

The True Cost of Car Crashes

WASHINGTON TRANSPORTATION FACTS • FACT SHEET #1

On average, two Washington residents die in a car crash each day, and more than 100 are injured. Over the course of a year, these collisions account for tens of thousands of injuries and deaths. But because this tragedy unfolds slowly, day by day, it's easy to lose sight of just how risky—and how costly—car crashes really are.

One way that states and communities can reduce the risk of car crashes is to help residents drive less. Encouraging transit and promoting compact, mixed use communities—where drivers can make shorter trips, and some trips can be made on foot or on transit—can reduce vehicle fatalities, saving both money and lives.

MOTOR VEHICLE ACCIDENTS ARE A MAJOR HEALTH RISK IN WASHINGTON STATE – ESPECIALLY FOR YOUNG PEOPLE

- Car crashes **kill about 700 Washington residents**—including motorists, bicyclists, and pedestrians—each year. Over the most recent decade, motor vehicle collisions killed 1,429 residents of King County, 719 residents of Pierce County, and 597 residents of Snohomish County.¹
- Each year, car crashes **injure more than 40,000 Washingtonians**—including at least 2,500 who suffer disabling injuries.²
- Car crashes are the **number one killer** of Washington residents under the age of 45, largely because of a spike in fatal accidents between the ages of 15 and 24. Nearly two-thirds of all car crash victims are under the age of 45.³
- Car crashes rank third—trailing only cancer and heart disease—in **shortening lifespans before the age of 65**.⁴

CAR CRASHES
are the leading cause of death under the age of 45.

CAR CRASHES HURT THE ECONOMY

- Based on National Safety Council estimates, each fatal car crash corresponds to \$5.4 million in direct economic costs, including medical expenses, lost wages, property damage, and other outlays.⁵ Using this estimate, **car crashes cost the Washington economy more than \$38 billion** over the last decade, including more than \$15 billion in King, Pierce, and Snohomish counties combined.⁶

Direct cost of car crashes, by county, 1994-2003⁷

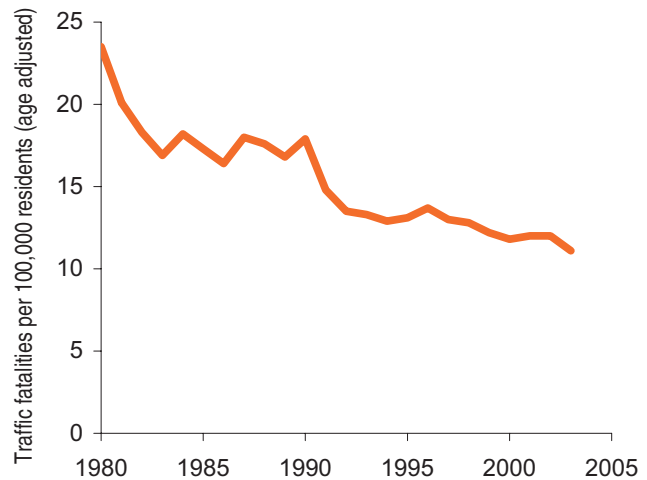
King.....	\$7.7 billion
Pierce.....	\$4.4 billion
Snohomish.....	\$3.2 billion
Spokane.....	\$2.5 billion
Clark.....	\$1.8 billion
Kitsap.....	\$1.2 billion



- The Washington State Department of Transportation places the comprehensive cost of car crashes even higher, at more than **\$5.6 billion per year**—or \$930 for every man, woman, and child in Washington. That’s more than three times as much as the Transportation Department’s entire annual budget—which suggests that car crashes in Washington State may be even more costly than the roads on which they occur.⁸
- Other government estimates, based on people’s willingness to pay for safety features that prevent accidental death, suggest that the value of each prevented death is between \$3.6 and \$6 million.⁹ Based on these higher figures, the total economic losses associated with car crashes in Washington may top **\$8 billion** annually.

TRANSPORTATION POLICIES CAN IMPROVE SAFETY—ESPECIALLY BY REDUCING THE NEED TO DRIVE

- Stricter drunk driving laws, along with safety improvements in both cars and roads, have caused a **sustained decline in traffic fatality rates** since 1980.¹⁰
 - Many strategies can make roads safer for drivers and pedestrians. **Slower speeds, better lighting, and safer crosswalks**, among other features of street and road design, can reduce risk.
- Crash risk is roughly proportionally to how much people drive: as a general rule, **the more people drive, the more risk they face**.¹¹
- Transportation and land-use policies that reduce the need to drive can **lower accident rates and costs**. But policies that encourage driving—such as increasing roadway capacity, including by widening and straightening roads—may increase overall crash risks by encouraging driving, and by promoting sprawling, car-dependent land-use patterns.
- King County—Washington’s most densely populated county—had the state’s **lowest traffic fatality rate** over the last decade.¹² This is in large part because King County’s comparatively compact communities reduce the number of miles that people need to drive to get to work, stores, and services.
- **Improving transit service**—especially by promoting compact, transit-oriented neighborhoods—can yield an extra safety bonus: mile for mile, riding a bus is at least 10 times safer than driving a car.¹³



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Sources on following page, or visit http://www.northwestwatch.org/sprawl_health/

SOURCES

¹Traffic fatalities from Washington State Department of Health, Center for Health Statistics, http://www.doh.wa.gov/ehsphl/chs/chs-data/death/dea_VD.htm. See especially "Table E8 - Unintentional Injury (Accident), Motor Vehicle Traffic, and Falls by Place of Residence." Most recent decade for which data are available covers 1994 through 2003.

²Injuries and disabling injuries from Washington State Department of Transportation, "The Cost of Motor Vehicle Collisions to Society" at <http://www.wsdot.wa.gov/planning/wtp/datalibrary/Safety/MVCsocietalcost.htm>; see especially source data for chart, "Severity of Collisions and Societal Costs of Collisions by Severity."

³Derived from US Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, "WISQARS Fatal Injuries: Mortality Reports" at <http://webappa.cdc.gov/sasweb/ncipc/mortrate.html>. Based on 2002 data.

⁴Derived from US Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, "WISQARS Leading Causes of Death Reports, 1999 – 2002" at <http://webapp.cdc.gov/sasweb/ncipc/leadcaus10.html>. Based on 2002 data.

⁵National Safety Council, "Estimating the Costs of Unintentional Injuries, 2003," at <http://www.nsc.org/lrs/statinfo/estcost.htm>. These estimates assume that for every traffic fatality there are 54 nonfatal injuries, and 223 crashes that only damage property; actual figures for both cost and number of crashes per fatality in Washington counties may vary.

⁶Estimate derived from total vehicle accident deaths, by county, from 1994 through 2003, op cit. note 1. County-specific vehicle fatalities from figures are in 2004 dollars.

⁷Traffic accident costs estimated from National Safety Council estimates of per-fatality costs for traffic accidents (The National Safety Council, <http://www.nsc.org/lrs/statinfo/estcost.htm>) and total vehicle accident deaths, by county, from 1994 through 2003, op cit. note 1.

⁸The Washington State Department of Transportation's biannual budget for 2005-7 allocates \$2,399 million for capital expenditures and \$1,061 for operations and maintenance. See Washington State Department of Transportation, 2005-2007 Current Law Budget, at www.wsdot.wa.gov/commission/BudgetReport05-07.pdf

⁹Economic value of prevented death from: U.S. Department of Transportation, Federal Highway Administration "Technical Advisory: Motor Vehicle Accident Costs" at <http://www.fhwa.dot.gov/legregs/directives/techadvts/t75702.htm>; and "Draft Report to Congress on the Costs and Benefits of Federal Regulations," Federal Register: February 11, 2000 (Volume 65, Number 29, Page 7197-7267 at <http://www.epa.gov/fedrgstr/EPA-GENERAL/2000/February/Day-11/g3175.htm>. Figures adjusted for inflation.

¹⁰Decline in vehicle fatalities from Washington State Department of Health, Center for Health Statistics, http://www.doh.wa.gov/ehsphl/chs/chs-data/death/dea_VD.htm, and Washington State Department of Transportation, "Motor Vehicle Fatalities" at <http://www.wsdot.wa.gov/planning/wtp/datalibrary/Safety/MVFatalities.htm>.

¹¹Risk proportionate to distance driven from Victoria Transport Policy Institute, "Safe Travels: Evaluating Mobility Management Traffic Safety Impacts," June, 2005. At <http://www.vtpi.org/safetrav.pdf>. See especially pages 10-13.

¹²Fatality rates op cit. note 1. Link between sprawl and vehicle fatalities from Ewing, Reid, PhD; Richard A. Scheiber; Charles v. Zegeer. "Urban Sprawl as a Risk Factor in Motor Vehicle Occupant and Pedestrian Fatalities" American Journal of Public Health. September 2003; v93, n.9; pp 1541-1545.

¹³Victoria Transport Policy Institute, Online TDM Encyclopedia, "Evaluating Safety and Health Impacts," at <http://www.vtpi.org/tdm/tdm58.htm>.