if this steady nationwide reporting is applicable to Washington. In using the WASPC arrest data to track the actual level of criminal violence in Washington, the assumption is that people in Washington are similar to those in the rest of the nation in how often they report violent crimes to the police.

The second assumption—*that police have cleared a consistent proportion of reported violent crimes with arrests*—also seems reasonable. An analysis of WASPC data reveals that, for violent crimes committed by adults and juveniles combined, there has been a remarkably stable relationship between the number of violent crimes reported to the police and the number of those crimes cleared by police. For example, in 1983, police cleared 51 percent of all violent crimes reported; eleven years later, in 1994, police cleared a nearly identical 50 percent of reported violent crimes. When a crime is reported to police, it is not always known if the crime was committed by a juvenile or an adult. Therefore, it is not known if this stable overall relationship of clearing reported violent crimes holds for both juveniles and adults as separate sub-groups. The assumption in this analysis is that it does.

The third assumption—*that there has been a stable relationship between the number of juveniles arrested for violent crimes and the number actually convicted of those offenses*—also seems reasonable. Chart 18 compares the change since 1984 (the first year of the OAC's data) in the arrest data (from WASPC) and the conviction data (from OAC) for violent offenses committed by juveniles. The two lines exhibit a high degree of correlation over time. If the

Chart 18

Juvenile Arrest and Conviction Rates for Violent Offenses, 1984=0



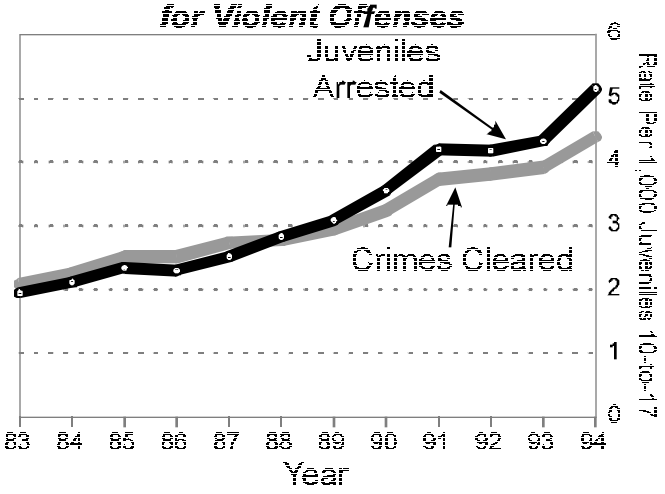
arrest rate had grown much more rapidly than the conviction rate, then the increase in arrests could have been due, at least in part, to an increase in *erroneous* juvenile arrests. Since the relationship has been highly correlated over the 1984 to 1994 period, however, there is reason to believe that the third assumption is a reasonable one.

Collectively, these three assumptions seem reasonable and support the use of arrest data as a way to track overall trends in criminal violence.

Arrest Rates and Clearance Rates

Within the data reporting system used by WASPC, there is a distinction between the number of *juveniles arrested* for violent offenses, and the number of juvenile violent *crimes cleared.* Arrests count the number of individuals arrested for a given offense, clearances count the number of crimes cleared by one or more arrests (or, much less often, by other means). Over time, this relationship has changed for juveniles in Washington. Chart 19 shows that there has been an increase in the number of juveniles arrested for violent offenses relative to the number of violent crimes cleared by juvenile arrests. The data on violence in this report are for the number of arrests per thousand juveniles, not for the number of crimes cleared by a juvenile arrest. As the chart shows, both rates have gone up considerably over the 1983 to 1994 period, but the arrest rate has gone up faster than the crime rate.

Chart 19



Multiple Offenders

Another possible contributor to the increased level of juvenile violence could be that a fixed, stable, segment of the youth population is committing an increased number of multiple-offenses. A core group of offenders could be committing, and getting arrested for, many more crimes than in the past. If this is true, then part of the increased rate of youth violence reported in this paper could be due to an increasingly delinquent, but relatively fixed, segment of the youth population, rather than a more widespread involvement of youth in violent crime. The arrest and clearance data from WASPC cannot provide information to examine this possibility. In the near future, however, the Institute intends to use data from the Administrator for the Courts to determine what portion, if any, of the increase in juvenile violence has been due to an increase in multiple violent offenders.

ENDNOTES:

[1] Long-term trends in two of the eight at-risk behaviors—child abuse or neglect, and out-of-home placements of youth—are not covered in this report. They will be the subject of a forthcoming report by the Institute.

[2] RCW 43.70.540.

[3] RCW 43.70.540.

[4] See, Washington State Institute for Public Policy, "A Plan for Evaluating Washington's State's Violence Prevention Act", July 1995. This plan was the first evaluation product required of the Institute.

[5] Long-term trends in two of the eight at-risk behaviors—child abuse or neglect, and out-of-home placements of youth—are not covered in this report. They will be the subject of a forthcoming report by the Institute.

[6] Washington State Department of Health (1995), *Youth Risk Assessment Data Base*, Olympia, Washington.

[7] A principal source of information for tracking long-run trends in criminal violence in Washington is the Washington Association of Sheriffs and Police Chiefs (WASPC). This state association tallies the number of arrests made by local police and the State Patrol. WASPC's data system, which follows the FBI's Uniform Crime Reporting process, was initiated in 1980 and produced reliable statewide counts by 1983. The Appendix contains a discussion on using arrest data to track trends in criminal violence.

[8] Data on convictions are from the Office of the Administrator for the Courts. See the Appendix for detail.

[9] The 18- to 49-age group was selected to represent the adult population to control for the relative growth in the over-50 cohort. In 1994, 95 percent of all adult arrests for violent offenses were for those under 50.

[10] U.S. Department of Justice, (August, 1995), *Juvenile Offenders and Victims: A National Report*, page 120.

[11] There is the possibility that, over time, suicide deaths among the young have been classified incorrectly; that is, that deaths classified as suicides today were once classified as accidents. If this mis-classification has happened in Washington over time, then the long-term numbers reported here will tend to underestimate the number of suicides in the earlier years of the 1970 to 1994 period. See Holinger, Paul C., (1994) *Suicide and Homicide Among Adolescents*, New York: Guilford Press, p. 37.

[12] The latest published dropout data for Washington are for the 1991-92 year. See, Office of the Superintendent of Public Instruction, (October, 1993) *Dropout Rates and Graduation Statistics by County and School District for School Year 1991-92*. The trends in the high school graduation rates presented in this report closely match the trends in the cumulative high school dropout rates as reported in the OSPI report.

[13] This figure includes the arrest data from the City of Seattle, which reports separately.

[14] U.S. Department of Justice, Bureau of Justice Statistics, (1994), *Criminal Victimization in the United States, 1992*, p.8.