# Risk and Protection Profile for Substance Abuse Prevention in **Cowlitz County**



4.47-8:2012

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These tables provide a comprehensive update of data published in previous *Profiles*. They are among the timeliest data available to planners for understanding the risks of substance abuse among youth in their counties. Community, family, peer, and school-related factors are presented within the Hawkins and Catalano risk and protective factor framework that is used by many substance abuse prevention planners across the country.

For more information about the data, framework, definitions, and other topics, see the 1997 *Profile on Risk and Protection for Substance Abuse Prevention Planning in Washington State,* (Report 4.15-40). That report and subsequent years' Profiles are available on the RDA website at: www1.dshs.wa.gov/rda/research/risk.shtm.



# **Cowlitz County**

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**Interpreting Annual Trend Charts:** 

**Indicator Comparison Profiles:** (A comparison of standardized five-year rates at county and 'county like us' levels by domain, factor, and indicator)

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- 2. Indicator Profile 2
- 3. Indicator Profile 3
- 4. Indicator Profile 4

## **Community:**

- 5. Availability of Drugs
- 6. Extreme Economic & Social Deprivation
- 7. Transitions & Mobility
- 8. Antisocial Behavior of Community Adults
- 9. Low Neighborhood Attachment and Community Disorganization

## Family:

10. Family Problems

## **Schools**:

- 11. Academic Achievement
- 12. School Climate

## Individual/Peer:

13. Early Criminal Justice Involvement

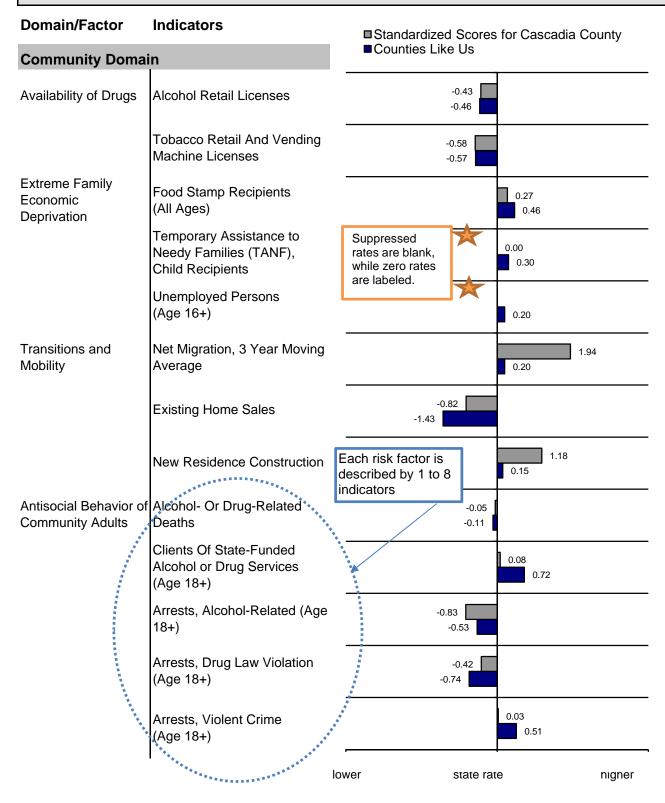
## **Problem Outcomes:**

- 14. Child and Family Health
- 15. Criminal Justice
- 16. Substance Use

## **Appendices**

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The Indicator Profile compares rates for your County, and Counties Like Us to the state. The Profile displays standardized scores to allow comparison between indicators. See Technical Notes for a definition of a standardized score and of Counties Like Us. To see all 39 counties ranked from the highest to the lowest for each indicator, go to http://www.dshs.wa.gov/pdf/ms/rda/research/4/47/updated/state.pdf



## **Understanding the CORE Trend Charts and Tables**

The presentation of risk factor data in the CORE reports is organized by domain (Community, Family, School, and Individual/Peer) and by risk factor within domains. Each risk factor may include one or more indicators.

Knowing that your county has a particular rate for one of the indicators does not help you evaluate the importance of that indicator to your risk profile. You do not know if it is higher or lower than you could reasonably expect. It is more useful to compare your county rate to the state rate, which is the average for the whole state, and to other counties, especially counties that have some characteristics in common with your county. This is especially important when urban rates differ substantially from rural rates. The comparison we present is for a group of counties that are similar in characteristics related to prevention planning: population of young people (aged 10-24), the percentage of deaths in the county that are alcohol and drug-related, and a simple geographic division into Eastern and Western Washington. For each indicator the **Counties Like Us** rate is the average rate across all of the counties in the cluster. For more information on Counties Like Us see the Technical Notes.

## Please note these IMPORTANT ISSUES:

The tabs are labeled with the name of the risk factor. Each risk factor may in turn include several indicators. Be sure to **scroll down the page** to review all of the available indicators for a given risk factor. The workbook is designed to print with one indicator on each page.

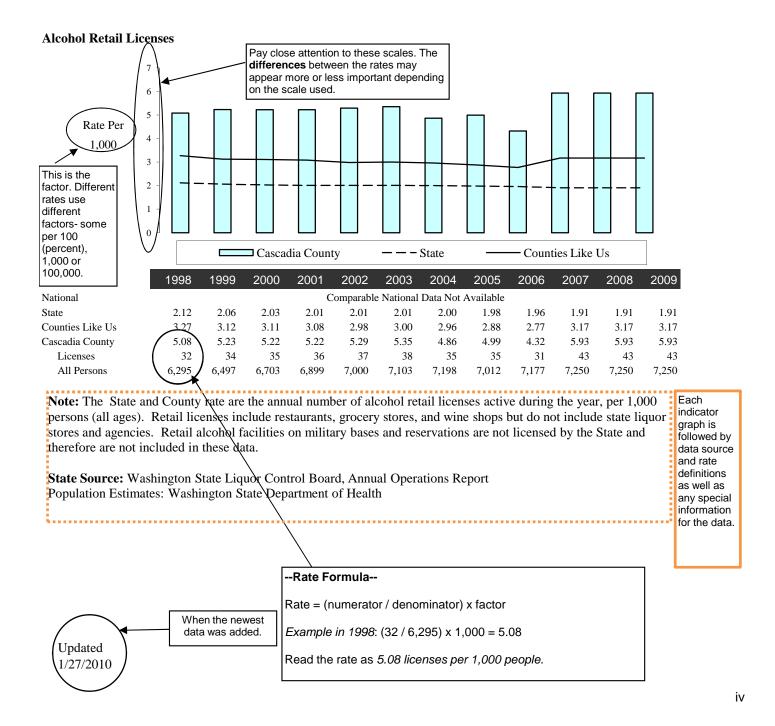
## Understanding the chart scales:

Users should be careful to interpret the chart scales correctly. The chart scales are automatically adjusted to enhance differences between the indicators at each geographic level. Users should consider whether the differences they observe between geographic areas or across years are significant. The unit of measurement is displayed at the left of each chart scale. Often the unit of measurement is a rate expressed as the number of events or a count of individuals per 100 population (or, "percent"), or sometimes per 1,000 or 100,000 population.

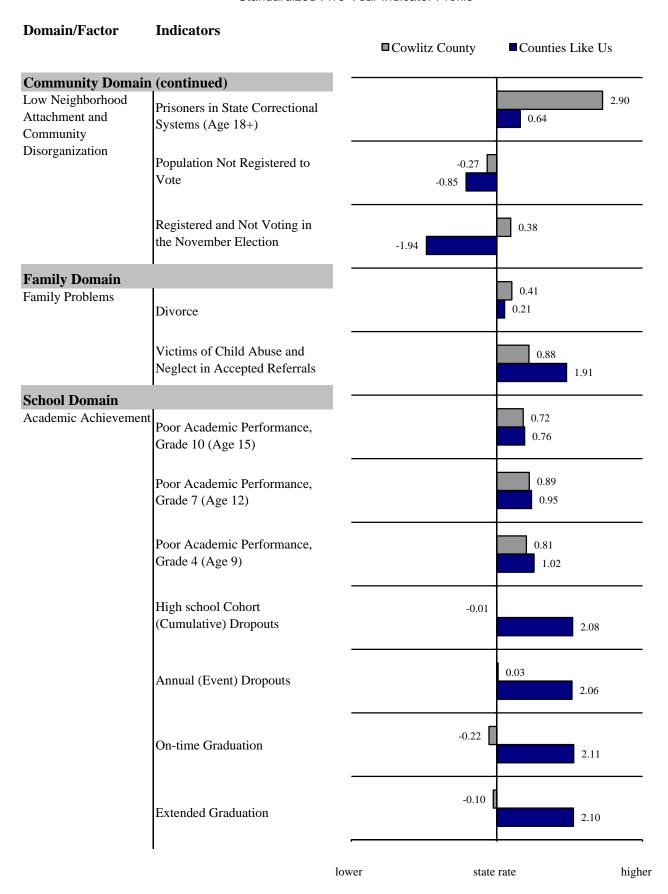
## Review the example:

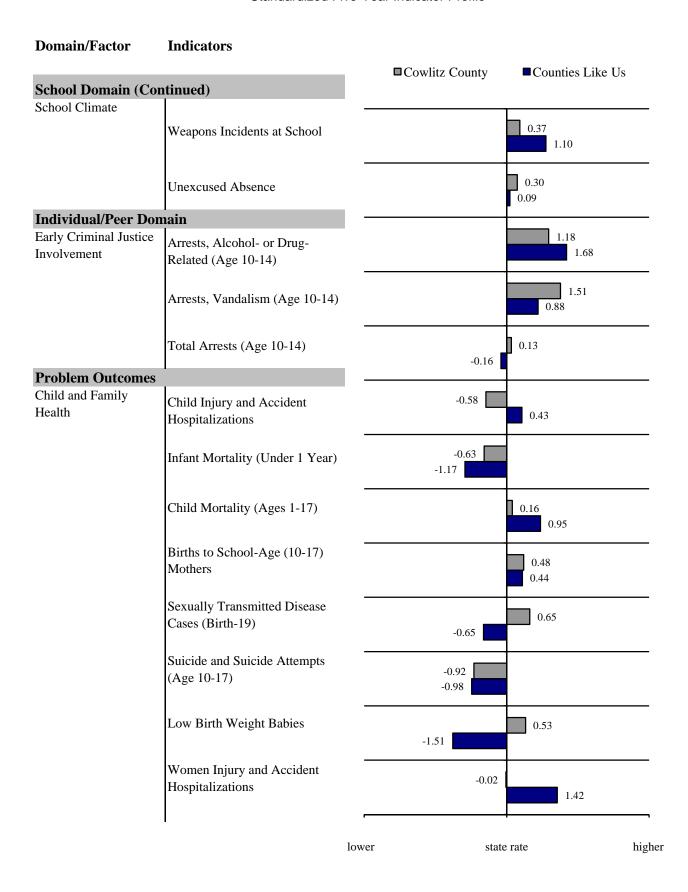
On the following page (below, scroll down) is an example indicator for Alcohol Retail Licenses in "Cascadia County" . The number of alcohol retail licenses is expressed as a rate per 1,000 population.

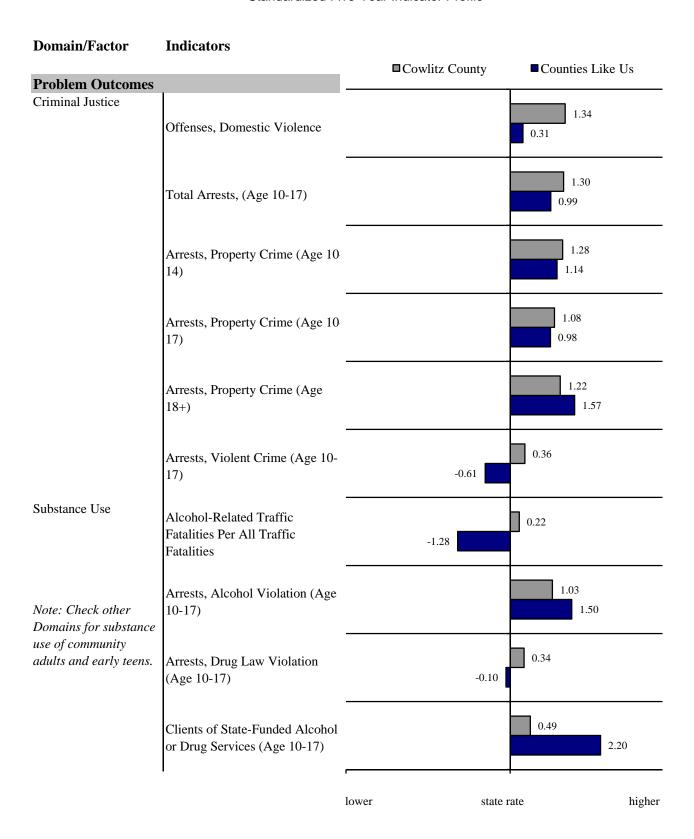
Each risk factor is on its separate tab. Each risk factor may include several indicators, so **remember** to page down. For example, the risk factor *Availability of Drugs* has two indicators: Alcohol Retail Licenses (shown below) and Tobacco Retail And Vending Machine Licenses.



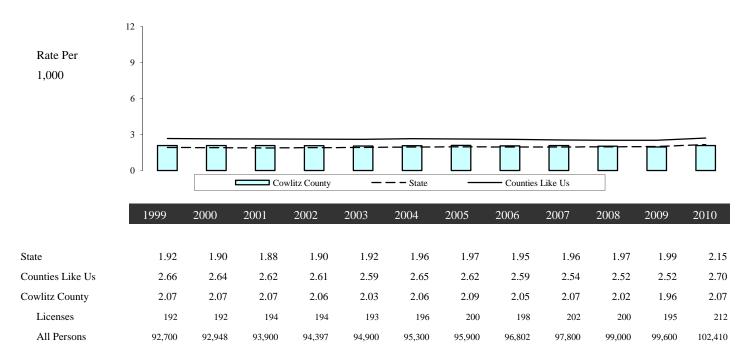
## Domain/Factor **Indicators** ■ Cowlitz County ■Counties Like Us **Community Domain** Availability of Drugs 0.02 Alcohol Retail Licenses 1.33 Tobacco Retail and Vending 0.39 Machine Licenses Extreme Family Supplemental Nutritional 1.62 **Economic Deprivation** Assistance Program (SNAP) Temporary Assistance to Needy 1.56 Families (TANF), Child 1.03 Recipients 1.56 Unemployed Persons (Age 16+) 1.63 0.39 Free or Reduced Price Lunch 0.51 Eligibility Transitions and -0.57 Net Migration, 3 Year Moving Mobility 0.84 Average 0.15 **Existing Home Sales** 1.74 -0.68 **New Residence Construction** -0.06 Antisocial Behavior of Alcohol- or Drug-Related 0.21 Community Adults Deaths -0.06 Clients of State-Funded Alcohol 1.15 or Drug Services (Age 18+) 1.29 Arrests, Alcohol-Related (Age -0.54 18+) -0.91 Arrests, Drug Law Violation 0.30 (Age 18+) -0.37 Arrests, Violent Crime (Age 1.33 0.59 18+)







## **Alcohol Retail Licenses**

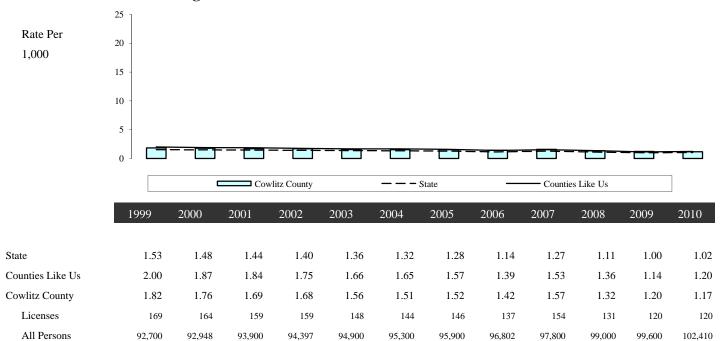


**Note:** The alcohol retail licenses active during the year, per 1,000 persons (all ages). Retail licenses include restaurants, grocery stores, and wine shops but do not include state liquor stores and agencies. Retail alcohol facilities on military bases and reservations are not licensed by the State and therefore are not included in these data. Policies on licensing distributors, taxing the proceeds, and determining who can sell alcohol vary substantially from state to state. Consequently, there is no consistent comparable source for national data. Data from 1999 to present is now geocoded from the facility address, rather than apportioned from zip code. This results in a more accurate, but different data total per county.

**State Source:** Washington State Liquor Control Board, Annual Operations Report Population Estimates: Washington State Department of Health

Updated 4/28/2011

# **Tobacco Retail and Vending Machine Licenses**

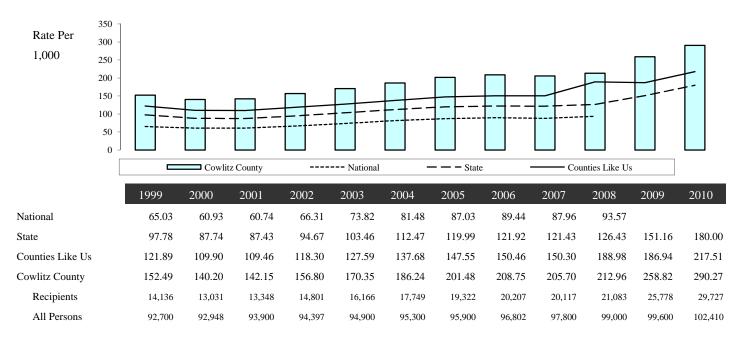


**Note:** The tobacco retailer and vending machine licenses active during the year, per 1,000 persons (all ages). Tobacco retailers on military bases and reservations are not licensed by the State and therefore are not included in these data. Tobacco sales licenses include tobacco retailer licenses (stores that sell tobacco products) and tobacco vending machines. No source of comparable national data was obtained.

**State Source:** Department of Health (from the Department of Licensing), Tobacco Prevention Program, Tobacco Statistics Population Estimates: Washington State Department of Health

Updated 4/28/2011

# Supplemental Nutritional Assistance Program (SNAP)



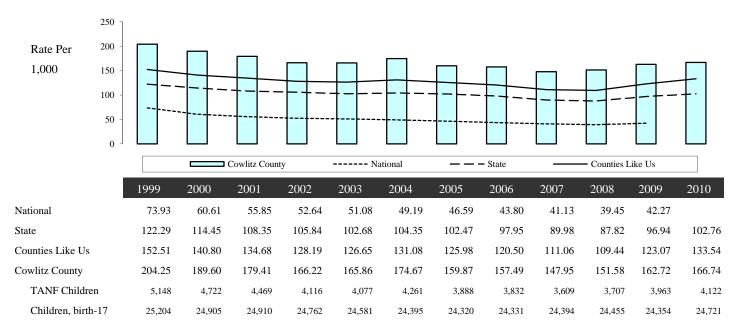
**Note:** The persons (all ages) receiving food stamps in the fiscal year, per 1,000 persons (all ages). The population used is for the calendar year which ends the fiscal period. National rates use counts of all yearly recipients. Suppression code definitions for yearly rates are explained in Technical Notes.

**State Source:** Department of Social and Health Services, Research and Data Analysis, Automated Client Eligibility System and Warrant Roll. Population Estimates: Washington State Department of Health

National Source: US Census Bureau, Statistical Abstract of the US; Federal Food Stamp Programs by State

Updated 3/15/2011

# Temporary Assistance to Needy Families (TANF), Child Recipients



**Note:** The children (age birth-17) participating in Aid to Families (AFDC/TANF) programs in the fiscal year, per 1,000 children (age birth-17). The population used is for the calendar year which ends the fiscal period. National TANF child recipients are defined as children 0-19 with almost no children of age 19, therefore national denominators are for children 0-18. Suppression code definitions for yearly rates are explained in Technical Notes.

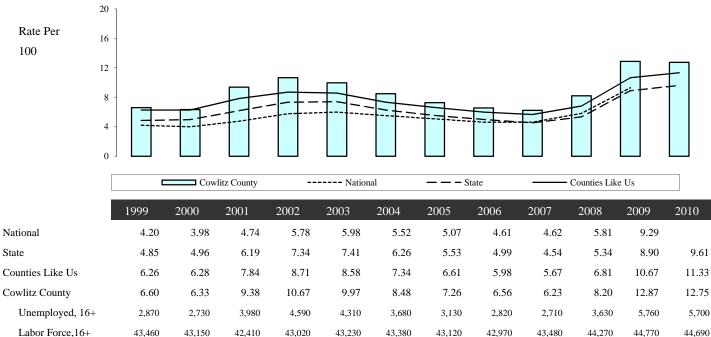
**State Source:** Department of Social and Health Services, Research and Data Analysis, Automated Client Eligibility System and Warrant Roll. Population Estimates: Washington State Department of Health

**National Source:** U.S. Department of Health & Human Services, Administration for Children and Families, Office of Planning Research and Evaluation: Characteristics and Financial Circumstances of TANF Recipients Table I-29

Updated

3/15/2011

# **Unemployed Persons (Age 16+)**



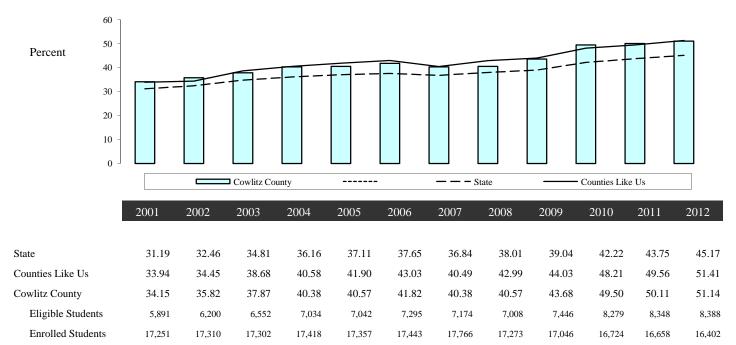
**Note:** The unemployed persons (age 16 and over) per 100 persons in the civilian labor force. Unemployed persons are individuals who are currently available for work have actively looked for work, and do not have a job. The civilian labor force includes persons who are working or looking for work. The monthly numbers are a snapshot in time done approximately the 12th of each month. A yearly estimate is then produced by averaging the monthly numbers. Historical data has been updated. Data for the latest year should be considered preliminary. Suppression code definitions for yearly rates are explained in Technical Notes.

State Source: Employment Security Department, Labor Market and Economic Analysis, County Unemployment File

National Source: U.S. Department of Labor Bureau of Labor Statistics Labor Force Statistics from the Current Population Survey

Updated 4/13/2011

# Students Eligible for Free or Reduced Price Lunch

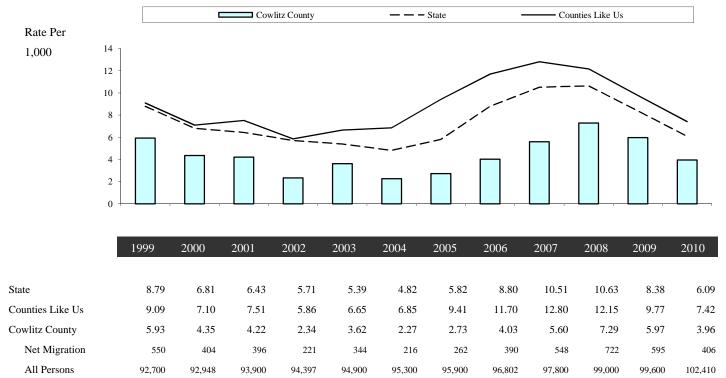


**Note:** The students eligible for free or reduced price lunch per 100 students enrolled. Eligibility requirements are discussed in Technical Notes.

State Source: Office of Superintendent of Public Instruction

Updated 2/21/2012

# Net Migration, 3 Year Moving Average

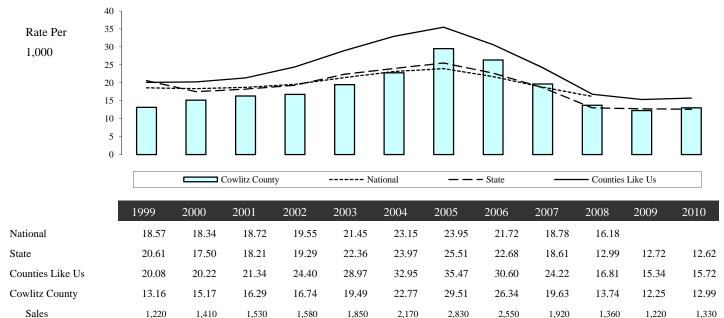


**Note:** Net migration is the annual number of new residents that moved into an area minus the number of residents that moved out of an area. In Washington, the Office of Financial Management estimates annual net migration for twelve months ending on March 31st of a given year. For example, annual net migration in 2009 refers to the period from April 1, 2008 through March 31, 2009. Net migration can change a lot from year to year; calculating a 3-year moving average smoothes net migration. The net migration rate in Year 3 is equal to the average of net migration in Years 1, 2, and 3, divided by the total population in Year 3. The result is then multiplied by 1,000 to measure net migration rate per 1,000 persons.

State Source: Office of Financial Management, Net Migration Data

Updated 10/4/2010

# **Existing Home Sales**



**Note:** The previously-owned homes sold, per 1,000 persons (all ages). Previously-owned homes sold is rounded to the tens. Existing homes sold are estimated based on data from multiple listing services, firms that monitor deeds, and local Realtors associations. Adjustments were made by the data provider to remove refinanced, rather than sold homes from the counts of sales.

94,900

95,300

95,900

96,802

97,800

99,000

99,600

102,410

**State Source:** Washington Center for Real Estate Research, Washington State University, Washington State's Housing Market: A Supply/Demand Assessment. Population Estimates: Washington State Department of Health

National Source: US Census Bureau, Statistical Abstract of the US; Existing One-family Houses Sold

94,397

Updated 10/25/2011

All Persons

92,700

92,948

93,900

#### **New Residence Construction** Rate Per 8 1,000 7 6 5 4 3 2 Cowlitz County ----- National — — — State Counties Like Us 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

6.39

7.07

7.23

4.59

436

94,900

6.06

8.18

7.90

4.29

409

95,300

5.61

8.59

9.00

5.37

515

95,900

6.17

7.89

8.25

7.26

703

96,802

4.65

7.33

7.57

5.91

578

97,800

3.14

4.39

4.12

2.79

276

99,000

2.55

2.52

1.48

147

99,600

3.08

2.56

1.28

131

102,410

**Note:** The new building permits issued for single and multi-family dwellings, per 1,000 persons (all ages). Each unit in a multi-family dwelling (for example, each apartment in a building) has a separate building permit.

**State Source:** Washington Center for Real Estate Research, Washington State University, Washington State's Housing Market: A Supply/Demand Assessment. Population Estimates: Washington State Department of Health

National Source: US Census Bureau, Statistical Abstract of the US; New Privately Owned Housing Units Started

Updated 10/25/2011

National

Counties Like Us

Cowlitz County

New Residences

All Persons

State

5.96

7.34

6.51

6.35

589

92,700

5.64

6.65

6.34

5.53

514

92,948

5.74

6.42

5.64

4.38

411

93,900

6.07

6.69

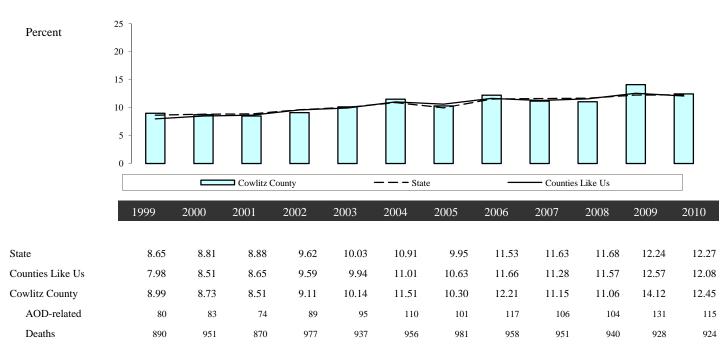
6.38

5.10

481

94,397

# **Alcohol- or Drug-Related Deaths**

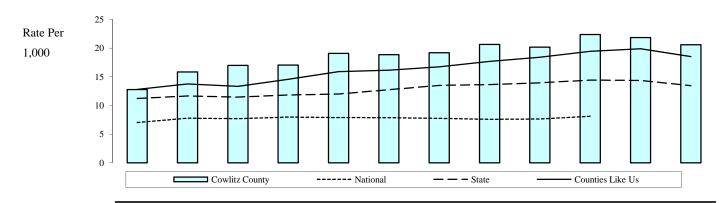


**Note:** The deaths, with alcohol- or drug-related causes, per 100 deaths. Evaluation is based on all contributory causes of death for direct and indirect associations with alcohol and drug abuse. For a complete explanation of the codes and methods used please see Technical Notes: Counting Alcohol- or Drug-related Deaths. Suppression code definitions for yearly rates are explained in Technical Notes. Rates are not reported when fewer than 100 deaths occurred in an area.

State Source: Department of Health, Center for Health Statistics, Death Certificate Data File

Updated 9/19/2011

# Clients of State-Funded Alcohol or Drug Services (Age 18+)



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
National	7.02	7.79	7.70	7.98	7.89	7.87	7.76	7.59	7.65	8.11		
State	11.20	11.64	11.47	11.82	11.98	12.73	13.49	13.63	13.93	14.41	14.35	13.43
Counties Like Us	12.81	13.74	13.33	14.56	15.88	16.13	16.73	17.67	18.39	19.42	19.87	18.51
Cowlitz County	12.76	15.84	16.97	17.03	19.06	18.86	19.18	20.63	20.15	22.36	21.84	20.57
Admits, 18+	861	1,078	1,171	1,186	1,340	1,337	1,373	1,495	1,479	1,667	1,643	1,598
Persons, 18+	67,496	68,043	68,990	69,635	70,319	70,904	71,580	72,470	73,406	74,545	75,246	77,689

**Note:** The adults (age 18 and over) receiving state-funded alcohol or drug services, per 1,000 adults. Counts of adults are unduplicated so that those receiving services more than once during the year are only counted once for that year. State-funded services include treatment, assessment, and detox. Persons in Department of Corrections treatment programs are not included.

**State Source:** Department of Social and Health Services, Division of Behavioral Health and Recovery, Treatment and Assessment Report Generation Tool (TARGET). Population Estimates: Washington State Department of Health

National Source: Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS)

Updated 10/28/2011

# Arrests (Age 18+), Alcohol-Related

11.95

15.22

995

65,395

12.56

67,496

848

9.77

9.41

640

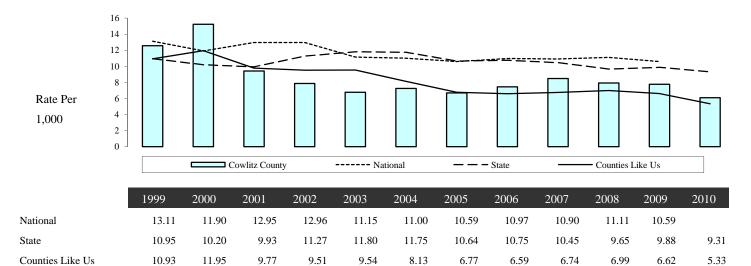
68,019

9.51

7.86

495

62,959



8.13

7.24

513

70,904

6.77

6.69

479

71,580

6.59

7.45

540

72,470

6.74

8.49

623

73,406

6.99

7.93

591

74,545

6.62

7.76

584

75,246

5.33

6.10

474

77,689

Note: The alcohol violations (age 18+), per 1,000 adults (age 18+). Alcohol violations include all crimes involving driving under the influence, liquor law violations, and drunkenness. DUI arrests by the Washington State Patrol are included in the state trend analysis. However, they are not included in the county rankings since WSP arrests are not assigned to counties. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

6.77

476

70,319

State Source: Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

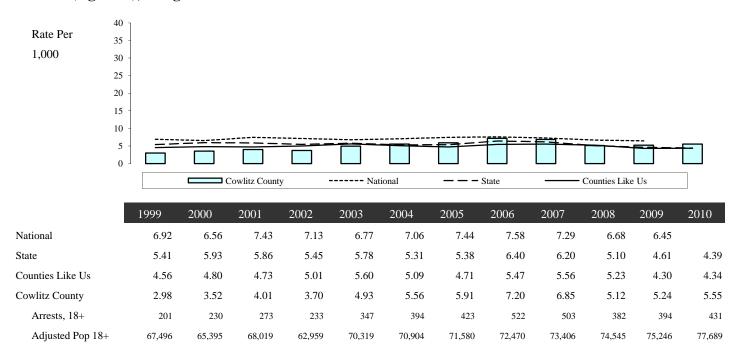
Updated 10/18/2011

Cowlitz County

Arrests, 18+

Adjusted Pop 18+

## Arrests (Age 18+), Drug Law Violation



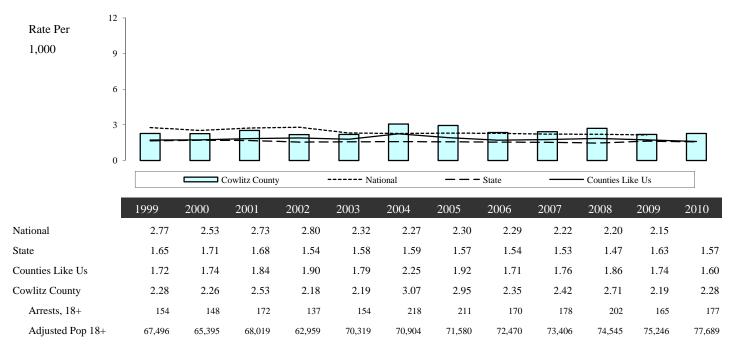
**Note:** The arrests of adults (age 18+) for drug law violations, per 1,000 adults (age 18+). Drug law violations include all crimes involving sale, manufacturing, and possession of drugs. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

**State Source:** Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Updated 10/18/2011

# Arrests (Age 18+), Violent Crime



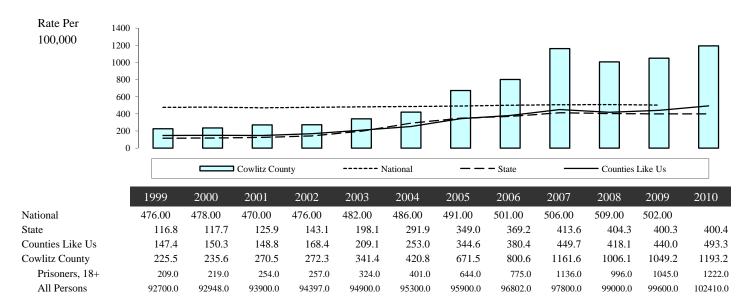
**Note:** The arrests of adults (age 18+) for violent crime per 1,000 adults (age 18+). Violent crimes include all crimes involving criminal homicide, forcible rape, robbery, and aggravated assault. Simple assault is not defined as a violent crime. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

**State Source:** Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Updated 10/18/2011

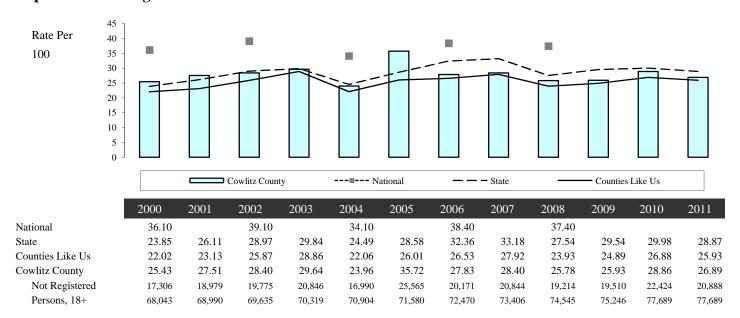
# Prisoners in State Correctional Systems (Age 18+)



**Note:** The adult (age 18 and over) admissions to prison, per 100,000 persons (all ages). Admissions include new admissions, readmissions, community custody inmate violations, and parole violations. Counts of admissions are duplicated so that individuals admitted to prison more than once in a year are counted each time they are admitted. The admissions are attributed to the county where the conviction occurred. In 2003 prisoners being electronically monitored are included in the data. This causes a jump in numbers for counties which use this incarceration option. Suppression code definitions for yearly rates are explained in Technical Notes.

State Source: Department of Corrections, Inmates File. Population Estimates: Washington State Department of Health

# **Population Not Registered to Vote**



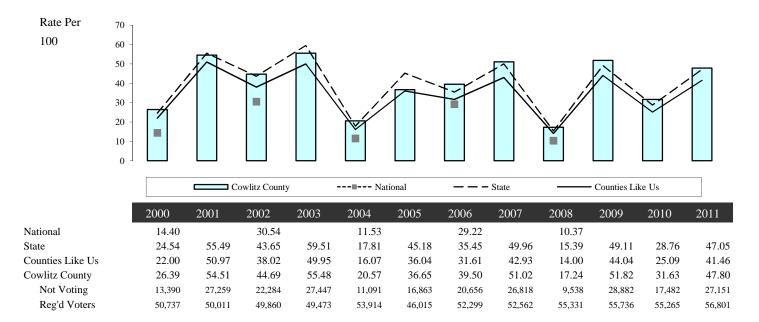
**Note:** The persons not registered to vote in the November elections, per 100 adults (age 18 and over). As part of the November Current Population Survey (the Voting and Registration Supplement), the Bureau of the Census collects data on voting and registration in years with presidential or congressional elections (i.e. every other year).

**State Source:** Office of the Secretary of State, Elections Division, Registered Voters. Population Estimates: Washington State Department of Health

**National Source:** Calculated using data from U.S. Census Bureau, Statistical Abstract of the United States; "Voting-Age Population, Percent Reporting Registered, and Voted"

Updated 3/28/2012

# **Registered And Not Voting in the November Election**



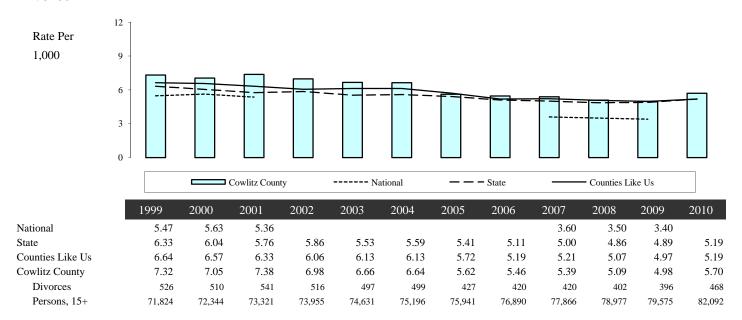
**Note:** The persons registered to vote in the November elections but not voting, per 100 adults (age 18 and over) registered to vote. As part of the November Current Population Survey (the Voting and Registration Supplement), the Bureau of the Census collects data on voting and registration in years with presidential or congressional elections (i.e. every other year).

**State Source:** Office of the Secretary of State, Elections Division, Registered Voters. Population Estimates: Washington State Department of Health

**National Source:** Calculated using data from U.S. Census Bureau, Statistical Abstract of the United States; "Voting-Age Population, Percent Reporting Registered, and Voted"

Updated 3/28/2012

## **Divorce**



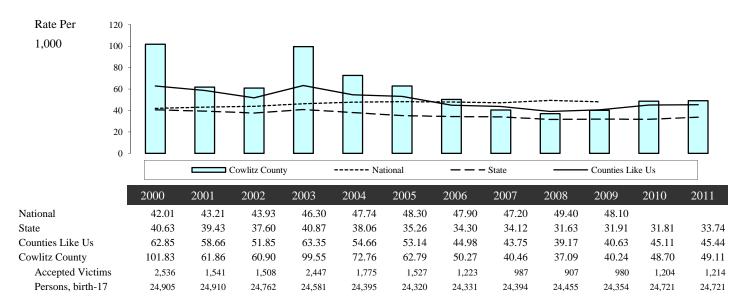
**Note:** The divorces per 1,000 persons (age 15 and over). Divorce includes dissolutions, annulments, and unknown decree types; it does not include legal separations. Divorce data is reported by the woman's residence, if in Washington at the time of decree. If the woman lived outside Washington, the man's residence was used. If both parties residence was unknown the event is not assigned to a county, but is included in the state rate. The National rate is based on age 18 and over population. Suppression code definitions for yearly rates are explained in Technical Notes.

**State Source:** Department of Health, Center for Health Statistics, Dissolution and Annulment Data. Population Estimates: Washington State Department of Health

National Source: Calculated using Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, National Vital Statistics Reports Births, Marriages, Divorces, and Deaths, Provisional Data

Updated 10/26/2011

# Victims of Child Abuse and Neglect in Accepted Referrals



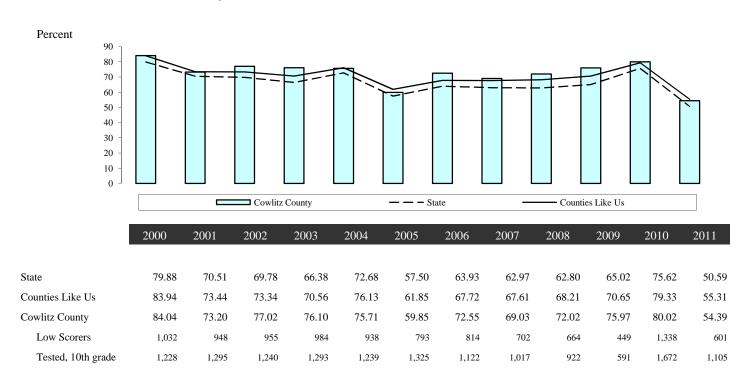
**Note:** The children (age birth-17) identified as victims in reports to Child Protective Services that were accepted for further action, per 1,000 children (age birth-17). Children are counted more than once if they are reported as a victim more than once during the year. A "referral" is a report of suspected child abuse. Numbers may differ due to corrections or changes in location definition made in the database extraction process. Child location is derived from the residence at the time of referral. Suppression code definitions for yearly rates are explained in Technical Notes.

**State Source:** Department of Social and Health Services, Children's Administration FamLink Data Warehouse. Population Estimates: Washington State Department of Health

National Source: US Department of Health and Human Services Administration for Children and Families, Voluntary Cooperative Information System(VCIS), and estimates from Adoption, Foster Care Analysis Reporting System(AFCARS)

Updated 5/8/2012

## Poor Academic Performance, Grade 10



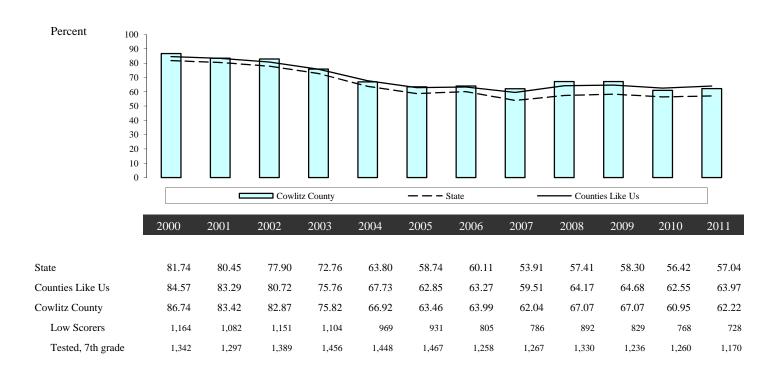
**Note:** The students tested who failed one or more content areas as a percent of all students tested at the 10th grade level. Some districts have chosen to test students in both grades 9 and 10 for the 10th grade assessment. All students being tested at the 10th grade level are included in these data regardless of their grade placement. Tests are given in the spring of the year. For example, data for 2008 is for students in the 10th grade during the school year 2007/2008. By contractual agreement data is suppressed when less than ten students were tested to avoid individual student identification.

In 2009-10 the tenth grade WASL was replaced by the High School Proficiency Exam (HSPE). This test was built on the same framework as the WASL, but contain fewer questions. It is considered equivalent by OSPI.

**State Source:** Office of Superintendent of Public Instruction, Instructional Programs, Curriculum and Assessment, Grade 10 Failing In One Or More Content Areas.

Updated 3/22/2012

## Poor Academic Performance, Grade 7



**Note:** The students tested who failed one or more content areas as a percent of all students tested at the 7th grade level. Tests are given in the spring of the year. Data for 2008 is for students in the 7th grade during the school year 2007/2008. By contractual agreement data is suppressed when less than ten students were tested to avoid individual student identification.

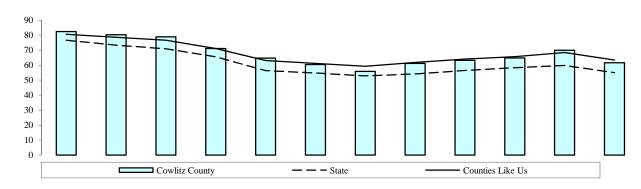
In 2009-10 the 7th grade WASL was replaced by Measurements of Student Progress (MSP). This test was built on the same framework as the WASL, but contain fewer questions. It is considered equivalent by OSPI.

**State Source:** Office of Superintendent of Public Instruction, Instructional Programs, Curriculum and Assessment, Grade 7 Failing In One Or More Content Areas.

Updated 3/22/2012

# Poor Academic Performance, Grade 4

## Percent



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
State	76.68	73.30	70.86	65.56	56.39	54.79	52.82	54.08	56.47	58.27	59.80	54.97
Counties Like Us	80.57	78.56	76.58	71.04	63.12	61.19	59.20	61.77	64.05	65.68	68.37	63.43
Cowlitz County	82.41	80.30	78.87	71.11	64.69	60.40	55.77	61.16	63.13	64.74	69.91	61.56
Low Scorers	1,204	1,125	1,105	938	828	810	638	759	767	782	885	732
Tested, 4th grade	1,461	1,401	1,401	1,319	1,280	1,341	1,144	1,241	1,215	1,208	1,266	1,189

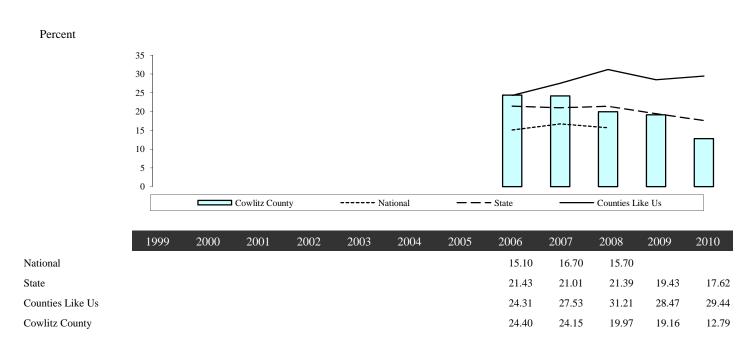
**Note:** The students tested who failed one or more content areas as a percent of all students tested at the 4th grade level. Tests are given in the spring of the year. Data for 2008 is for students in the 4th grade during the school year 2007/2008. By contractual agreement data is suppressed when less than ten students were tested to avoid individual student identification.

In 2009-10 the 4th grade WASL was replaced by Measurements of Student Progress (MSP). This test was built on the same framework as the WASL, but contain fewer questions. It is considered equivalent by OSPI.

**State Source:** Office of Superintendent of Public Instruction, Instructional Programs, Curriculum and Assessment, Grade 4 Failing In One Or More Content Areas.

Updated 3/22/2012

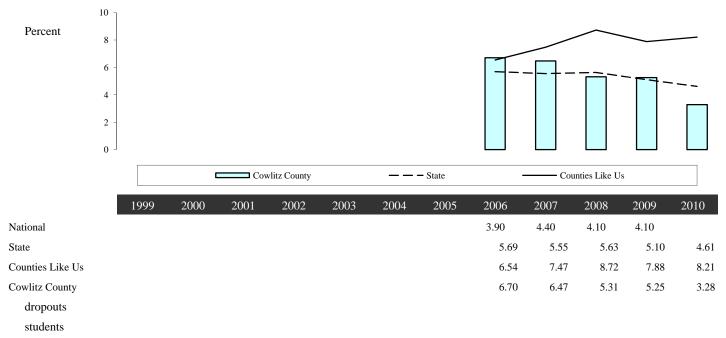
# **High school Cohort (Cumulative) Dropouts**



**Note:** A cumulative or cohort dropout rate is based on the percentage of students who began grade 9 in a given year but dropped out of school over a four-year period and did not receive a high school diploma. The Cohort (Cumulative) Dropout Rate formula is: 100-(100\*(1-grade 9 dropout rate)\*(1-grade 10 dropout rate)\*(1-grade 11 dropout rate)\*(1-grade 12 dropout rate)). Due to the complexity of this formula numerators and denominators have not been listed here, but are available at http://www.k12.wa.us/DataAdmin/pubdocs/GradDropout/.

State Source: Office of Superintendent of Public Instruction, Graduation and Dropout Statistics for Washington.

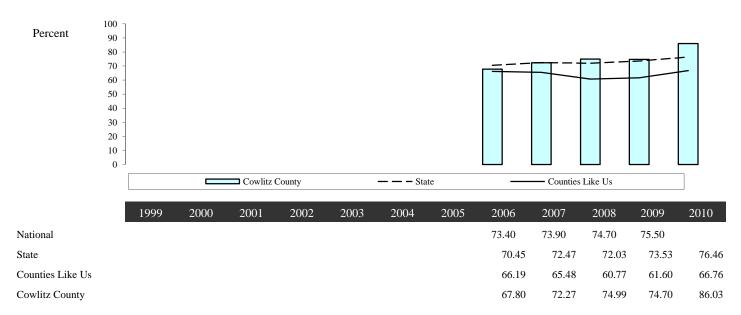
# **Annual (Event) Dropouts**



**Note:** The proportion of students enrolled in grades 9-12 who drop out in a single year without completing high school. This indicator answers the question "How many high-school students left school without graduating this year?". This is the total number of students that drop out of school from grades 9 through 12, divided by the total number of students in grades 9 through 12, less the number of students that transferred out of the district/school. Additional Information on using academic indicators is available in technical notes. More information about graduation and dropout rates in Washington State can be found online at: http://www.k12.wa.us/dataadmin.

State Source: Office of Superintendent of Public Instruction, Graduation and Dropout Statistics for Washington.

## **On-time Graduation**



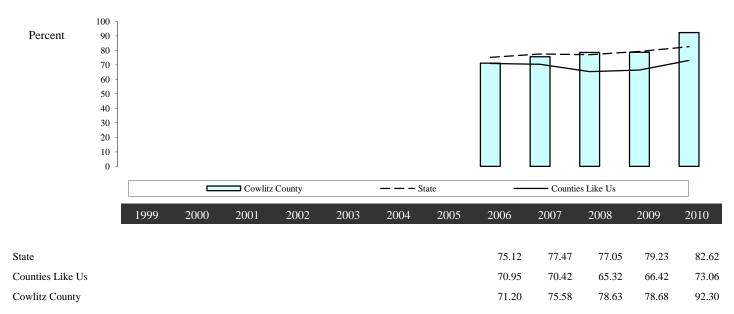
**Note:** The percent of students who graduate in four years to complete their degree. The Washington State Board of Education establishes minimum credit requirements, the Culminating Project and the High School and Beyond Plan. The Washington State Legislature requires state testing. To earn a high school diploma, a student must:

- Earn high school credit
- Pass state tests or approved alternatives to those tests
- Complete a Culminating Project
- Complete a High School and Beyond Plan.

The On-Time Graduation Rate formula is: 100\*(1-grade 9 dropout rate)\*(1-grade 10 dropout rate)\* (1-grade 11 dropout rate)\*(1-grade 12 dropout rate-grade 12 continuing rate). Due to the complexity of this formula numerators and denominators have not been listed here, but are available at http://www.k12.wa.us/DataAdmin/pubdocs/GradDropout/. Additional Information on using academic indicators is available in technical notes.

State Source: Office of Superintendent of Public Instruction, Graduation and Dropout Statistics for Washington.

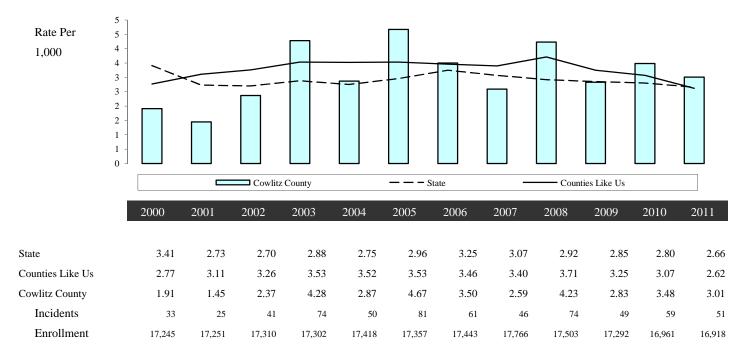
## **Extended Graduation**



**Note:** The percent of students who graduate including those students who stay in school and take more than four years to complete their degree. The Extended Graduation formula is: (the number of on-time and late graduates)/(the number of on-time graduates divided by the on-time graduation rate). A large difference in the size of the on-time and extended graduation rates may indicate that a district or school is working hard to keep students in school or to have dropouts return to school and graduate. Additional Information on using academic indicators is available in technical notes.

State Source: Office of Superintendent of Public Instruction, Graduation and Dropout Statistics for Washington.

# Weapons Incidents in School

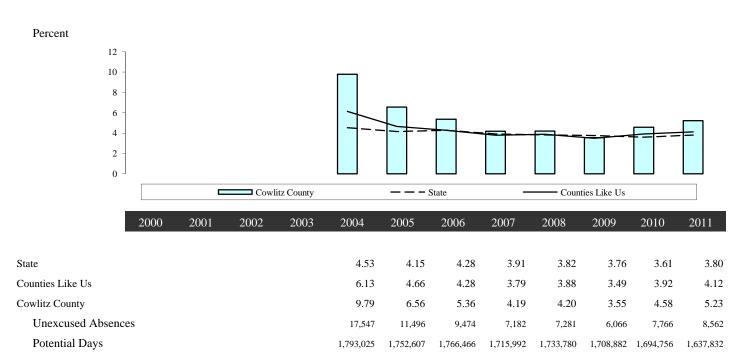


**Note:** The reported incidents involving guns and other weapons at any grade level per 1000 students enrolled in October of all grades.

**State Source:** Office of Superintendent of Public Instruction, Information Services, Safe and Drug-free Schools: Report to the Legislature on Weapons in Schools RCW 28A.320.130

Updated 3/26/2012

#### **Unexcused Absences for Students in Grades 1 to 8**

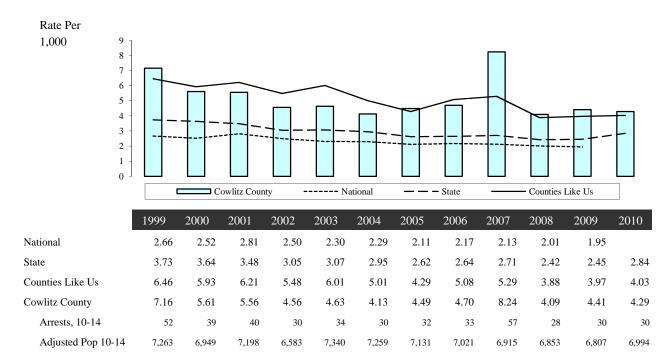


**Note:** The unexcused absences for students in grades 1-8 as a percent of the total student days possible. Potential school days are the number of days students were taught from the first day of school through May 31 in each school building multiplied by the net served students in grades 1-8 in that building. The definition of an unexcused absence is a local decision, so the definition differs among schools and districts. In general, a student who has an unexcused absence has not attended a majority of hours or periods in a school day, or has not complied with a more restrictive district policy, and has not met the conditions for an excused absence (see RCW 28A.225.020).

State Source: Office of Superintendent of Public Instruction, Washington State Report Card, Unexcused Absence Files.

Updated 12/15/2011

## Arrests (Age 10-14), Alcohol- or Drug-Related



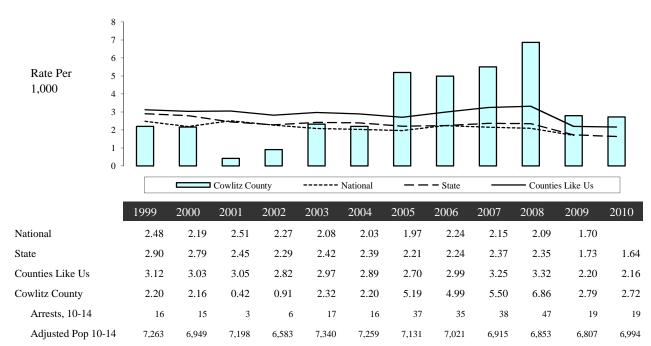
**Note:** The arrests of younger adolescents (age 10-14) for alcohol and drug law violations, per 1,000 adolescents (age 10-14). Alcohol violations include all crimes involving driving under the influence, liquor law violations, and drunkenness. For children, arrests for liquor law violations are usually arrests for minor in possession. Drug law violations include all crimes involving sale, manufacturing, and possession of drugs.

- 1) Denominators are adjusted by subtracting the population of police agencies that did not report arrests to Uniform Crime Report (UCR). In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.
- 2) The DUI portion of this measure is likely understated, because arrests made by the State Patrol are not attributable to counties. State Patrol arrests are included in the state rates.

**State Source:** Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

#### Arrests (Age 10-14), Vandalism

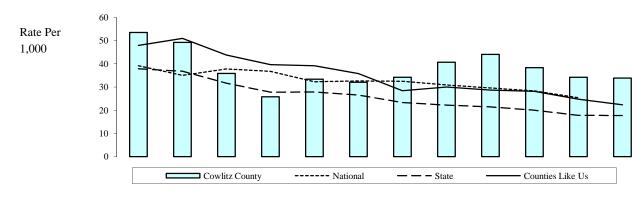


**Note:** The arrests of younger adolescents (age 10-14) for vandalism (including residence, non-residence, vehicles, venerated objects, police cars, or other) per 1,000 adolescents (age 10-14). Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

**State Source:** Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

## **Total Arrests of Adolescents (Age 10-14)**



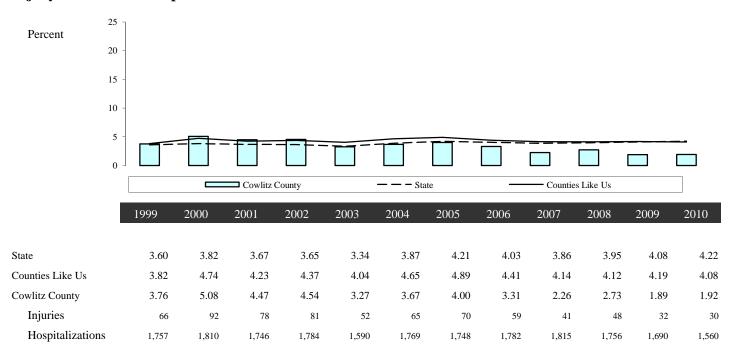
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
National	39.19	35.05	37.82	36.76	32.27	32.61	32.50	30.90	29.57	28.35	25.41	
State	37.85	36.84	31.69	27.81	27.87	26.57	23.29	22.21	21.44	19.99	17.80	17.75
Counties Like Us	47.97	50.98	43.82	39.63	39.17	35.82	28.45	29.99	28.71	28.14	24.76	22.38
Cowlitz County	53.56	49.22	35.84	25.82	33.38	32.10	34.22	40.73	44.11	38.38	34.23	33.89
Arrests, 10-14	389	342	258	170	245	233	244	286	305	263	233	237
Adjusted Pop 10-14	7,263	6,949	7,198	6,583	7,340	7,259	7,131	7,021	6,915	6,853	6,807	6,994

**Note:** The arrests of adolescents (age 10-14) for any crime, per 1,000 adolescents (age 10-14). Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

**State Source:** Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

#### Injury or Accident Hospitalizations for Children



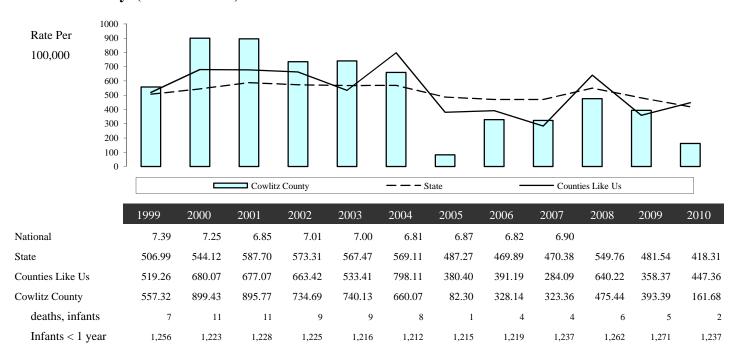
**Note:** The child injury or accident hospitalizations as a percent of all hospitalizations for children (age birth-17). Suppression code definitions for yearly rates are explained in Technical Notes. Due to contractual agreement data may not be displayed for areas with less than 100 hospitalizations.

**State Source:** Department of Health, Office of Hospital and Patient Data Systems, Comprehensive Hospital Abstract Reporting System (CHARS)

Updated

9/24/2011

#### **Infant Mortality (Under 1 Year)**



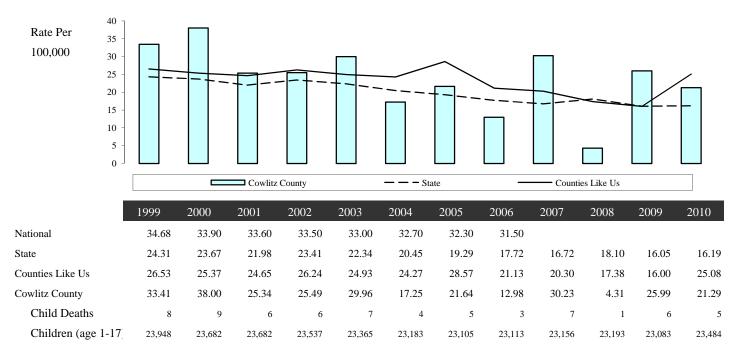
**Note:** The deaths, of infants under one year of age, per 100,000 population of infants under one year of age. Suppression code definitions for yearly rates are explained in Technical Notes. Rates are not reported when fewer than 100 deaths occurred in an area.

**State Source:** Department of Health, Center for Health Statistics, Death Certificate Data File. Population Estimates: Washington State Department of Health

**National Source:** U.S. Department of Health and Human Services, Centers for Disease Control and Health Statistics National Center for Health Statistics, Division of Health Services, National Vital Statistics Reports

Updated 9/19/2011

#### **Child Mortality (Ages 1-17)**



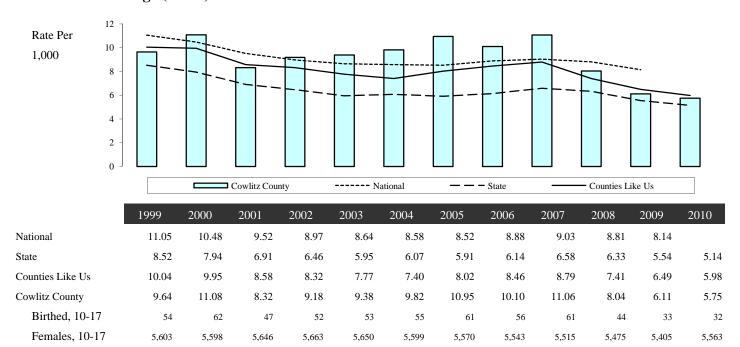
**Note:** The deaths, of children 1 to 17 years of age, per 100,000 population of children 1 to 17 years of age. Suppression code definitions for yearly rates are explained in Technical Notes. Rates are not reported when fewer than 100 deaths occurred in an area.

**State Source:** Department of Health, Center for Health Statistics, Death Certificate Data File. Population Estimates: Washington State Department of Health

**National Source:** U.S. Department of Health and Human Services, Centers for Disease Control and Health Statistics National Center for Health Statistics, Division of Health Services, National Vital Statistics Reports

Updated 9/19/2011

#### Births to School-Age (10-17) Mothers



**Note:** The live births to adolescents (age 10-17) per 1,000 females (age 10-17). Rate changes in data result from on-going updates to birth records. Suppression code definitions for yearly rates are explained in Technical Notes. Due to contractual agreement data may not be displayed for areas with less than 100 births.

**State Source:** Department of Health, Center for Health Statistics, Birth Certificate Data File. Population Estimates: Washington State Department of Health

National Source: U.S. Department of Health and Human Services, Centers for Disease Control and Health Statistics National Center for Health Statistics, Division of Health Services, National Vital Statistics Reports

Updated

9/17/2011

## **Sexually Transmitted Disease Cases (Birth-19)**

1.79

49

27,428

2.73

27,485

75

2.08

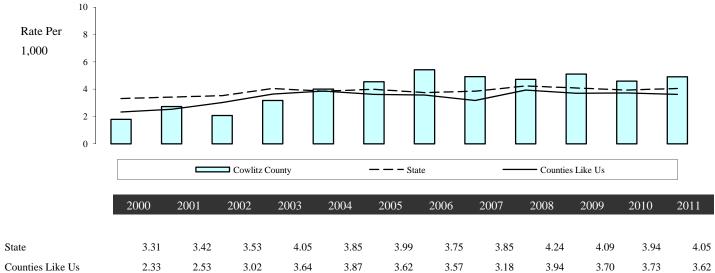
27,348

57

3.17

27,160

86



**Note:** The reported cases of gonorrhea, syphilis, or chlamydia in children (age birth-19) per 1,000 adolescents (age birth-19). Suppression code definitions for yearly rates are explained in Technical Notes. Due to contractual agreement data may not be displayed for populations less than 100.

4.00

108

26,991

4.54

122

26,900

4.92

133

27,009

4.72

128

27,135

5.10

138

27,065

4.59

126

27,475

4.91

135

27,475

5.42

146

26,918

**State Source:** Department of Health, Sexually Transmitted Disease (STD) Services, Sexually Transmitted Disease Reported Cases. Population Estimates: Washington State Department of Health

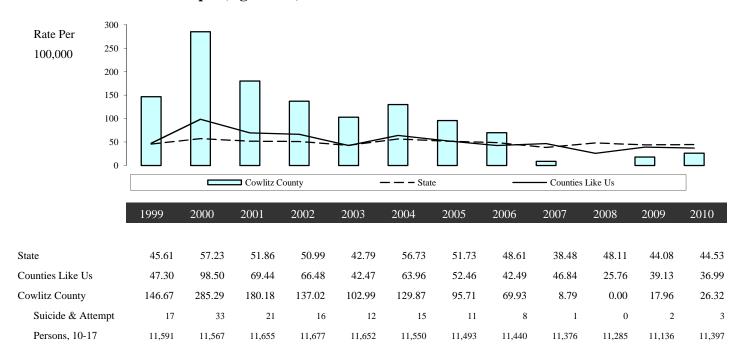
Updated 5/10/2012

Cowlitz County

Cases, birth-19

Persons, birth-19

#### Suicide and Suicide Attempts (Age 10-17)

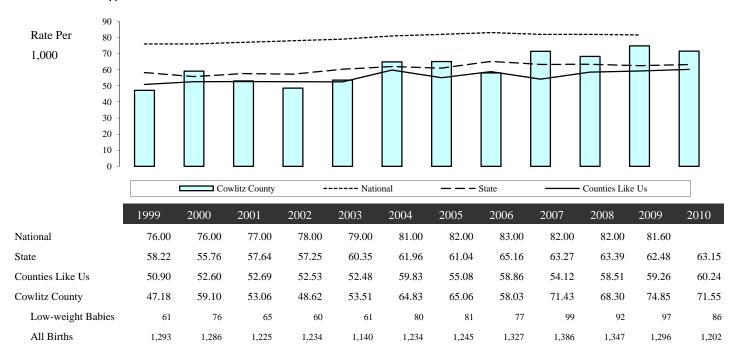


**Note:** The adolescents (age 10-17) who committed suicide or were admitted to the hospital for suicide attempts, per 100,000 adolescents (age 10-17). Suicides are based on death certificate information. Suicide attempts are based on hospital admissions, but do not include admissions to federal hospitals. Suppression code definitions for yearly rates are explained in Technical Notes. Due to contractual agreement data may not be displayed for locations with adolescent populations less than 100.

**State Source:** Department of Health, Office of Hospital and Patient Data Systems, Comprehensive Hospital Abstract Reporting System (CHARS) and Department of Health, Center for Health Statistics Death Certificate Data. Population Estimates: Washington State Department of Health

Updated 9/24/2011

#### Low Birthweight Babies



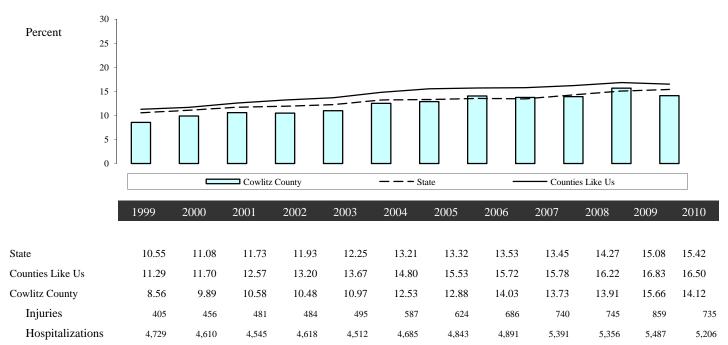
**Note:** The babies born with low birthweight, per 1,000 live births. Low birthweight is less than 2,500 grams. Rate changes in data may result from on-going updates to birth records. No rate is given when the number of live births is less than 100 in the geographic area. Suppression code definitions for yearly rates are explained in Technical Notes.

State Source: Department of Health, Center for Health Statistics, Birth Certificate Data File

**National Source**: U.S. Department of Health and Human Services, Centers for Disease Control and Health Statistics National Center for Health Statistics, Division of Health Services, WONDER Data System

Updated 9/17/2011

## Injury or Accident Hospitalizations for Women

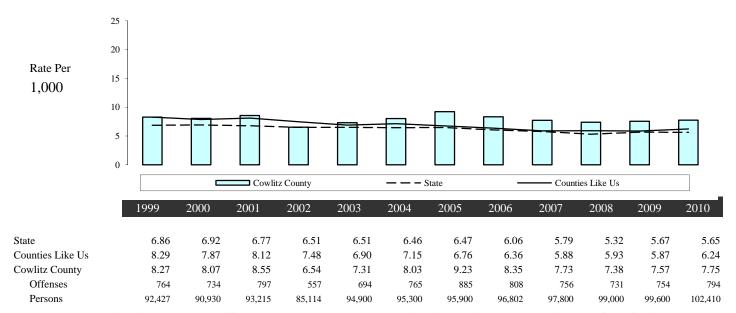


**Note:** The injury or accident hospitalizations for women as a percent of all hospitalizations for women (age 18+). Suppression code definitions for yearly rates are explained in Technical Notes. Due to contractual agreement data may not be displayed for areas with less than 100 hospitalizations.

**State Source:** Department of Health, Office of Hospital and Patient Data Systems, Comprehensive Hospital Abstract Reporting System (CHARS).

Updated 9/24/2011

#### Offenses, Domestic Violence



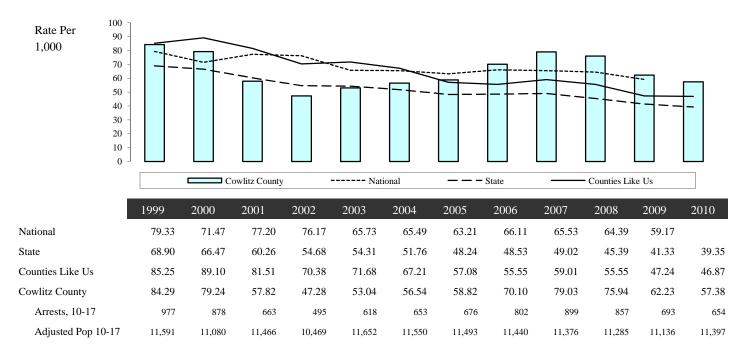
**Note:** The domestic violence-related offenses, per 1,000 persons. Domestic violence includes any violence of one family member against another family member. Family can include spouses, former spouses, parents who have children in common regardless of marital status, adults who live in the same household, as well as parents and their children.

Offenses differ from arrests. While funding and grants are associated with participation, reporting is not mandatory. Offenses are incidence reporting. When more than one victim is involved an offence is filed for each victim. Multiple property violations performed at the same incident are counted as one offence. However when both types of events happen, only the victim incidents are reported as offenses. Offenses focus on the nature of the crime, while arrests focus on the apprehended accused perpetrator. Many offenses occur without arresting perpetrators.

Denominators are adjusted by subtracting the population of police agencies that did not report offenses. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted and the agencies not reporting, see the appendix on Non-Reporting Agencies and Population. Suppression code definitions for yearly rates are explained in Technical Notes.

**State Source**: Washington Association of Sheriffs and Police Chiefs, UCR Division. Population Estimates: Washington State Department of Health

#### **Total Arrests of Adolescents (Age 10-17)**

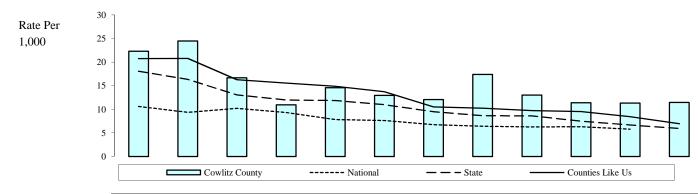


**Note:** The arrests of adolescents (age 10-17) for any crime, per 1,000 adolescents (age 10-17). Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

**State Source:** Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

## Arrests (Age 10-14), Property Crime



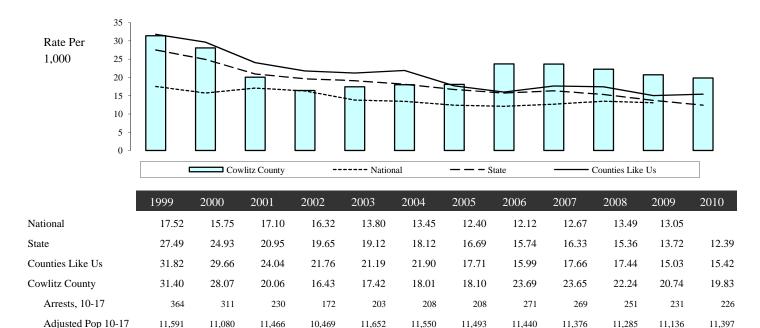
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
National	10.59	9.34	10.18	9.31	7.82	7.63	6.73	6.39	6.28	6.30	5.80	
State	18.07	16.32	13.05	11.96	11.84	10.97	9.47	8.64	8.61	7.48	6.68	5.92
Counties Like Us	20.72	20.77	16.27	15.54	14.86	13.71	10.51	10.24	9.72	9.53	8.42	6.94
Cowlitz County	22.30	24.46	16.67	10.94	14.58	12.95	12.06	17.38	13.02	11.38	11.31	11.44
Arrests, 10-14	162	170	120	72	107	94	86	122	90	78	77	80
Adjusted Pop 10-14	7,263	6,949	7,198	6,583	7,340	7,259	7,131	7,021	6,915	6,853	6,807	6,994

**Note:** The arrests of younger adolescents (age 10-14) for property crimes, per 1,000 adolescents (age 10-14). Property crimes include all crimes involving burglary, larceny-theft, motor vehicle theft, and arson. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the area will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

**State Source:** Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

#### Arrests (Age 10-17), Property Crime



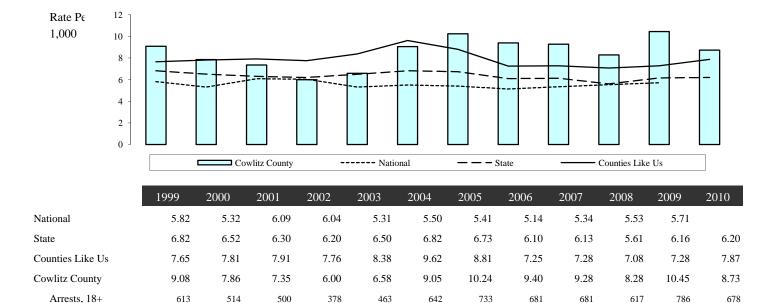
Note: The arrests of adolescents (age 10-17) for property crimes, per 1,000 adolescents (age 10-17). Property crimes include all crimes involving burglary, larceny-theft, motor vehicle theft, and arson. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

State Source: Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Updated 10/18/2011 11,397

#### Arrests (Age 18+), Property Crime



**Note:** The arrests of adults (age 18+) for property crimes, per 1,000 adults (age 18+). Property crimes include all crimes involving burglary, larceny-theft, motor vehicle theft, and arson. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

70,319

70,904

71,580

72,470

74,545

75,246

77,689

73,406

**State Source:** Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

Updated 10/18/2011

Adjusted Pop 18+

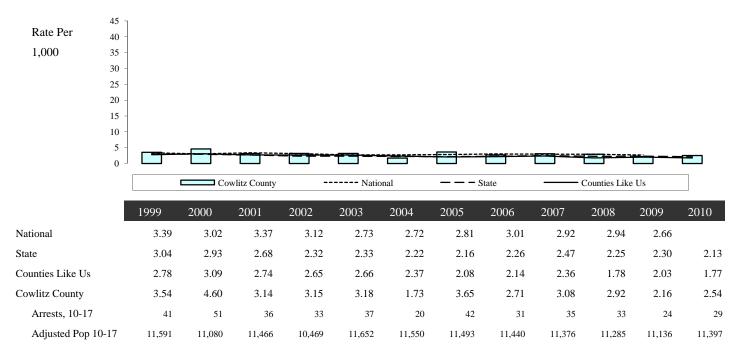
67,496

65,395

68,019

62,959

#### Arrests (Age 10-17), Violent Crime

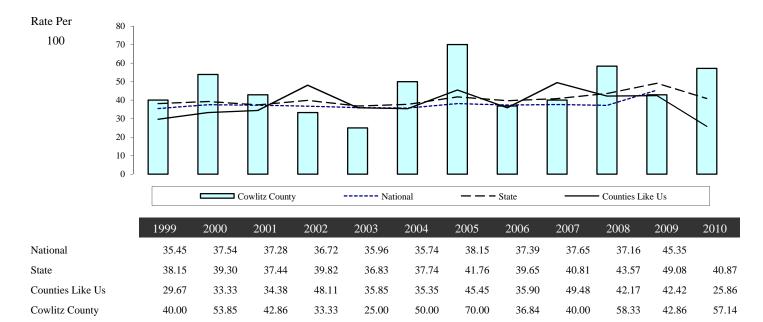


**Note:** The arrests of adolescents (age 10-17) for violent crime per 1,000 adolescents (age 10-17). Violent crimes include all crimes involving criminal homicide, forcible rape, robbery, and aggravated assault. Simple assault is not defined as a violent crime. Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

**State Source:** Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

## **Alcohol-Related Traffic Fatalities Per All Traffic Fatalities**



**Note:** The alcohol-related traffic fatalities, per 100 traffic fatalities. "Alcohol-related" means that the officer on the scene determined that at least one driver involved in the accident "had been drinking." Thus, "Alcohol-related" includes but is not limited to the legal definition of driving under the influence. Care should be taken since small numbers of events can cause unreliable rates in some counties.

State Source: Washington State Patrol, Records Section, Traffic Collisions in Washington State, Accident Records Database

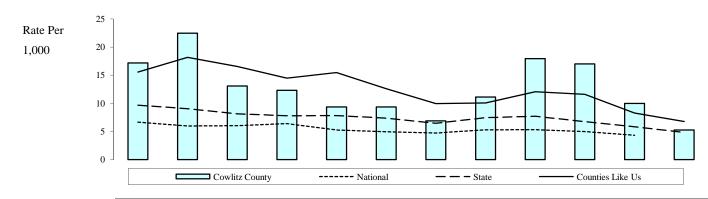
National Source: National Center for Statistics and Analysis, Fatal Accident Reporting System (FARS)

Updated 11/30/2011

Alcohol-related

Fatalities

## Arrests (Age 10-17), Alcohol Violation



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
National	6.66	5.98	6.02	6.38	5.25	4.94	4.72	5.27	5.31	4.98	4.32	
State	9.66	9.03	8.13	7.79	7.81	7.36	6.46	7.44	7.70	6.72	5.81	4.82
Counties Like Us	15.56	18.17	16.54	14.47	15.47	12.60	9.95	10.05	12.05	11.61	8.26	6.77
Cowlitz County	17.17	22.47	13.08	12.32	9.35	9.35	6.87	11.10	17.93	17.01	9.97	5.26
Arrests, 10-17	199	249	150	129	109	108	79	127	204	192	111	60
Adjusted Pop 10-17	11,591	11,080	11,466	10,469	11,652	11,550	11,493	11,440	11,376	11,285	11,136	11,397

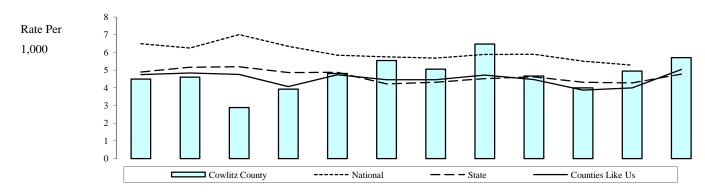
**Note:** The arrests of adolescents (age 10-17) for alcohol violations, per 1,000 adolescents (age 10-17). Alcohol violations include all crimes involving driving under the influence, liquor law violations, and drunkenness. For children, arrests for liquor law violations are usually arrests for minor in possession.

- 1) Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.
- 2) The DUI portion of this measure is likely understated, because arrests made by the State Patrol are not attributable to counties. State Patrol arrests are included in the state rates.

**State Source:** Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

## Arrests (Age 10-17), Drug Law Violation



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
National	6.49	6.24	7.00	6.34	5.84	5.75	5.67	5.88	5.89	5.50	5.28	
State	4.89	5.16	5.19	4.86	4.87	4.22	4.31	4.52	4.62	4.31	4.27	4.77
Counties Like Us	4.74	4.83	4.75	4.07	4.73	4.45	4.45	4.72	4.46	3.87	3.99	5.03
Cowlitz County	4.49	4.60	2.88	3.92	4.81	5.54	5.05	6.47	4.66	3.99	4.94	5.70
Arrests, 10-17	52	51	33	41	56	64	58	74	53	45	55	65
Adjusted Pop 10-17	11,591	11,080	11,466	10,469	11,652	11,550	11,493	11,440	11,376	11,285	11,136	11,397

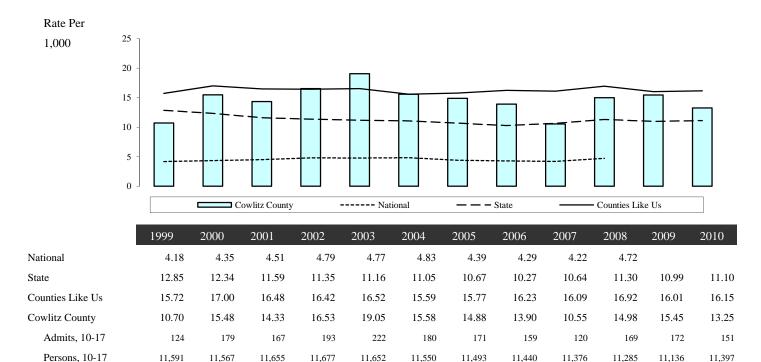
**Note:** The arrests of adolescents (age 10-17) for drug law violations, per 1,000 adolescents (age 10-17). Drug law violations include all crimes involving sale, manufacturing, and possession of drugs.

Denominators are adjusted by subtracting the population of police agencies that did not report arrests to UCR. In spite of this population adjustment, when the non-reporting police jurisdiction is where much of the crime occurs, the rate for the county will be lower than it would be if that jurisdiction was included. For percent subtracted, suppression code definitions and the agencies not reporting, see the Technical Notes and the appendix on Non-Reporting Agencies and Population.

**State Source:** Washington Association of Sheriffs and Police Chiefs, Uniform Crime Report (UCR), Tables 40 and 50. Population Estimates: Washington State Department of Health

National Source: US Department of Justice, Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics Online

## Clients of State-Funded Alcohol or Drug Services (Age 10-17)



**Note:** The adolescents (age 10-17) receiving state-funded alcohol or drug services, per 1,000 adolescents 10-17. Counts of clients are unduplicated so that those receiving services more than once during the year are only counted once for that year. State-funded services include treatment, assessment, and detox. Persons in Department of Corrections treatment programs are not included.

**State Source:** Department of Social and Health Services, Division of Behavioral Health and Recovery, Treatment and Assessment Report Generation Tool (TARGET). Population Estimates: Washington State Department of Health

**National Source:** Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS)

#### **Topics:**

Counting Alcohol- or Drug-related Deaths
Uniform Crime Report - Non-Reporting Police Jurisdictions
Suppression Codes
Counties Like Us
Duplicated and Unduplicated Counts
CORE-GIS Conversion Process and Weighted Reliability Index
Rates – Why is Raw Data Converted to Rates?
Standardization of CORE Indicators
Where are the roadblocks to learning in our communities?

#### **Counting Alcohol- or Drug-related Deaths**

AOD deaths are identified by matching all the contributory causes of death from death certificate records to a list of causes that are considered AOD-related. The deaths identified as AOD-related then may be summed to provide area totals. Dividing the total AOD-related deaths by all deaths in an area gives the percent of all deaths that are alcohol and drug related. Lists of underlying causes of death that are AOD-related have been developed in several studies. Citations for these studies are listed prior to the AOD attribution tables. AOD-related deaths used in this report are determined using a comprehensive assembly of disease, accident, and injury codes identified in those studies. The codes are based upon the International Classification of Diseases, Ninth Revision (ICD-9) from 1990 to 1998 or International Classification of Diseases, Tenth Revision (ICD-10) after 1998.

The identified AOD-related causes of death may be either fully attributable or sometimes attributable to alcohol or drugs. Some contributory causes of death are explicit in their mention of alcohol or drugs. Examples include alcoholic cirrhosis of the liver (ICD-9 code 571.2), alcohol and drug dependence syndromes (ICD-9 codes 303 and 304, respectively), and drug poisonings (ICD-9 codes E850 through E859). All deaths of this sort are fully, or 100%, attributable to alcohol or drug abuse and are considered direct AOD-related deaths.

Other contributory causes of death are related only sometimes to alcohol or drugs. For example, epidemiological studies have shown that, among persons over 35 years of age, 60% of deaths due to chronic pancreatitis (ICD-9 code 577.1) and 75% of malignant neoplasms of the esophagus (ICD-9 code 150) are alcohol-related. For persons of all ages, 42% of motor vehicle traffic and nontraffic deaths (ICD-9 codes E810 through E825) are alcohol-related. The appropriate percentage of such indirectly attributable deaths are also counted toward totals for AOD-related deaths.

The tables on the following pages characterize the different diseases, injuries, and accidents by: name, ICD-9 or ICD-10 code, percent attributable to alcohol or drugs, age of inclusion. Information sources are listed below.

- 1. Schultz J, Rice D, & Parker D. 1990. Alcohol-related mortality and years of potential life lost United States, 1987. Morbidity and Mortality Weekly Report, 39, 173-178.
- 2. Rice D, et al. 1990. The Economic Costs of Alcohol and Drug Abuse and Mental Illness: 1985. Report submitted to the Office of Financing and Coverage Policy of the Alcohol, Drug Abuse, and mental health Administration, U.S. Department of Health and Human Services. San Francisco, CA: Institute for Health and Aging, University of California.
- **3.** Fox K, Merrill J, Chang H, & Califano J. 1995. Estimating the Costs of Substance Abuse to the Medicaid Hospital Care Program. American Journal of Public Health, 85(1), 48-54.
- **4.** Seattle-King County HIV/AIDS Epidemiology Unit and Washington State Office of HIV/AIDS Epidemiology and Evaluation. 1994. Washington State/Seattle-King County HIV/AIDS Epidemiology Report (2nd Quarter, 1994), p. 4.

#### **Technical Notes**

Disease Category	ICD-10 Code	ICD-9 Code	Attrib	Age
Diseases Directly Attributable to				18-
Alcoholic psychoses	F10, F10.3-F10.9	291	100%	>=15
Alcohol dependence syndrome	F10.2	303	100%	>=15
Alcoholic polyneuropathy	G62.1	357.5	100%	>=15
Alcoholic cardiomyopathy	I42.6	425.5	100%	>=15
Alcoholic gastritis	K29.2	535.3	100%	>=15
Alcoholic fatty liver	K70.0	571.0	100%	>=15
Acute alcoholic hepatitis	K70.1, K70.4	571.1	100%	>=15
Alcoholic cirrhosis of the liver	K70.3	571.2	100%	>=15
Alcoholic liver damage, other	K70.2, K70.9, K70	571.3	100%	>=15
Excessive blood level of alcohol,	R78.0, T51	790.3. 980	100%	>=0
toxic effect of alcohol	170.0, 131	750.5.500	10070	/ -0
Accidental poisoning by alcohol	X45, Y15	E860	100%	>=0
Nondependent abuse of Alcohol	F10.1	305.0	100%	>=0
Alcohol-induced pseudo-Cushing's		Not Available in ICD-9	100%	>=15
Degeneration of nervous system du		Not Available in ICD-9	100%	>=15
Alcoholic myopathy	G72.1	Not Available in ICD-9	100%	>=15
Maternal care for (suspected) dama		Not Available in ICD-9	_	>=15
Newborn affected by maternal use		Not Available in ICD-9	100%	>=0
Fetal alcohol syndrome (dysmorph		Not Available in ICD-9	100%	>=0
Suicide attributable to alcohol	X65	Not Available in ICD-9	100%	>=0
Alcoholic Pellagra	E52	265.2	100%	>=0
Diseases Indirectly Attributable t		203.2	100%	>=0
Ÿ	O Alcohol	I		1
Neoplasms	C50 D05	174 0 174 0 222 0	120/ E	. 25
Breast	C50, D05	174.0-174.9, 233.0	13% F	1
Esophagus	C15, D00.1	150.1-150.9, 230.1	75%	>=35
Larynx	C32, D02.0	161.0161.9, 231.0	50%	>=35
			M,	
T 1 1 1	C00 C14 D00 0	140 1 141 0 142 0 140 0 220 0	40% F	1
Lip, oral cavity, pharynx	C00-C14, D00.0	140.1-141.9, 143.0-149.9, 230.0	50%	>=35
			M,	
			40% F	
Liver	C22, D01.5	155.0-155.2, 230.8	29%	>=35
Cardiovascular				
Cardiomyopathy	I42.0 - I42.2, I42.5, I42.7- I42.9	425.1, 425.4, 425.9	40%M	
Hypertension	I10-113, O10-O14, O16	401.0-404.9, 642.0, 642.2, 642.9	11%	>=35
Digestive System				
Cirrhosis	K71.7, K74.5-K74.6	571.5	74%	>=35
Duodenal Ulcers	K26	532.0-532.9	10%	>=35
Pancreatitis, acute	K85	577.0	47%	>=35
Pancreatitis, chronic	K86.1- K86.3, K86.9	577.1, 577.2, 577.9	72%	>=35
Other Diseases or Conditions				
Epilepsy	G40.3,G40.4,G40.6,G40.9	345.1, 345.3, 345.9	30%	>=15
Seizures	R56	780.3	41%	>=15
Tuberculosis	A16-A19	011-013, 017, 018	25%	>=15
Accident or Injury Causes : Motor	V02–V04, V09.0, V09.2, V12–V14,	E810-E825	42%	>=0
vehicle traffic and non-traffic	V19.0–V19.2, V19.4–V19.6, V20–V79,			
accidents	V80.3– V80.5, V81.0–V81.1, V82.0–V82.1,			
	V83–V86, V87.0–V87.8, V88.0–V88.8,			
	V89.0, V89.2			

Technical Notes									
Disease Category	ICD-10 Code	ICD-9 Code	Attrib	Age					
Pedal cycle and other road vehicle	V01, V05–V06, V09.1, V09.3–V09.9,	E826-E829	20%	>=0					
accidents	V10–V11, V15–V18, V19.3, V19.8–V19.9,								
	V80.0–V80.2, V80.6–V80.9, V82.2–V82.9,								
	V87.9, V88.9, V89.1, V89.3, V89.9								
Water transport accidents	V90-V94	E830-E838	20%	>=0					
Air & space transport accidents	V95-V97	E840-E845	16%	>=0					
Accidental falls	W00-W19	E880-E888	35%	>=15					
Accidents caused by fire	X00-X09	E890-E899	45%	>=0					
Accidental drowning and	W65-W74	E910	38%	>=0					
submersion									
	now considered direct AOD-related deaths, o	ther suicides are not apportioned. The	his brings	our					
definitions into compliance with NO	CHS definitions.								
Homicide & other purposely	X86–Y09, Y87.1	E960-E962, E962.1-E969	46%	>=15					
inflicted injury									
Other	X31, W79, W50-W52, W20- W34, Y15-Y19	E901, E911, E917-E920, E922	25%	>=15					
Other category includes: Excessive	L cold, Choking on food in airway; Striking aga	inst or struck accidentally by objects	or person	ue.					
	objects; Accidents caused by machinery; Accidents								
		some caused by cutting and pictering	mod unici	160.					
Diseases Directly Attributable to 1		<del>,</del>		T					
Drug psychoses	F11-F16, F18-F19	292	100%	>=0					
Drug dependence syndrome	F11-F16, F18-F19	304	100%	>=0					
Polyneuropathy due to drugs	G62.0	357.6	100%	>=15					
Drug dependence during	F11-F16, F18-F19	648.3	100%	>=0					
pregnancy									
Suspected damage to fetus from	O35.5,	655.5	100%	>=0					
drugs									
Noxious influences affecting fetus	P04.4	760.7	100%	>=0					
Drug reactions, intox., withdrawal	P96.1	779.4, 779.5	100%	>=0					
specific to newborn									
Selected drug poisonings	R78,R78.1-R78.6, T38; excludes Y40-59.9	962, 965, 967-971, 977 excludes	100%	>=0					
selected drug personnings	(therapeutic use)	E930-949	10070						
Selected accidental drug	X40-X44	E850-E858	100%	>=0					
poisonings		2000 2000	10070						
Accidental Poisonings (magic	X46-X49	E861-E869	100%	>=0					
mushrooms, huffing and other		2001 2007	10070						
drug use)									
Nondependent abuse of drugs	F11-F16, F18-F19	305.2-305.9	100%	>=0					
Assault by poisoning using drugs	x85	E962.0	100%	>=0					
and medicaments	A05	1302.0	10070	>-0					
Drug induced myopathy	G72.0	Not Available in ICD-9	100%						
Poisoning by drugs, accidentally or		E980.0-E980.5	100%	>=0					
purposely inflicted	110 114	L)00.0 L)00.5	10070	>=0					
Suicides attributable to drugs	x60-64	E950.0-E950.5	100%	>=0					
Diseases Indirectly Attributable to	1	12750.0 2750.5	10070	/-U					
AIDS (from IV drug use exposure)		042.0-044.9	5%	>=15					
Cardiovascular			+						
Endocarditis	I33.0, I33.9	421.0, 421.9	75%	>=15					
Other	155.0, 155.7	1210, 1210	7570	7-13					
Hepatitis A	B15.9	70.1	12%	>=15					
Hepatitis B	B16-B16.9	70.2, 70.3	36%	>=15					
Hopatitis C	R17 R10 0	70.5, 70.0	10%	>=13					

Hepatitis C

B17-B19.9

10%

70.5, 70.9

#### **Uniform Crime Report - Non-Reporting Police Jurisdictions**

Most law enforcement agencies report arrest and offence data to the Washington Association of Sheriffs and Police Chiefs (WASPC), which in turn provides data to the FBI's Uniform Crime Reporting Program. This is the source of our data. Some jurisdictions do not report all arrests and offenses, some report partial years, and some withhold certain categories of arrests or offenses. Reporting is voluntary for arrests and offenses. Offenses are more likely to be reported since some funding is associated with reporting. Offenses are incidence reporting. When more than one victim is involved an offence is filed for each victim. Multiple property violations performed at the same incident are counted as one offence.

However when both types of events happen, only the victim incidents are reported as offenses. Offenses focus on the nature of the crime, while arrests focus on the apprehended accused perpetrator. Many offenses occur without arresting perpetrators. Sometimes charges are dropped and sometimes no perpetrator is ever found. No perpetrator age can be assigned to offence data so the entire age range of population is used as the denominator. Some data is reported to UCR in a new system which is not yet compatible with UCR output reports and UCR cannot extract that data for this report but does include it in their reports to the FBI. We list those jurisdictions as non-reporting although UCR considers them to have reported. Only part one offenses are reported in the Uniform Crime Report, some agencies have no part one crimes to report. Those agencies are listed with zero events, not as non-reporting.

Information on the Non-reporting Population and Non-reporting Agencies are available only in the individual county and locale level reports. Each area report shows how and when that area's police jurisdictions reported data to the Washington Association of Sheriff's and Police Chiefs. If your area is one with jurisdictions having a significant amount of incomplete data, be very careful that you adjust your risk assessment to reflect this. In other words, the reported arrest rates may not adequately reflect the entire area. This will be true especially in those cases where the non-reporting police jurisdictions have either very high or very low arrest rates, compared to the rest of the area.

In order to compensate for missing police reports, we have adjusted the denominator in the rate calculation so that it reflects only the proportion of the area for which we do have data. For instance, say area A, with a population of 40,000, has eight police districts. Now, if one of the police districts in the area did not report their arrests, the number of arrests would not be representative of the whole area. Therefore, we would not want to use the population of the whole area in the denominator because that would make the rate lower than it should be. The solution used in this report is to subtract the population of that missing police district from the area population. We follow the same procedure for police districts that report partial years: if they report only six months, we use only half of the population to calculate the rate.

Due to the uneven geographic distribution of crime, missing police data can cause spikes or dips in the trend data comparison of multiple consecutive years. We do not run into this problem in the state report because the county rates there (as opposed to the individual county reports) only report 5-year averages. However for individual county reports and reports for smaller areas like locales or districts the trend data can become unstable due to non-reporting. Alternately, the conversion of data from certain police jurisdictions to other areas like locales may not apportion directly causing too much of the data to be apportioned based on population rather than clearly assigned to one area. We use a weighted reliability index (WRI) to determine when the conversion is no longer reliable. An explanation of that process follows. We have tried to compensate for these and other issues by suppressing data which is likely to be affected.

#### **Suppression Codes for Yearly Trend Data**

**UN=Unreliable conversion** of events to report geography, failure of **weighted reliability index** (WRI). The WRI evaluation process is further explained in the section labeled 'CORE-GIS Conversion Process and Weighted Reliability Index'.

**SP**=Suppressed by agreement with data provider when denominator is below agreed level and may compromise a person's rights to confidentiality.

SN=Small Number Sample. Geography has less than 30 events in the denominator. More reliable at 5 year level or for larger area.

**NR**=Not reliable due to non-reporting of police jurisdictions data. Fifty percent or more of the population is not represented by the data due to non-reporting jurisdictions.

#### **Counties Like Us**

Knowing that your county has a particular rate for one of the indicators does not help you evaluate the importance of that indicator to your risk profile. You do not know if it is higher or lower than you could reasonably expect. It is more useful to compare your county rate to the state rate, which is the average for the whole state, and to other counties, especially counties that have some characteristics in common with your county. This is especially important when urban rates differ substantially from rural rates. The comparison we present is for a group of counties that are similar in characteristics related to prevention planning: population of young people (aged 10-24), the percentage of deaths in the county that are alcohol and drug-related, and a simple geographic division into Eastern and Western Washington. For each indicator the Counties Like Us rate is the average rate across all of the counties in the cluster.

The groupings for "Counties Like Us" are as follows:

Urban A\* - King County

Urban B\* - Pierce, Snohomish, and Spokane

Urban C – Benton, Clark, Kitsap, Thurston, Whatcom, and Yakima

Rural A – Ferry, Franklin, Grant, Klickitat, Okanogan, Pend Oreille, and Skamania

Rural B – Adams, Asotin, Chelan, Columbia, Douglas, Garfield, Kittitas, Lincoln,

Stevens, Walla, and Whitman

Rural C - Clallam, Cowlitz, Grays Harbor, Island, Jefferson, Lewis, Mason, Pacific,

San Juan, Skagit, Wahkiakum

#### **Duplicated and Unduplicated Counts**

In an unduplicated person count, each person is counted only once in a year for the specified activity or service type, even if they receive that service multiple times during the year. Examples include Temporary Assistance to Needy Families (TANF) Child Recipients, Food Stamp Recipients, and alcohol or drug treatment. Duplicated counts are made of events such as prison admissions, arrests, births, or admission to a hospital for attempted suicide. For instance, each time a person is admitted to a prison, that "event" is counted. Therefore, a person admitted more than once is included more than once in the total count.

#### **CORE-GIS Conversion Process and Weighted Reliability Index**

CORE-GIS obtains data from many government agency sources. The data are represented as events (e.g. # of teen births, # of crimes, # of clients) occurring within a given geographic unit. This geographic unit is generally the smallest that can be obtained from the agency source. For example, data may be available by school district, by zip code, by census tract or by police jurisdictions. CORE-GIS calls these geographic units the "source geography."

CORE-GIS data is usually reported at the geographic level of county or community – called in the rest of this report the "destination geography." Therefore, data usually needs to be converted from the "source geographies" to the "destination geography."

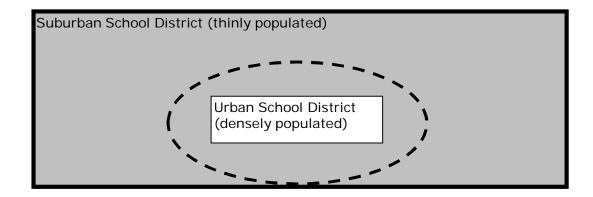
The conversion is based on an overlay process, in which the events occurring in small source geographies that are totally contained within the destination are combined with synthetic estimates of events occurring in source geographies that are partly within and partly outside the destination geography. The synthetic estimation is weighted by the population distribution between the source and destination areas. Therefore, it requires a small-scale count of the population underlying both source and destination geographies. This process is explained below through examples.

<sup>\*</sup> For comparison, King County is compared to Urban B, but average scores for the indicators in Urban B do not include King County.

Data being converted from a smaller geography (source geography) like school district to a larger geography (like a county) is usually fairly reliable because most of the smaller pieces fit neatly and wholly into the new geography. (See example 1).

The rectangles represent two possible data source geographies (one densely populated school district – Urban School District – and one thinly populated school district – Suburban School District – surrounding it). The large oval represents a report's destination geography such as county, locale or network.

#### Example 1



The following statements refer to the first example:

All of the events occurring in the urban school district can be attributed entirely to the destination geography.

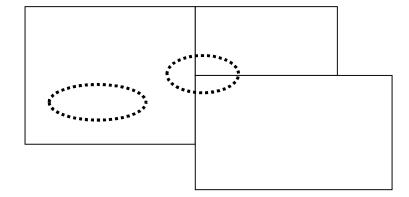
The events occurring in the split source geography (suburban school district, in this example) are distributed to the destination geography in the same proportion as the underlying population is distributed. If 40% of the suburban school district population lies within the destination geography, then 40% of its events are attributed to the destination geography.

These events are split by age, race and gender subgroups whenever possible, as are the populations. So the synthetic estimation is broken down that way also. If 40% of the young White population of the suburban school district lives in the destination geography, then 40% of the events occurring to young White people are attributed there. If, on the other hand, only 10% of the young American Indian population of the suburban school district lives in the destination geography, then only 10% of the events occurring to young American Indian people are attributed there.

While we can develop an algorithm to distribute all source geography populations to all destination geography populations, that distribution will not always be reliable.

For example, see the situation depicted in Example 2 below. Here we are trying to estimate the number of events contained in two very small destination geographies (the ovals). Could this synthetic estimate be reliable? Perhaps, if the small area within the ovals really is representative of the whole area -- but more likely not.

Example 2



A statistic is needed to assist researchers in determining when a destination geography's events cannot be reliably estimated using these processes. For CORE-GIS, that statistic is the Weighted Reliability Index (WRI).

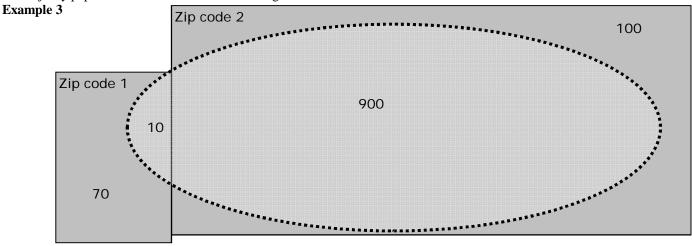
The amount of overlap between source and destination populations can vary from less than 1% to 99% -- only a little of a source population can live in a destination, or almost all of the source population can live in a destination.

The key underlying assumption behind the CORE-GIS Weighted Reliability Index is as follows:

## When most of the population for the source geography is also in the destination geography, we can be more certain of the reliability of the estimation process.

Therefore, the weighting process lets us calculate, for each source-geography/destination-geography combination, the reliability of each destination geography's estimate.

In the figure for Example 3, for zip code 2 the source area population is mostly in the destination oval (encased in the dashed line), but the majority population from the other contributing source area is not.



The oval represents the destination geography boundary -- the edge of a destination city. The rectangles represent the source geography boundaries for two zip codes. The numbers are population of people living in each place: 10 people live both in Destination City and in the first source (Zip code 1), and 900 people live both in Destination City and in the second source (Zipcode2).

The formula for **Weighted Reliability Index** for a single destination is the total weighted destination population as a percent of total population. To understand this formula, see the calculations below.

	<b>Total for Destination</b>	910	811.25
zip code 2	900/1000 = 90%	* 900	810.00
zip code 1	10/80 = 12.5%	* 10	1.25
	destination	attributed to the destination	destination
	Percent of source population attributed to	Multiplied by the population	Amount of

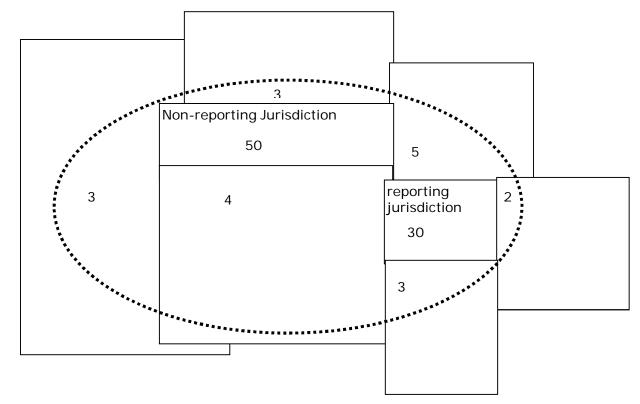
In the above example, the **Weighted Reliability Index** for Destination City is **811.25** / **910** = **89%**. **Basically, 89% of the event locations were directly attributed to the area they occurred.** Along with the WRI a cut point for reliable reporting is needed. When half or more of the events have been imputed to the destination geography, rather than directly attributed from the source geography, the data is considered unreliable and rates are suppressed.

#### WRI for Areas with Non-Reporting of Data

There is a second way that data may become unreliable. Some police jurisdictions do not report data to the state sources, use a reporting method which cannot be included in our files, fail to report for either adults or juveniles, or report for only part of a year. This is particularly true for court data – arrests or offenses. In order to accurately evaluate the reliability of data conversions for destination geographies containing those jurisdictions, non-reporting jurisdiction populations were excluded from the calculations for WRI and the non-reporting jurisdiction issue is evaluated separately.

Partial Reporting, part of a year or part of a population, is also taken into consideration when computing the percentage of non-reporting in a destination geography. Adult and juvenile rates are evaluated separately. Some areas may pass for one, but not for the other due to their reporting habits. For partial year reporting the percentage of the year with data reported is used to evaluate each category.





The second test of reliability is to determine whether the population for the rate is adequately represented. In this example, allow the numbers inside the oval to represent a population of 100 allocated to the destination geography. Two source jurisdictions are entirely located in the destination geography represented by the oval. Their events when reported would be directly attributed. The non-reporting jurisdiction would have its population of 50 excluded from the calculation for WRI, while the reporting jurisdiction would have its population included in the calculation. In this case the completely contained reporting jurisdiction would represent 30 of the remaining 50 population (60%) in the destination oval. The imputed portion is 40% allowing the destination geography to pass the first test for WRI.

CORE-GIS also requires that the excluded non-reporting jurisdiction population (50 of 100) are less than 50% of the total population for the destination geography. With an exclusion rate of 50%, this destination geography would fail the reliability criteria.

The reliability of arrest rates is calculated each year based on non-reporting. For five year rates, three out of five data years must be considered reliable by both tests and the average of the yearly WRI for all five years must reach the WRI cut point value.

#### Rates: why is "raw data" converted to rates?

In order to make comparisons between counties and the state, and between counties that have different sizes, we use rates to describe an event in terms of a standard size population---either per 100 (percent), per 1,000 or per 100,000. For instance, what does it mean if County A has 42 alcohol retail licenses, and County B has 399? Does it mean that based on this indicator, the risk factor (Availability) is much higher in County B than it is County A? No, not if County B is a much bigger county. If County B is bigger, then the "rate" of liquor licenses per population might be the same or even lower. The only way to compare them is to convert the raw numbers to rates, based on the same population factor.

For instance:

County A: # of licenses – 42, # of persons (all ages) – 14, 297

County B: # of licenses – 399, # of persons (all ages) – 186,185

To calculate the rate per 1,000:

 $42 / 14,297 = .002937 \cdot .002937 \times 1,000 = 2.94$ 

399 / 186,185 = .002143 .002143 X 1,000 = 2.14

So the rate of alcohol retail licenses is 2.94 per 1,000 people in County A, and 2.14 per 1,000 people in County B.

#### **Standardization of CORE Indicators**

An individual indicator by itself is interesting because you can compare your county (school district, locale) to all other counties (school districts, locales), and to the state. You can also look at how the indicator changes over time. But it is more difficult to compare several indicators to each other, for example, if you want to see which indicator of risk is extremely high and which is just average. For instance, you cannot directly compare the number (or rate) of alcohol retail licenses to the number (or rate) of Food Stamp recipients—this would be like comparing apples and oranges and would not be meaningful.

The preferred way to compare different indicators is to find out how much each individual indicator varies from some common point; in CORE reports the point we use is the indicator's value for the state. In more technical terms, we transform the original absolute rates to a common scale: the relative deviation from the state rate. This is called a **standardized score**, and is based on the mathematical calculation of the standard deviation. For a particular indicator, the county (school district, locale) with the highest absolute rate will have the highest standardized score. A standardized score of 1.2, for instance, means that the county's rate is 1.2 standard deviations above the state rate, and a –1.2 would be 1.2 standard measures *below* the state rate. Approximately 95% of all counties (school districts, locales) in the state will fall between +2 and –2 standard deviations from the state rate.

Here is an example. Let's say an indicator for extreme family economic deprivation (Food Stamp recipients per 100 people) has a standardized score of 2.5 and an indicator for availability of drugs (alcohol retail licenses per 1,000 people) has a score of 1.2. We can say that, other things being equal, the county (school district, locale) in question has a higher risk for extreme family economic deprivation than for availability of drugs.

CORE indicators are standardized using a formula similar to the calculation of a z-score. A typical z-score for an observation (a county, a locale, a school district) is calculated as a difference between an observation and the mean (average) of all observations, divided by the standard deviation for all observations. A CORE standardized score for a county (school district, locale) is instead calculated using the state rate in place of the mean for all counties (school districts, locales). A standardized CORE indicator avoids the problem of using an unweighted mean of all counties (school districts, locales) that would give counties of very different size equal weight, and therefore provides a more meaningful comparison.

CORE standardized indicators for counties are calculated using the following formula. The same formula is used for locales and for districts, by substituting locale or district rates for county rates in the formula.

$$stdiz \_score = \frac{county_{rate} - state_{rate}}{\sqrt{\sum_{i=1}^{N} (county_{rate,i} - state_{rate})^{2}}}$$

#### Where are the roadblocks to learning in our communities?

#### **Academic Achievement:**

The CORE-GIS measures academic achievement using three groups of indicators:

- 1. student assessment on statewide tests;
- 2. students who graduate from high school;
- 3. students who drop out of high school, failing to complete their education.

#### Student Assessment

The academic assessment indicators answer the question: "What kind of progress have students been making in learning basic skill content areas needed for academic success?". The indicators, *Poor Academic Performance in the Washington Assessment of Student Learning (WASL)*, are available for grades 4, 7 and 10. The indicators are calculated as a percentage of students tested in each grade assessment. Earlier years of information are from the Washington Assessment of Student Learning (WASL). In 2009-10 the WASL was replaced by the Measurements of Student Progress (MSP) for grades 3 through 8 and the High School Proficiency Exam (HSPE) for grade 10. Some districts have chosen to test students in both grades 9 and 10 for the 10th grade assessment, giving freshmen a second chance to pass the test. Passing the HSPE is essential for high-school graduation. Ninth graders who were tested are included with the tenth graders in the calculation of the Academic Achievement indicator for grade 10.

#### Graduating from High School

The Washington State Board of Education establishes minimum credit requirements and requirements for the Culminating Project and the High School and Beyond Plan. The Washington State Legislature requires state testing. To earn a high school diploma, a student must:

- earn sufficient number of high school credits;
- pass state tests or approved alternatives to those tests;
- complete a Culminating Project;
- complete a High School and Beyond Plan.

Two types of high school graduation rates are listed in the CORE-GIS reports, On-time Graduation and Extended Graduation.

To graduate on-time, a student must graduate within four years by completion of the above listed graduation requirements. This indicator answers the question "What percent of freshmen stayed in school and graduated in four years?". The *On-Time Graduation rate* formula uses dropout rates discussed below; the formula is: 100\*(1-grade 9 dropout rate)\*(1-grade 10 dropout rate)\*(1-grade 12 dropout rate-grade 12 continuing rate). The on-time graduation rate is the inverse of the cumulative dropout rate with the senior class adjusted to remove those students who stay in school for more than four years from the calculation.

Extended Graduation is going the extra mile, and requires more resources and dedication from district staff. It includes those students who stay in school after their senior year and complete the graduation requirements. This indicator answers the question "Do we go the extra distance to help students at risk graduate?". Districts which have high extended graduation rates may also have poor dropout rates since the students attempting extended graduation are also at highest risk of again dropping out. A large difference in the size of the on-time and extended graduation rates may indicate that a district or school is working hard to keep students in school or to have dropouts return to school and attempt to graduate. The *Extended Graduation rate* formula is: (the number of on-time and late graduates)/(the number of on-time graduates divided by the on-time graduation rate).

#### **Dropping Out of High School**

Two types of high school dropout rates are listed in the CORE-GIS reports, *Annual (Event) Dropouts* and *High School Cohort (Cumulative) Dropouts*.

The *Annual Dropout rate* measures the proportion of students enrolled in grades 9-12 who drop out in a single year without completing high school as a percentage of all students in grades 9 through 12. This indicator answers the question "How many high-school students left school without graduating this year?". When districts try new policies or projects to keep students in school the impact of those actions will be more immediately visible in this rate.

The *High School Cohort Dropout rate* (may also be referred to as the longitudinal, cumulative, or freshmen cohort dropout rate) measures what happens to a single group (or cohort) of students over a period of time. This indicator answers the question **"How many of the freshmen give up in the four years before their expected year of graduation?".** This rate is most useful for seeing the long-term impact on the community. The Cohort (Cumulative) Dropout rate formula is: 100-(100\*(1-grade 9 dropout rate)\*(1-grade 10 dropout rate)\*(1-grade 11 dropout rate)\*(1-grade 12 dropout rate)). The cohort rate is significantly higher than the annual rate for the same area as it measures the cumulative effect of the multiyear loss of students from their freshmen cohort.

Due to the complexity of the graduation and cohort dropout formulas numerators and denominators are not listed in the CORE-GIS reports. Formulas, definitions and requirements information has been taken primarily from the following report: Ireland, L. (2009), "Graduation and Dropout Statistics for Washington in 2007-08", Office of Superintendent of Public Instruction. Olympia, WA. This report and the formula components are available at the State of Washington Office of Superintendent of Public Instruction website, in the Research and Reports section, Data and Reports subsection, Graduation and Dropout Statistics for Washington's Counties, Districts, and Schools at:

http://www.k12.wa.us/DataAdmin/default.aspx#dropoutgrad.

Discussion of the difference between types of graduation and dropout rates was taken from: Camilla A. Lehr, David R. Johnson, Christine D. Bremer, Anna Cosio, Megan Thompson (May 2004). Increasing Rates of School Completion Moving From Policy and Research to Practice, A Manual for Policymakers, Administrators, and Educators. National Center on Secondary Education and Transition (NCSET):

http://www.ncset.org/publications/essential tools/dropout/default.asp.

Although the focus of the NCSET website is students with disabilities, it has many broad-ranging articles with many useful ideas for educators and prevention workers.

#### **School Climate:**

"Do students feel safe in school?" "Are they expected and encouraged to attend school?" Indicators listed under School Climate give an idea of how safe students may feel in their school or how committed they and their fellow students are to learning. These indicators are Weapons Incidents in School (rate per 1,000 students) and Unexcused Absences for Students in Grades 1 to 8 (as a percentage of total student days possible in the school year, which equals the number of students times teaching days). When weapons incidents are common or it is acceptable for young students to frequently miss school without explanation the school climate is not conducive to learning.

#### **Extreme Family Economic Deprivation:**

"Are students too hungry to learn?" Hungry students find it difficult to focus their attention long enough to learn. Those with inadequate housing or clothing may find it difficult to interact with their peers. There are three indicators which evaluate levels of poverty.

Child Recipients of TANF (Temporary Assistance for Needy Families) gives the rate of children from birth to 17 who receive income assistance. The child must be a citizen or legal alien and their caregiver must not have exceeded the 60 month maximum. There is a requirement for the adults to seek work and an income evaluation. Teen parents must attend school.

Supplemental Nutrition Assistance Program (SNAP) Recipients, formerly called Food Stamps shows a more generalized level of need. While the persons must be citizens or legal aliens who seek work and meet the income guidelines there is no cutoff time limit for benefits.

Students Eligible for Free or Reduced Price Lunch gives a much broader look at poverty in your area. Children of people who are "working poor", who have exceeded 60 months in benefits, are not legal aliens, or are not seeking work can still receive meals and free milk. The free guidelines are at or below 130 percent of the Federal poverty guidelines and the reduced price guidelines are between 130 and at or below 185 percent of the Federal poverty guidelines.

However, there are other ways to qualify. Many persons earning a gross income up to 200% of the Federal Poverty Level apply for income assistance because their children are automatically eligible for free school lunch if they meet the adjusted income guidelines. These are sometimes called \$0 grants. Households receiving assistance under SNAP, TANF for their children, Food Distribution Program on Indian Reservations (FDPIR) or, with children who are homeless, fostered, runaway, migrant, or in Head Start Programs are eligible for free benefits. If <u>any</u> child or household member receives benefits under Assistance Programs <u>all</u> children who are members of the household are eligible for free school meals.

#### **Cowlitz County**

## Populations subtracted for police agencies not reporting

Police agencies are not required to report arrests or offences to UCR, they do so voluntarily. For a variety of reasons, a jurisdiction may report part or none of the arrests or offences for a year. In these cases, the denominator is the population of the areas that did report. For example, if juvenile arrests for one agency are not reported, the juveniles for that jurisdiction are not included in the population denominator either.

The tables below show the values that comprise the adjustment for your county for each age range we report. "% Subtracted" is the percent of the county's population subtracted for non-reporting. "Subtracted" is the amount subtracted. "Persons" is the locale's population. "Adjusted Pop" is the denominator used to calculate indicator rates. Nevertheless, rates can differ markedly from year to year particularly if a jurisdiction, where most of the crime in the county occurs, did not report. When 50% or more of the population is not reported the yearly rate is suppressed. Jurisdictions crossing county boundary lines are apportioned to each area by age, and sex of the population. When more than 40% of the reported events have been apportioned, "synthetically estimated", the yearly rate is suppressed.

All **Arrests** for 10-14 year olds have 5 year rates which represent Adjustments for Non-reporting Arrests (age 10-14)

**100.00** % of the population.

% Subtracted Subtracted, 10-14 Persons, 10-14

Adjusted Pop 10-14

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
4.36	1.72	10.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
317	126	775	0	0	0	0	0	0	0	0
7,266	7,324	7,358	7,340	7,259	7,131	7,021	6,915	6,853	6,807	6,994
6,949	7,198	6,583	7,340	7,259	7,131	7,021	6,915	6,853	6,807	6,994

All Arrests for 10-17 year olds have 5 year rates which represent Adjustments for Non-reporting Arrests (age 10-17)

100.00 % of the population.

% Subtracted Subtracted, 10-17 Persons, 10-17 Adjusted Pop 10-17

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
4.20	1.62	10.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
486	189	1,209	0	0	0	0	0	0	0	0
11,567	11,655	11,677	11,652	11,550	11,493	11,440	11,376	11,285	11,136	11,397
11,081	11,466	10,468	11,652	11,550	11,493	11,440	11,376	11,285	11,136	11,397

All Arrests for adults have 5 year rates which represent Adjustments for Non-reporting Arrests (age 18+) 100.00 % of the population.

% Subtracted Subtracted, 18+ Persons, 18+ Adjusted Pop 18+

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
3.89	1.41	9.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,648	971	6,676	0	0	0	0	0	0	0	0
68,043	68,990	69,635	70,319	70,904	71,580	72,470	73,406	74,545	75,246	77,689
65,395	68,019	62,959	70,319	70,904	71,580	72,470	73,406	74,545	75,246	77,689

All Offenses for persons have 5 year rates which represent Adjustments for Non-reporting Offenses

100.00 % of the population.

% Subtracted Subtracted, 18+ Persons, 18+ Adjusted Pop 18+

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
2.17	0.73	9.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,018	685	9,282	0	0	0	0	0	0	0	0
92,948	93,900	94,397	94,900	95,300	95,900	96,802	97,800	99,000	99,600	102,410
90,930	93,215	85,115	94,900	95,300	95,900	96,802	97,800	99,000	99,600	102,410

Washington State Department of Social and Health Services Research and Data Analysis.

# **Cowlitz County Percent of Adult Arrests Not Reported to UCR by Year**

Police agency jurisdictions which are located at least partially in your county are listed below. The table shows the percentage of non-reporting by jurisdiction for each year.

Jurisdictions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Castle Rock PD	100.0	67.0	75.0								
Clark CO											
Cowlitz CO											
Kalama PD	100.0										
Kelso PD			67.0								
Lewis CO											
Longview PD											
Skamania CO											
Woodland PD											

## **Cowlitz County**

## Percent of Juvenile Arrests Not Reported to UCR by Year

Police agency jurisdictions which are located at least partially in your county are listed below. The table shows the percentage of non-reporting for juvenile arrests each year.

Jurisdictions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Castle Rock PD	100.0	67.0	75.0	2000				2007	2000	200)	2010
Clark CO											
Cowlitz CO											
Kalama PD	100.0										
Kelso PD			67.0								
Lewis CO											
Longview PD											
Skamania CO											
Woodland PD											

## **Cowlitz County**

## Percent of Offenses Not Reported to UCR by Year

Police agency jurisdictions which are located at least partially in your county are listed below. The table shows the percentage of non-reporting for offenses each year.

Jurisdictions	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Castle Rock PD	100.0	33.0	75.0	2000		2000	2000	2007			2010
Clark CO											
Cowlitz CO											
Kalama PD											
Kelso PD			67.0								
Lewis CO											
Longview PD											
Skamania CO											
Woodland PD											