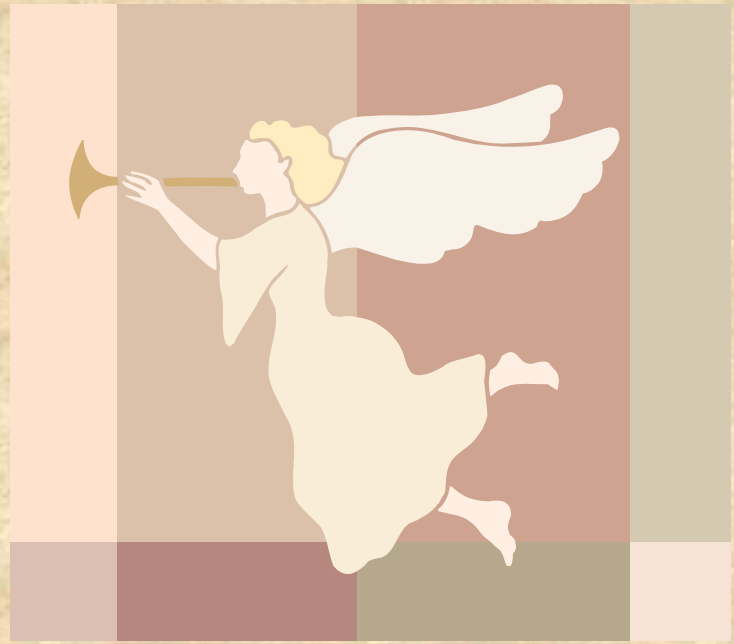

Never Drive Faster Than Your Guardian Angel Can Fly

and

Other Thoughts on Highway Safety

March 28, 2007

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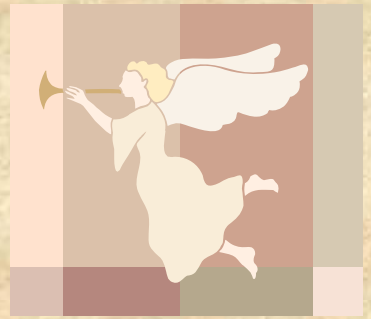


Death Risk

A Comparison of Accidental Death Risk by Travel Mode[a]
United States, 1999-2003

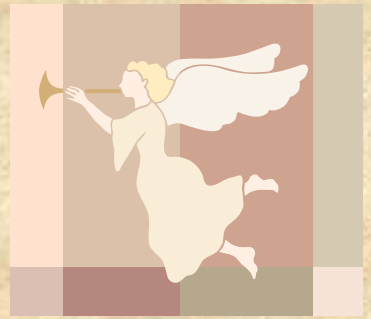
Travel Mode	Deaths Per Year (5-Yr. Avg.)	General Population Risk Per Year[b]	Risk Based on Exposure
Motor Vehicles	36,676	1 out of 7,700	1.3 deaths per 100 million vehicle miles
Motorcycles	3,112	1 out of 91,500	31.3 deaths per 100 million vehicle miles traveled
Railroads	931	1 out of 306,000	1.3 deaths per million vehicle miles
Bicycles	695	1 out of 410,000	Not Available
Air Carriers	138[c]	1 out of 2,067,000	1.9 deaths per 100 million aircraft miles

[a]These data are drawn from a more detailed table prepared by the U.S. Dept. of Transportation.

[b]The U.S. Dept. of Transportation used an average U.S. population figure of approximately 285 million over the 5-year period in computations.

[c]Other than those aboard the aircraft who were killed, fatalities resulting from the 9/11 terrorist acts are excluded.

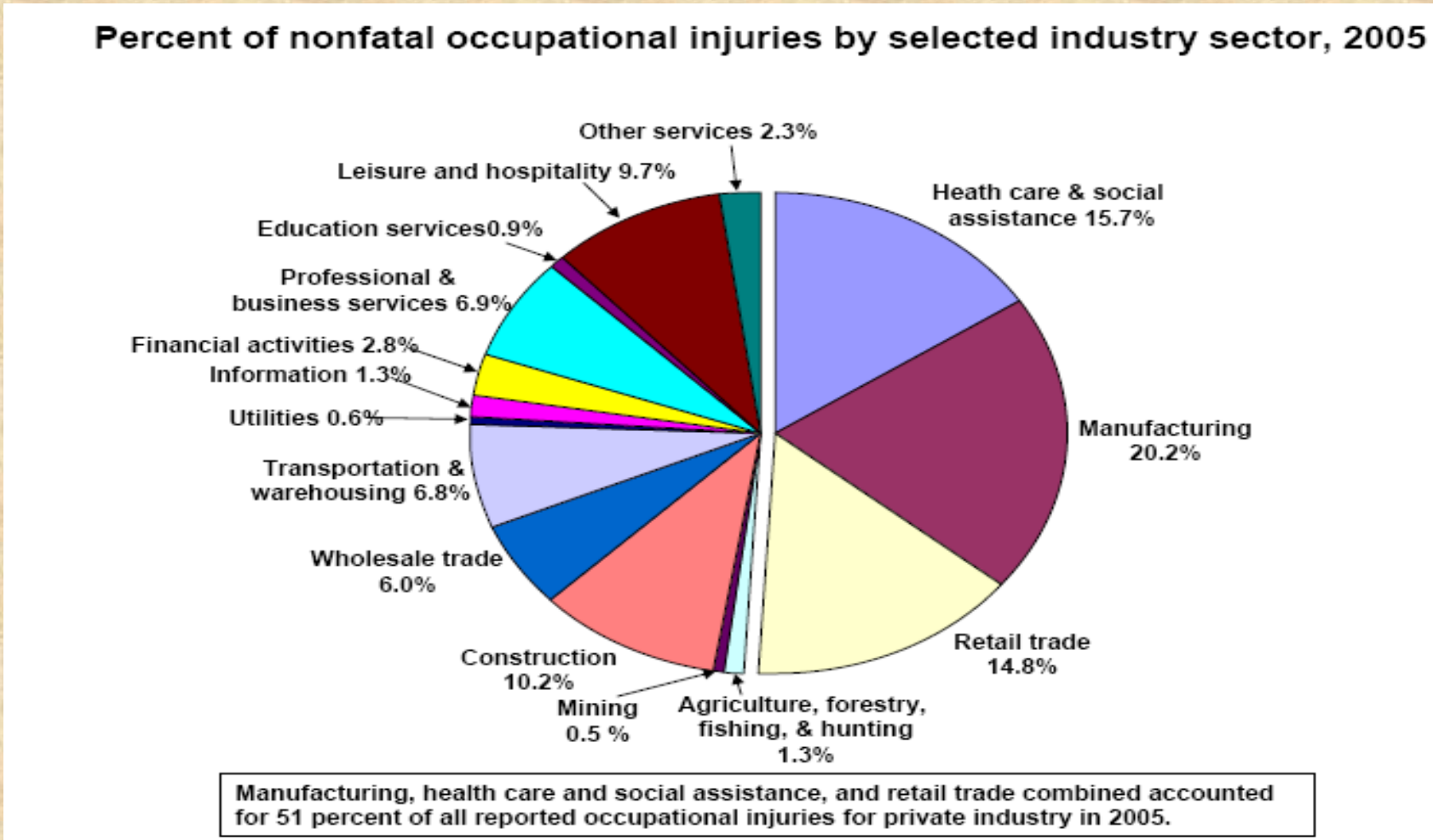
Source: Ropeik, D. (2006, September). How risky is flying? *NOVA.* Retrieved March 15, 2007, from http://www.pbs.org/wgbh/nova/planecrash/risky.html



Topics

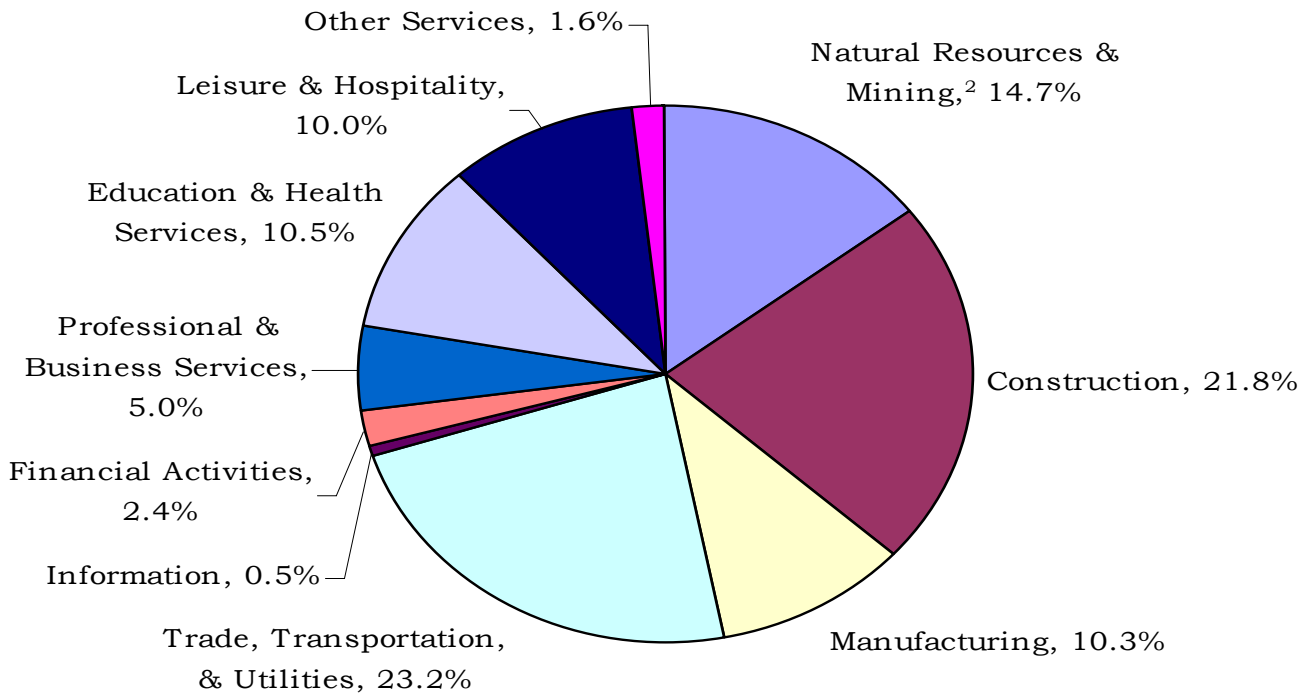
- U.S. and Wyoming nonfatal work-related injuries
- U.S. and Wyoming fatal occupational injuries
- Wyoming fatal work-related highway accidents
- Wyoming highway accident statistics
- Comparison of U.S. rural and urban accident statistics
- Understanding rural highway dangers
- Accident costs
- Accident prevention

U.S. Nonfatal Occupational Injuries



Wyoming Nonfatal Occupational Injuries

Figure: Percent of Wyoming Nonfatal Occupational Injuries Involving Days Away from Work[1] by By Major Industry (Private Sector Only), 2005



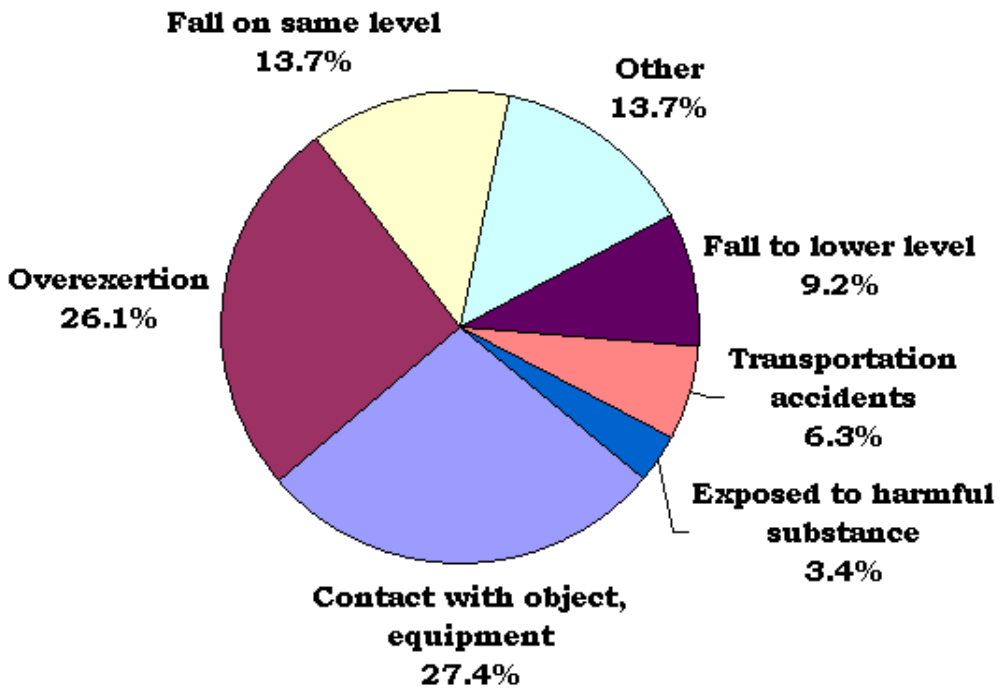
[1] Days-away-from-work cases include those that result in days away from work with or without job transfer or restriction.

[2] Excludes farms with fewer than 11 employees.

SOURCE: Bureau of Labor Statistics, U. S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

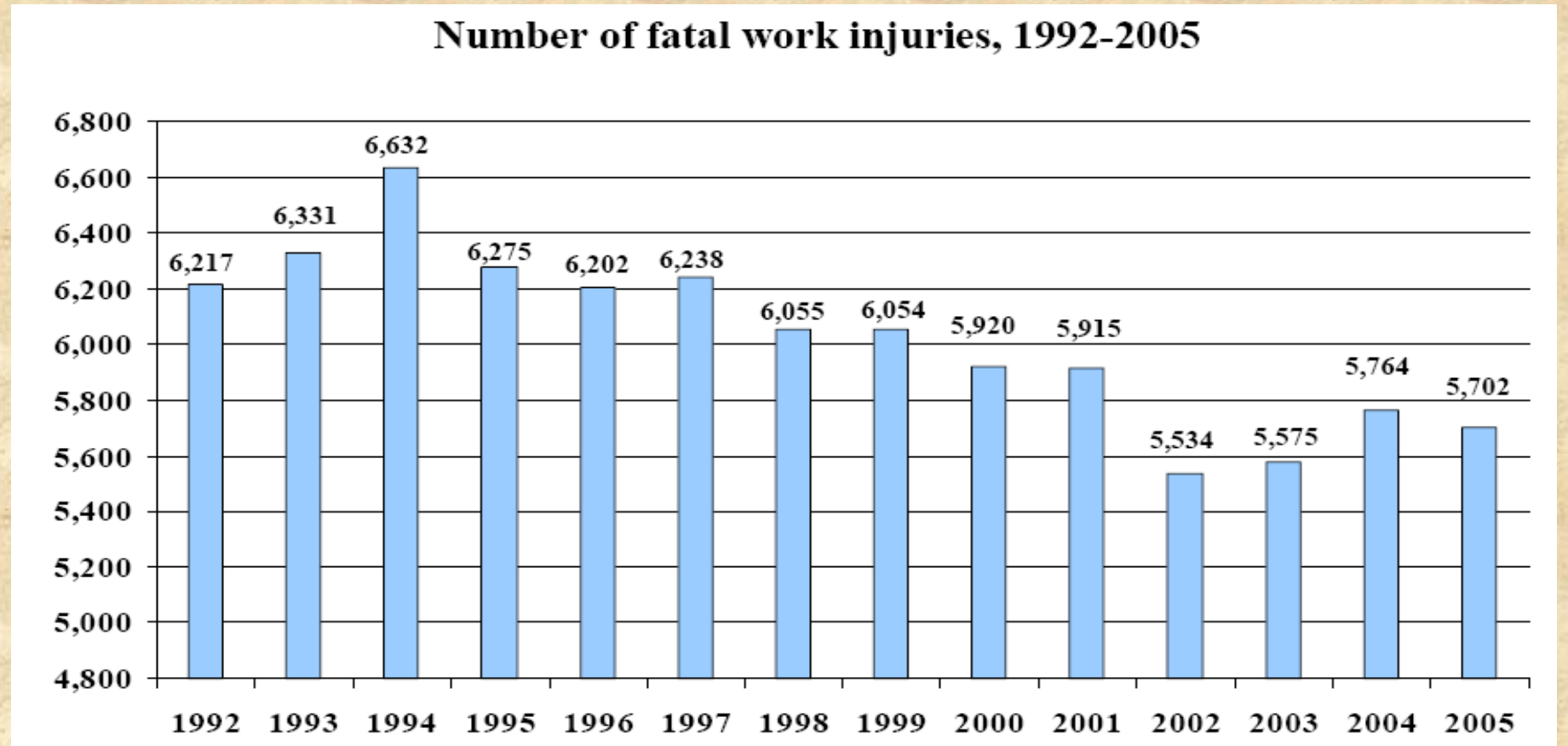
Wyoming Nonfatal Occupational Injuries

Figure 1: Percent distribution of occupational injuries and illnesses involving days away from work by event or exposure, Wyoming, private industry, 2005



Source: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

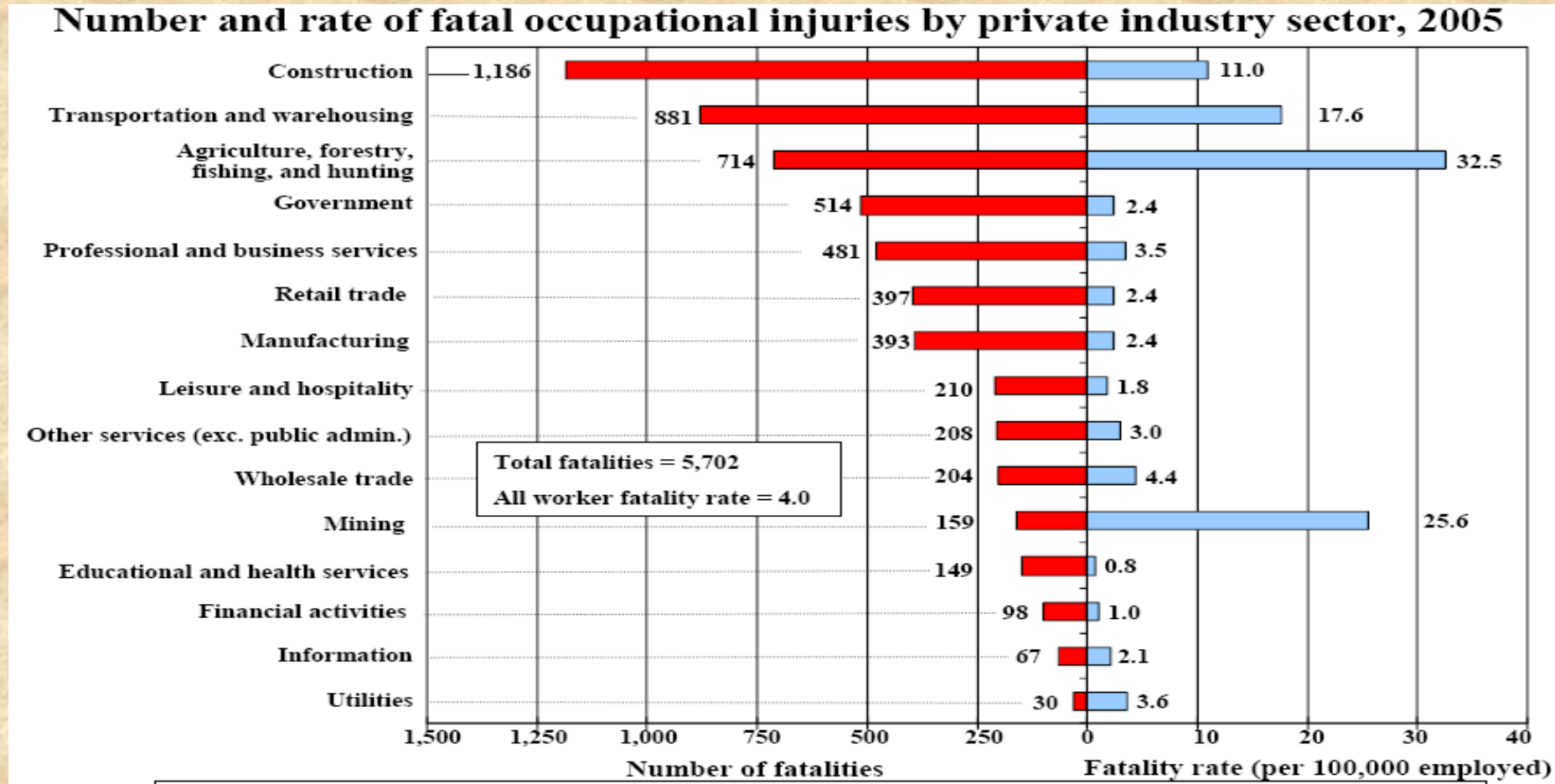
U.S. Fatal Occupational Injuries



The 5,702 work-related fatalities recorded in 2005 represent a decrease of 1 percent from the revised total of 5,764 fatal work injuries reported for 2004.

NOTE: Data from 2001 exclude fatalities resulting from the September 11 terrorist attacks.
SOURCE: US Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2005.

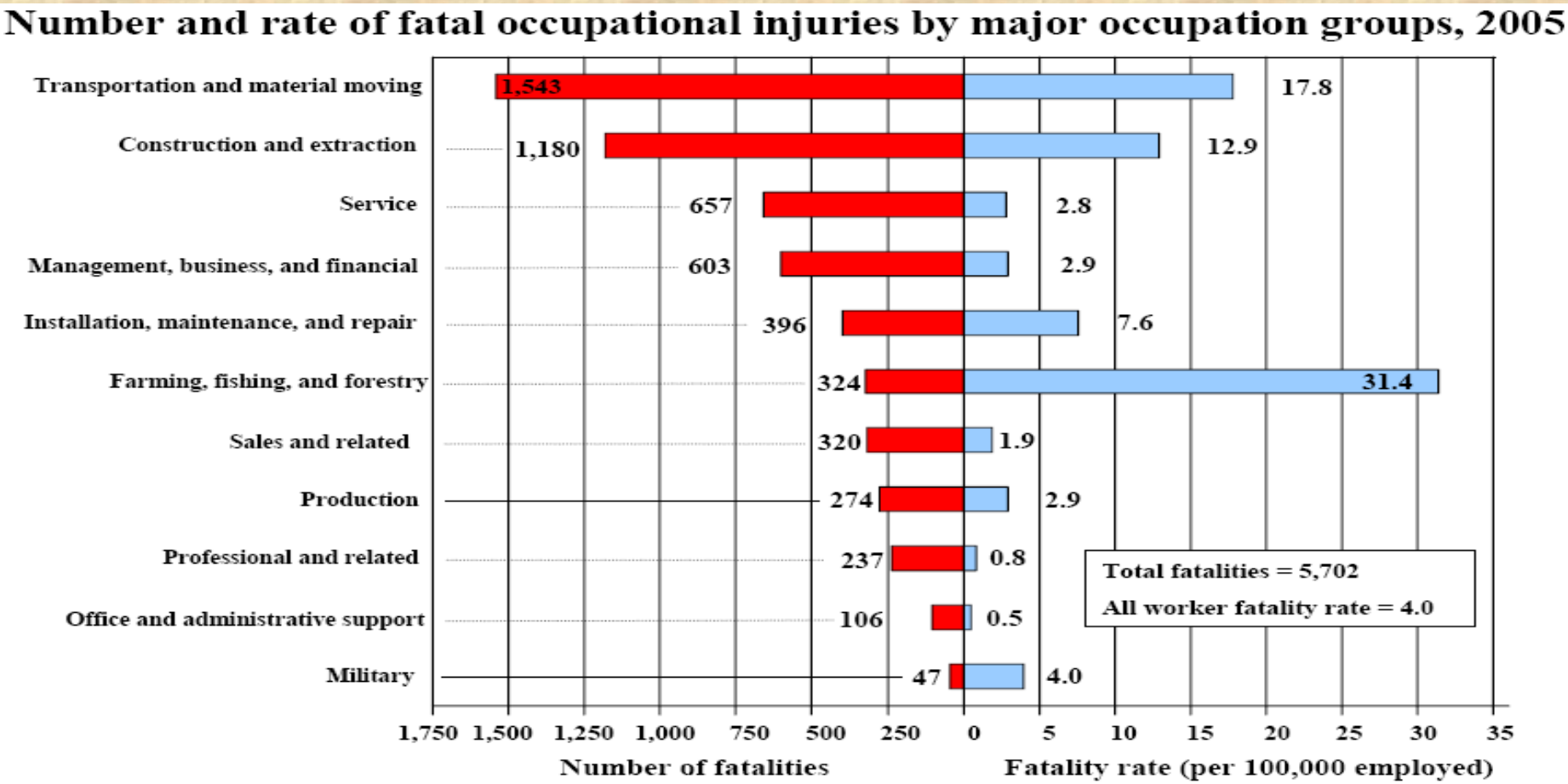
U.S. Fatal Occupational Injuries



Although the construction sector recorded the highest number of fatal injuries, the highest fatality rates were in agriculture, forestry, fishing, and hunting and in mining.

Rate = (Fatal work injuries/Employment) x 100,000. Employment data based on the 2005 Current Population Survey (CPS) and Department of Defense (DOD) figures.
SOURCE: US Department of Labor, Bureau of Labor Statistics, Current Population Survey, Census of Fatal Occupational Injuries, and US Department of Defense, 2005.

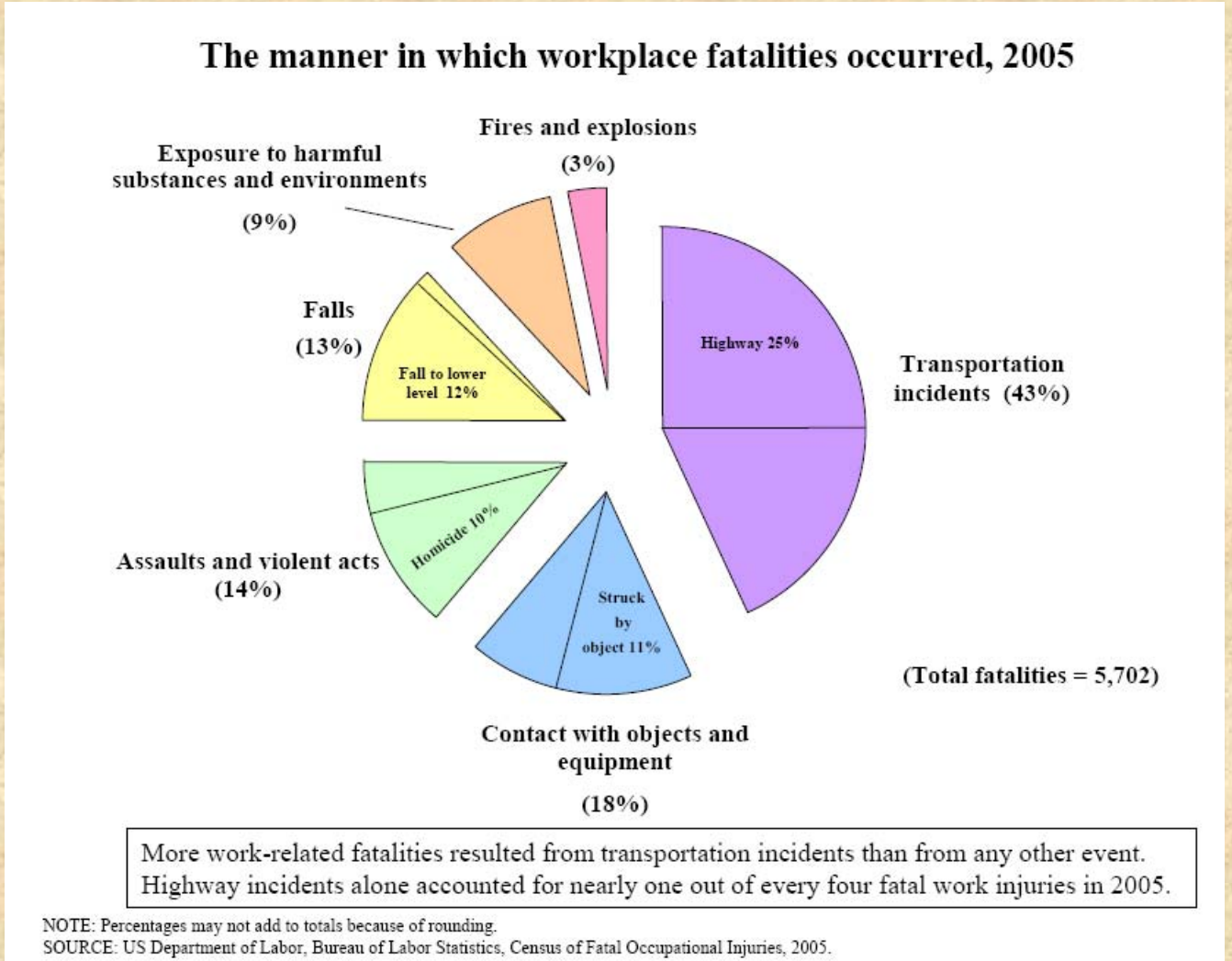
U.S. Fatal Occupational Injuries



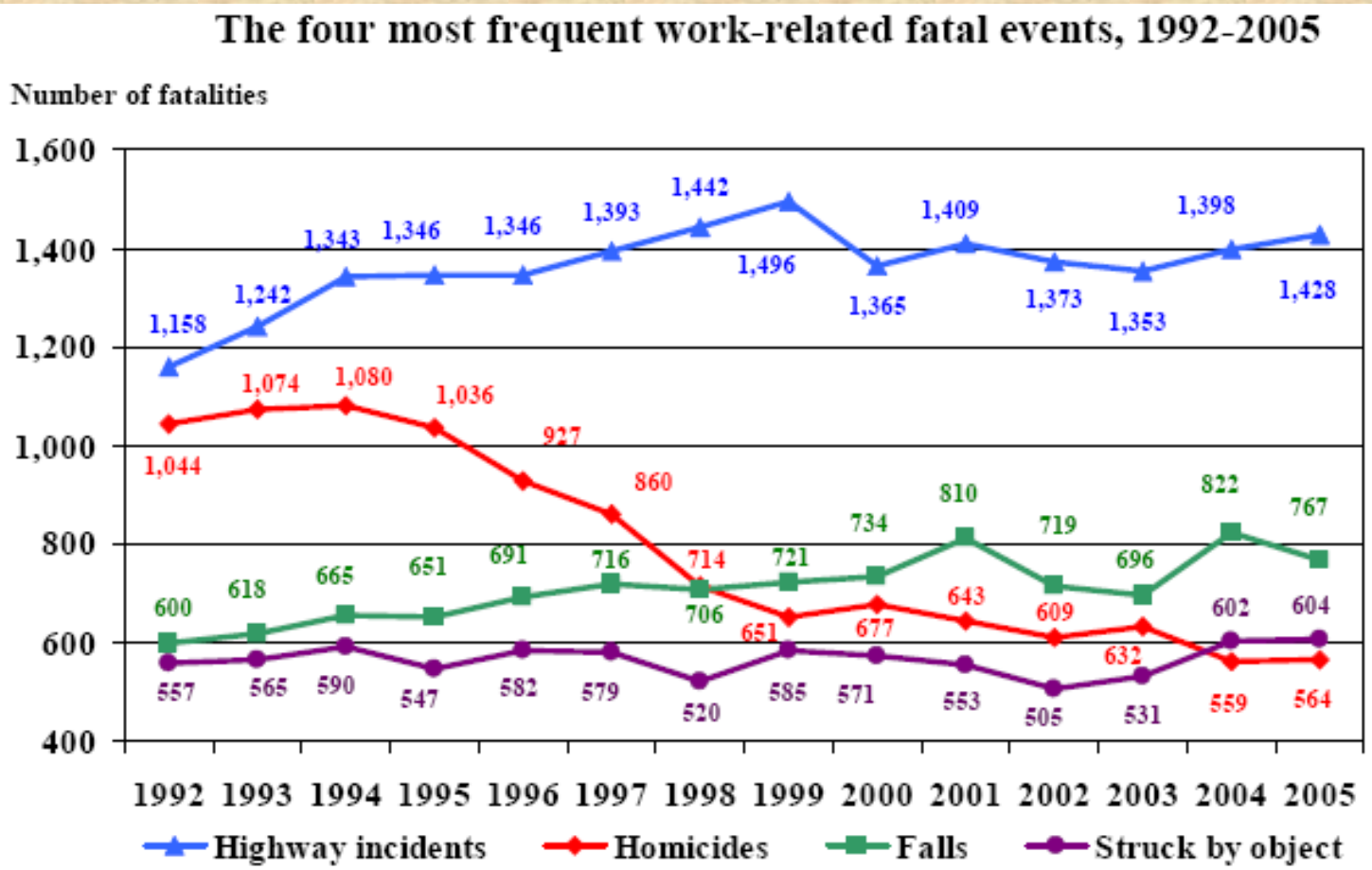
Although transportation and material moving occupations recorded the highest number of fatal work injuries, the highest fatality rate was in farming, fishing, and forestry.

Rate = (Fatal work injuries/Employment) x 100,000. Employment data based on the 2005 Current Population Survey (CPS) and Department of Defense (DOD) figures.
SOURCE: US Department of Labor, Bureau of Labor Statistics, Current Population Survey, Census of Fatal Occupational Injuries, and US Department of Defense, 2005.

U.S. Fatal Occupational Injuries



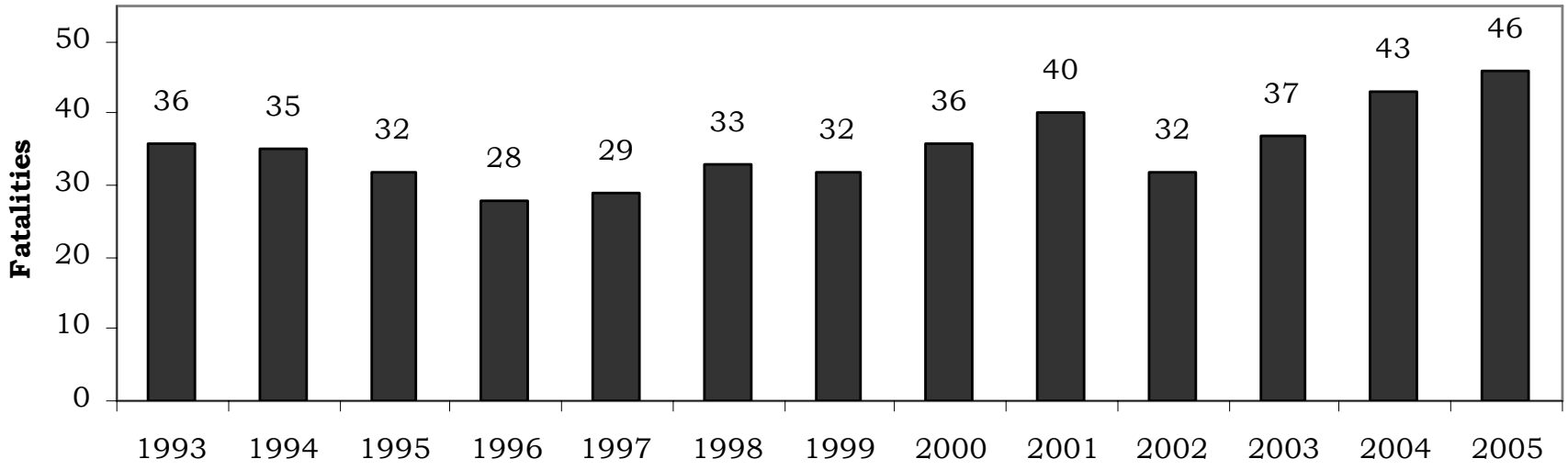
U.S. Fatal Occupational Injuries



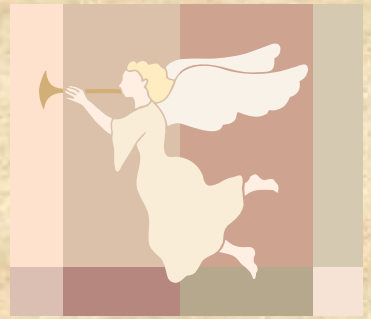
NOTE: Data from 2001 exclude fatalities resulting from the September 11 terrorist attacks.
SOURCE: US Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2005.

Wyoming Fatal Occupational Injuries

Figure: Wyoming Occupational Fatalities, 1993-2005



Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries in cooperation with state and federal agencies.



Wyoming Fatal Occupational Injuries

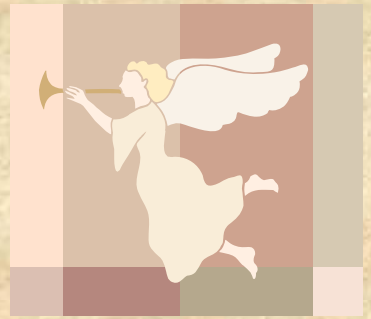
Table: Wyoming Occupational Fatalities by Industry, 2005

Industry[a]	n	Percentage of Total Fatalities	Change From 2004
Agriculture, Forestry, Fishing, & Hunting	5	10.9%	2
Mining[b]	13	28.3%	5
Construction	6	13.0%	0
Trade, Transportation, & Utilities	10	21.7%	-6
All Other Industries	12	26.1%	2
Total	**46**	**100.0%**	**3**

[a]Classified according to the North American Industry Classification System (NAICS).

[b]Includes fatalities at all establishments classified as Mining (Sector 21) in NAICS, including establishments not governed by Mine Safety and Health Administration (MSHA) rules and reporting such as those in Oil & Gas Extraction.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries in cooperation with state and federal agencies.



Wyoming Fatal Occupational Injuries

Table: Wyoming Occupational Fatalities by Event or Exposure, 2005

Event or Exposure[a]	n[b]	Percent of Total Fatalities	Change From 2004
Assaults and Violent Acts[c]	**3**	**6.5%**	**ND**
Transportation Incidents	**25**	**54.3%**	**-3**
Highway Incidents	17	37.0%	-8
Collision Between Vehicles, Mobile Equipment	6	13.0%	-7
Noncollision Incident	9	19.6%	1
Jack-Knifed or Overturned -- No Collision	9	19.6%	1
Contact With Objects and Equipment	**11**	**23.9%**	**5**
Struck by Object	6	13.0%	2
Struck by Falling Object	5	10.9%	ND
Caught In or Compressed by Equipment or Objects	5	10.9%	5
Caught In Running Equipment or Machinery	3	6.5%	3
All Other Events or Exposures	**7**	**15.2%**	**5**
Total	**46**	**100.0%**	**3**

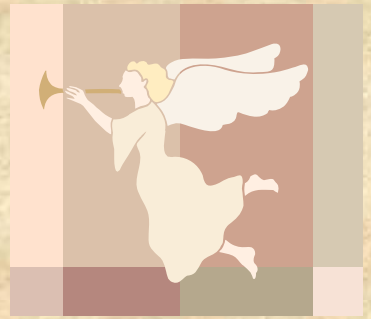
[a]Based on the 1992 Bureau of Labor Statistics Injury and Illness Classification Manual.

[b]Totals for major categories may include subcategories not shown separately.

[c]Includes cases in which individuals were fatally injured in intentional or unintentional assaults by people or animals.

ND - Not disclosable due to confidentiality of data.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries in cooperation with state and federal agencies.



Wyoming Fatal Occupational Injuries

Table : Wyoming Occupational Fatalities Due to Highway Incidents and Total Wyoming Highway Fatalities, 1993-2005

	Occupational Fatalities		All Wyoming Highway Fatalities	
Year	Number of Incidents	% of Total Fatalities	Total Deaths	Work-Related Deaths as a % of Total Deaths
1993	11	30.6%	NA	NA
1994	11	31.4%	144	7.6%
1995	11	34.4%	170	6.5%
1996	ND	ND	143	ND
1997	7	24.1%	137	5.1%
1998	16	48.5%	154	10.4%
1999	12	37.5%	189	6.3%
2000	11	30.6%	152	7.2%
2001	17	42.5%	186	9.1%
2002	12	37.5%	176	6.8%
2003	20	54.1%	165	12.1%
2004	25	58.1%	164	15.2%
2005	17	37.0%	170	10.0%

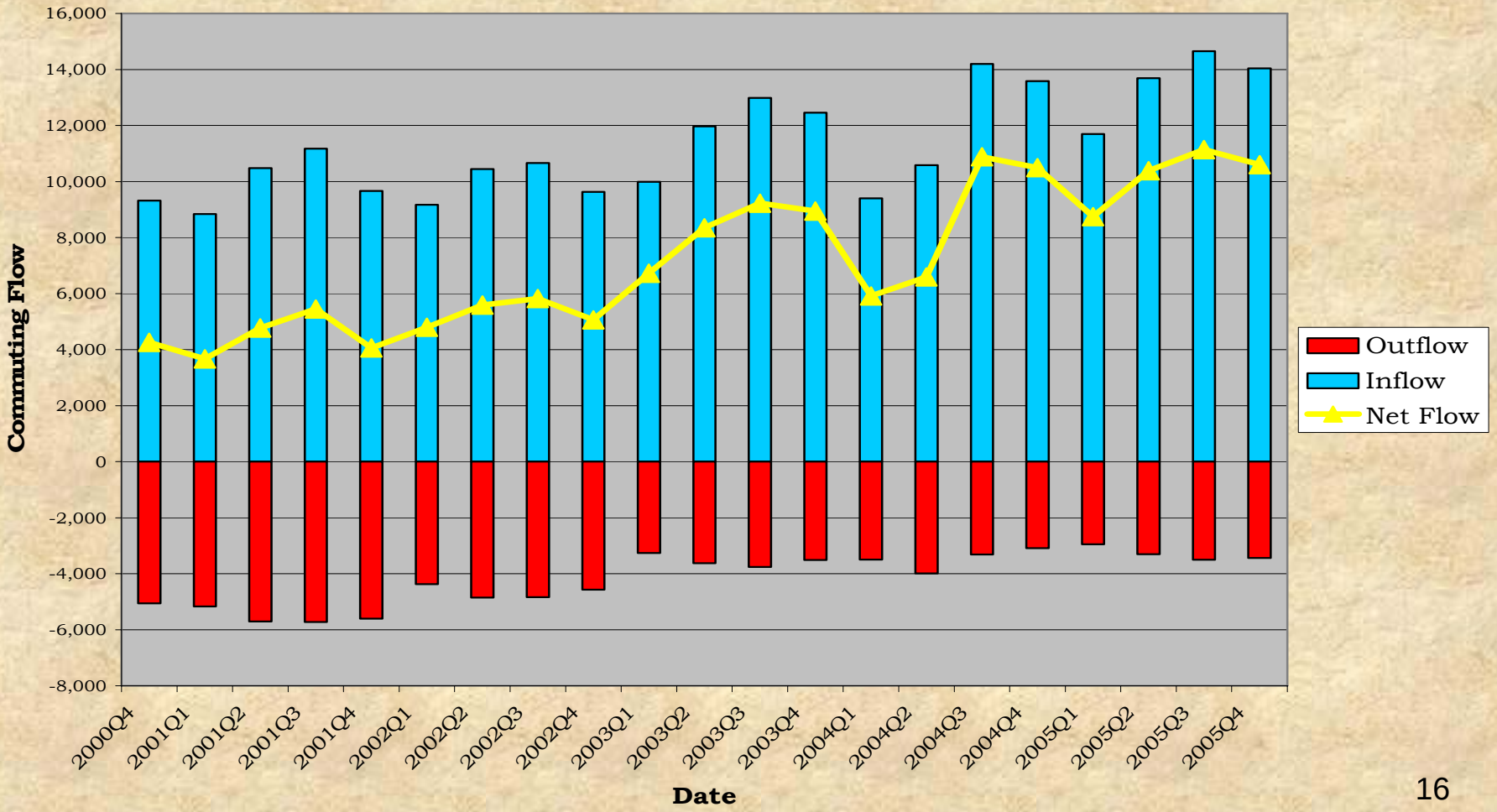
NA - Not available.

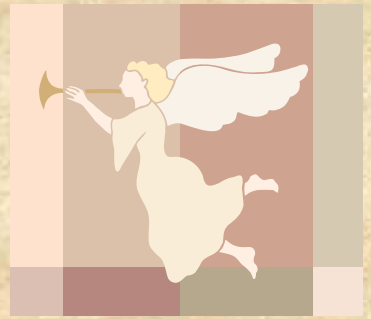
ND - Not disclosable due to confidentiality of data.

Sources: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries in cooperation with state and federal agencies; and U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis. (n.d.). *Fatalities and fatality rates by state*, 1994-2005. Retrieved September 15, 2006, from http://www-fars.nhtsa.dot.gov/finalreport.cfm?title=States&stateid=0&year=2005&title2=Fatalities_and_Fatality_Rates

Natrona County Commuting

Figure: Natrona County Commuting Flows, 2000Q4-2005Q4





Wyoming Fatal Occupational Injuries

Table: Wyoming Occupational Fatalities Due to Highway Accidents by Seatbelt Usage Status, 2003-2005[a]

	Seatbelt Usage Status		
Year	**Seatbelt in Use**	**Seatbelt Not in Use**	**Seatbelt Usage Unknown**
2003	--	9	9
2004	7	9	9
2005	--	12	4
Total Deaths	--	30	22

[a]Excludes highway accidents in which the victim would not have been wearing a seatbelt (e.g., ATV accidents, pedestrian accidents).

-- Dashes indicate no data reported or data that do not meet publication criteria.

Source: State-conducted research using Bureau of Labor Statistics data.

Prepared January 26, 2007 by Sara Saulcy, Senior Economist, Wyoming Dept. of Employment, Research & Planning

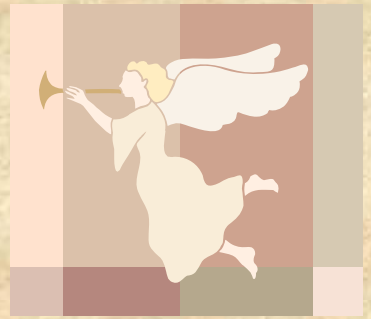
Wyoming Fatal Highway Accident Statistics

Highway Fatality Rates: Wyoming , U.S. and Best State, 2005

	# of Fatalities	Fatality Rate Per 100K Population
Wyoming	170	33.38
US	43,443	14.66
Best State		6.91

Best State: Lowest rate attained across all states.

Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics & Analysis.



Wyoming Fatal Highway Accident Statistics

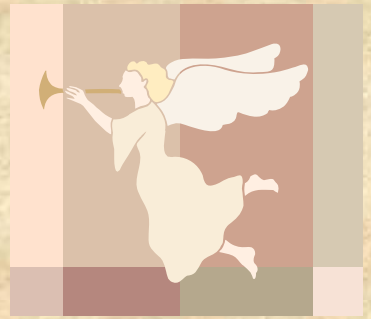
Wyoming Fatalities in Motor Vehicle Crashes, 2001-2005

Year	Total Fatalities	Total Alcohol-Related Fatalities (BAC = .01+)		Unrestrained Fatalities[a]		Speeding-Related Fatalities	
	Number	Number	%	Number	%	Number	%
2001	186	82	44%	117	72%	78	42%
2002	176	67	38%	95	67%	71	40%
2003	165	63	38%	79	61%	84	51%
2004	164	59	36%	80	61%	64	39%
2005	170	65	38%	86	66%	56	33%

[a]Unknown restraint use was distributed proportionately across known restraint use.

BAC - Blood Alcohol Content

Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics & Analysis.



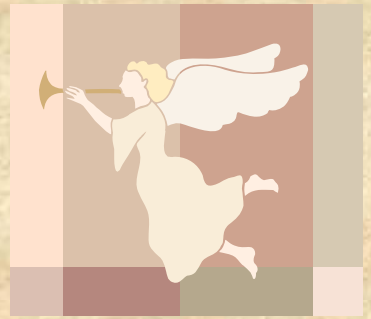
Wyoming Fatal Highway Accident Statistics

Wyoming Motor Vehicle Fatalities by Selected Characteristics, 2001-2005

	Year									
	2001		2002		2003		2004		2005	
	Number	%	Number	%	Number	%	Number	%	Number	%
Alcohol-Related	82	44.1%	67	38.1%	63	38.2%	59	36.0%	65	38.2%
Single Vehicle Crashes	123	66.1%	119	67.6%	109	66.1%	105	64.0%	113	66.5%
Non-Junction Crashes	154	82.8%	147	83.5%	136	82.4%	141	86.0%	158	92.9%
Intersection Crashes	17	9.1%	9	5.1%	8	4.8%	5	3.0%	6	3.5%
Intersection-Related Crashes	3	1.6%	4	2.3%	6	3.6%	4	2.4%	3	1.8%
Speeding Involved Crashes	78	41.9%	71	40.3%	84	50.9%	64	39.0%	56	32.9%
Pedestrians	5	2.7%	4	2.3%	7	4.2%	3	1.8%	7	4.1%
Pedalcyclists	1	0.5%	2	1.1%	1	0.6%	0	0.0%	2	1.2%
Large Truck Involved Crashes	23	12.4%	32	18.2%	30	18.2%	41	25.0%	31	18.2%
Roadway Departure Crashes	142	76.3%	131	74.4%	126	76.4%	110	67.1%	134	78.8%
Passenger Car Occupants	58	31.2%	63	35.8%	43	26.1%	51	31.1%	45	26.5%
Light Truck/Van Occupants	106	57.0%	80	45.5%	86	52.1%	79	48.2%	85	50.0%
Other/Unknown Occupants (Not Including Motorcycles)	6	3.2%	9	5.1%	8	4.8%	18	11.0%	10	5.9%
Total Occupants (Not Including Motorcyclists)	170	91.4%	152	86.4%	137	83.0%	148	90.2%	140	82.4%
Motorcycle Riders	10	5.4%	12	6.8%	20	12.1%	13	7.9%	20	11.8%
Total Fatalities[a]	186	100.0%	176	100.0%	165	100.0%	164	100.0%	170	100.0%

[a]The total number of fatalities is less than the sum of reported characteristics because a single fatality may be classified under multiple characteristics.

Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics & Analysis.



U.S. Rural & Urban Highway Accident Facts

- More than half of fatal crashes occur in rural areas: 59% of total traffic fatalities for all vehicles and 64% for passenger vehicles.
- The fatality rate in rural areas is TWICE that of urban areas: 2.6 deaths per 100 million vehicle miles traveled vs. 1.1 in urban areas.
- Restraint use in rural fatal crashes is LOWER than in urban crashes: 36% vs. 48%.
- Nearly 6 of every 10 children who die in crashes are unrestrained.
- Properly installed child safety seats reduce the risk of death by 71% for infants and 54% for toddlers.
- ***Seat belts reduce the risk of death or injury 45%-60%.***

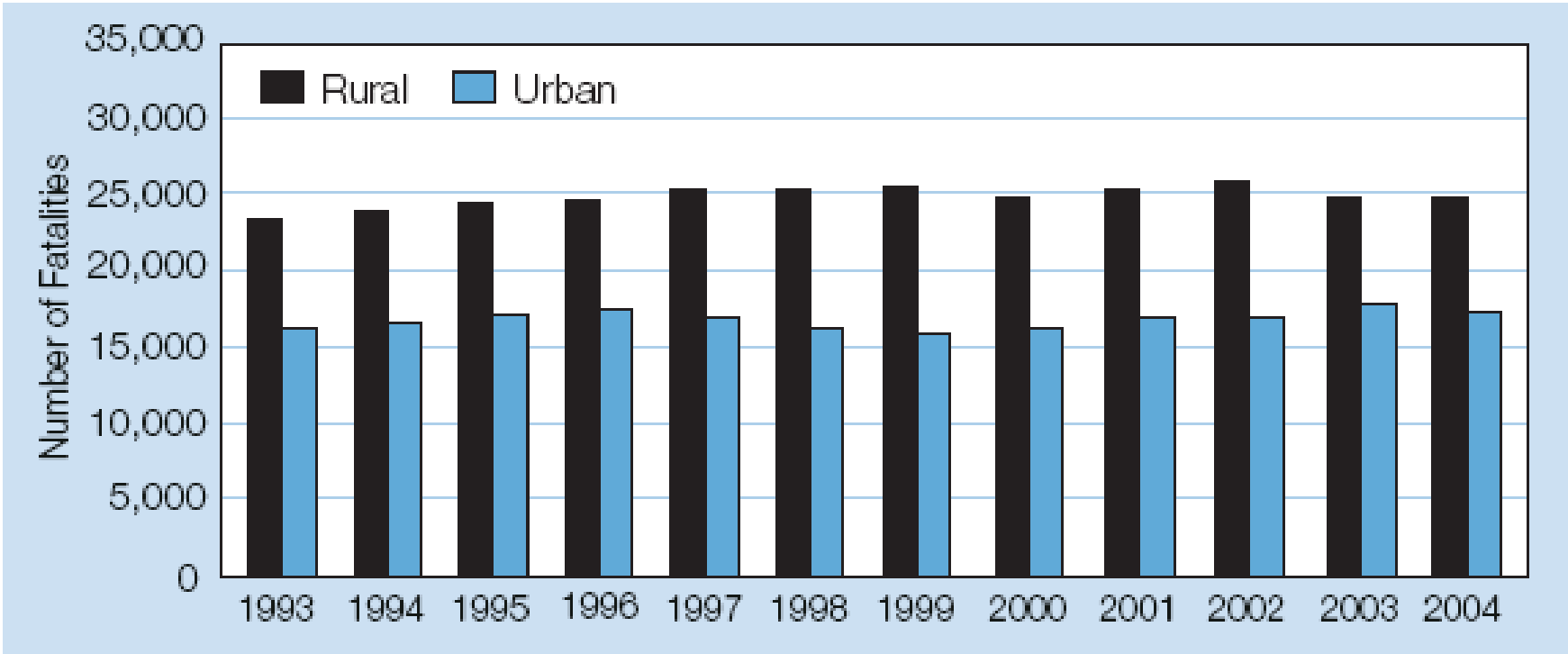
Source: National Highway Traffic Safety Administration. (n.d.). *Partners for Rural Traffic Safety Action Kit.* Retrieved March 16, 2007, from http://nhtsa.gov/people/injury/airbags/ruralsafety/introduc.htm

U.S. Rural vs. Urban Highway Fatalities

Figure 1

Number of Traffic Fatalities By Year and Location

1993-2004



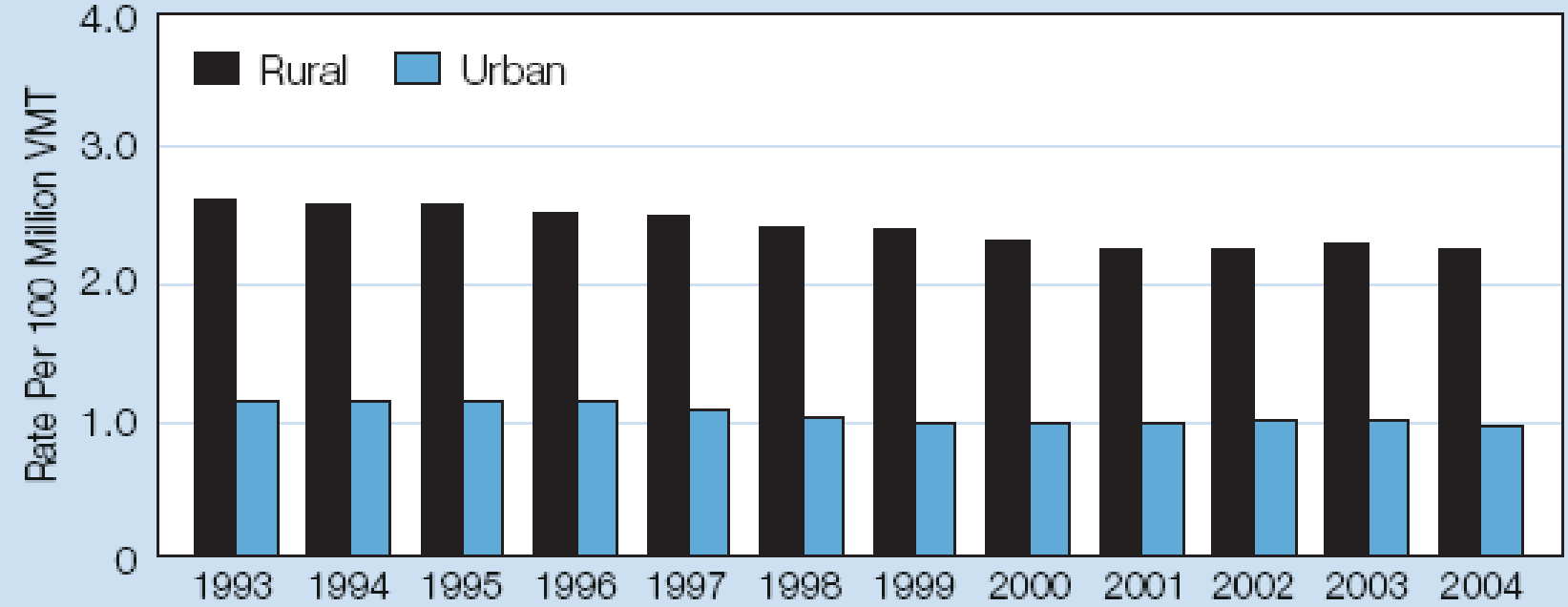
Source: NCSA, NHTSA, FARS 1993-2004

U.S. Rural vs. Urban Highway Fatalities

Figure 2

Fatalities per 100 Million Vehicle Miles Traveled By Year and Location

1993-2004

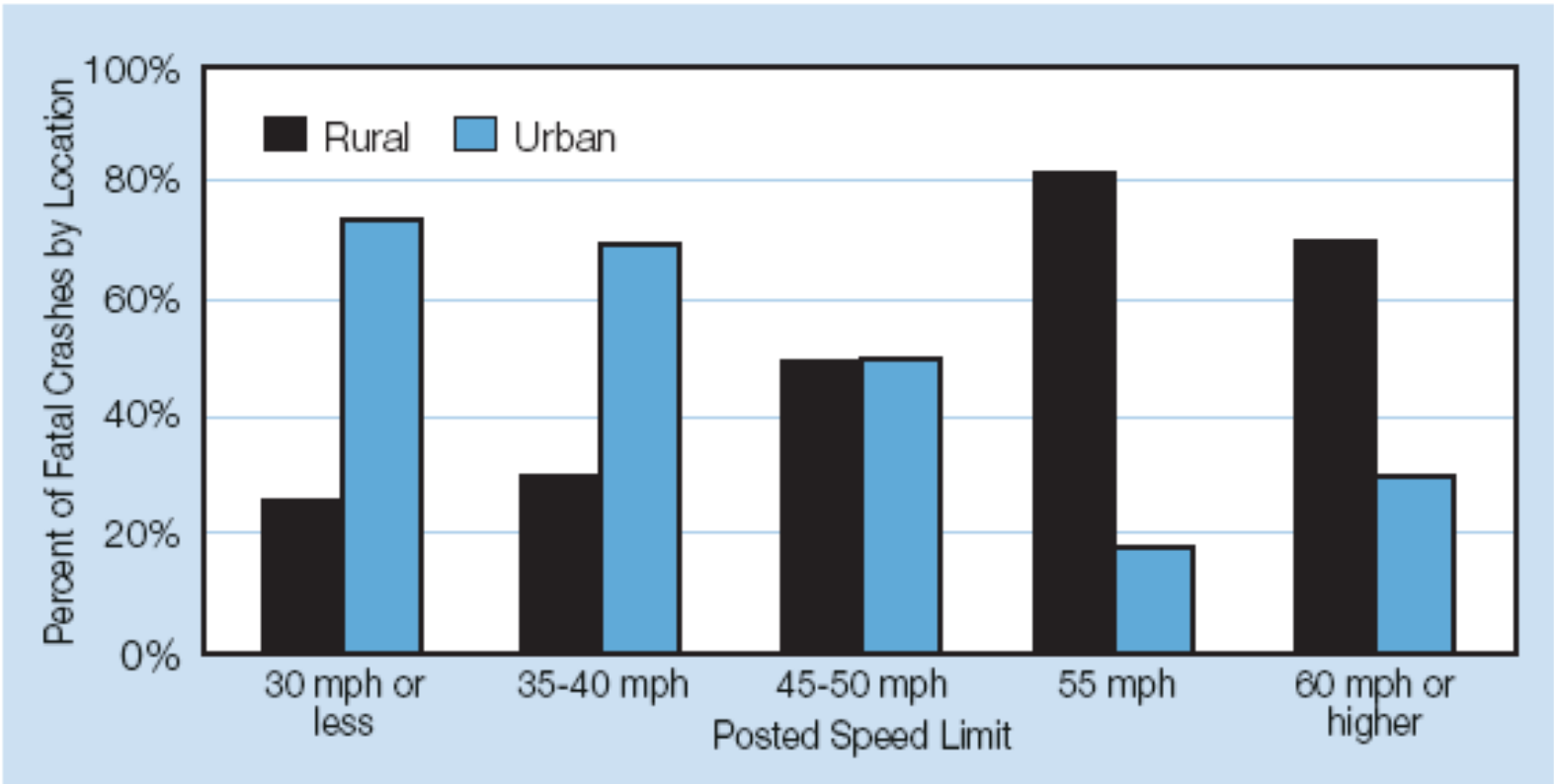


Source: NCSA, NHTSA, FARS 1993-2004 and FHWA, VMT data

U.S. Rural vs. Urban Highway Fatalities

Figure 3

Fatal Crashes By Posted Speed Limit and Location, 2004

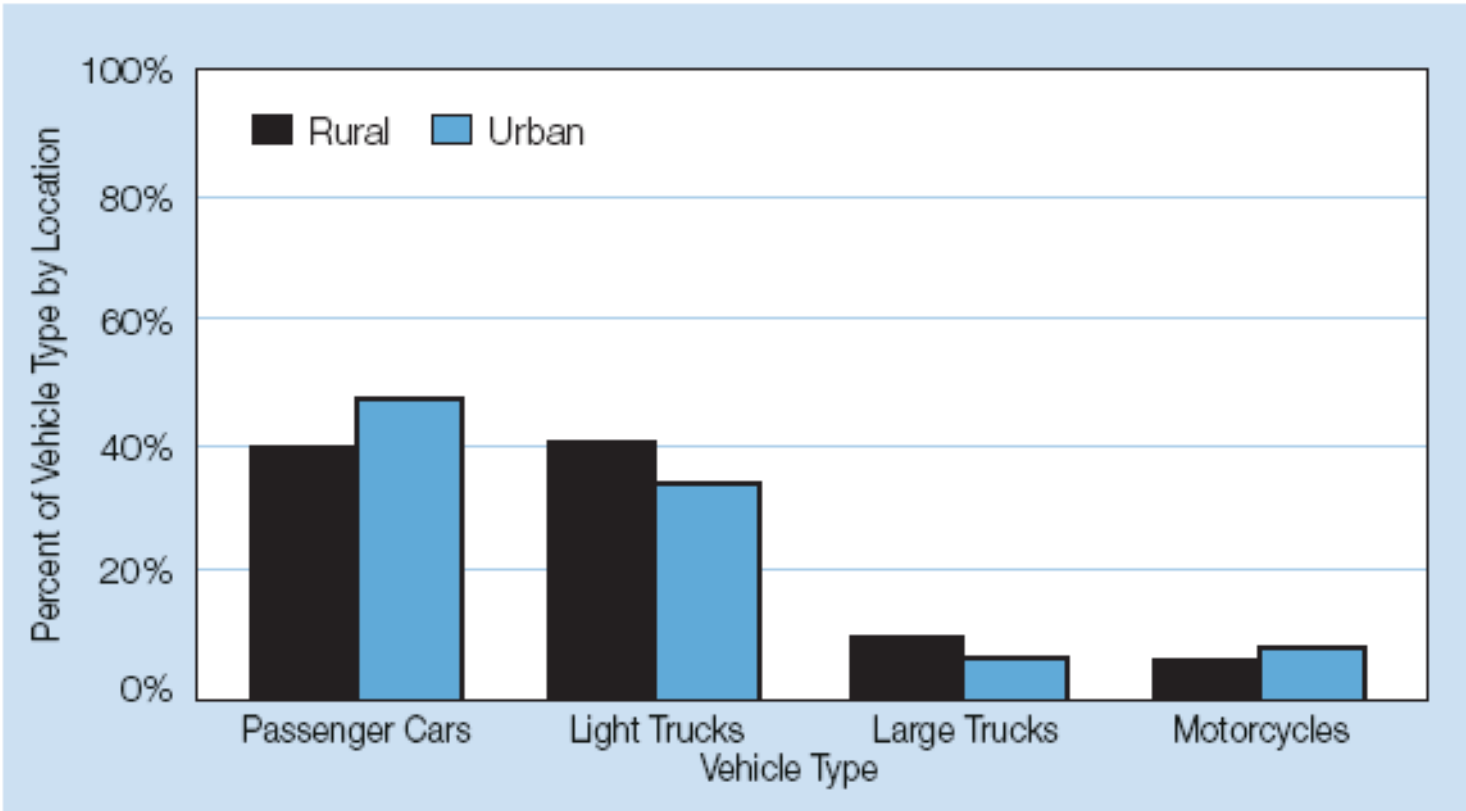


Source: NCSA, NHTSA, FARS 2004

U.S. Rural vs. Urban Highway Fatalities

Figure 4

Fatal Crashes By Vehicle Type and Location, 2004

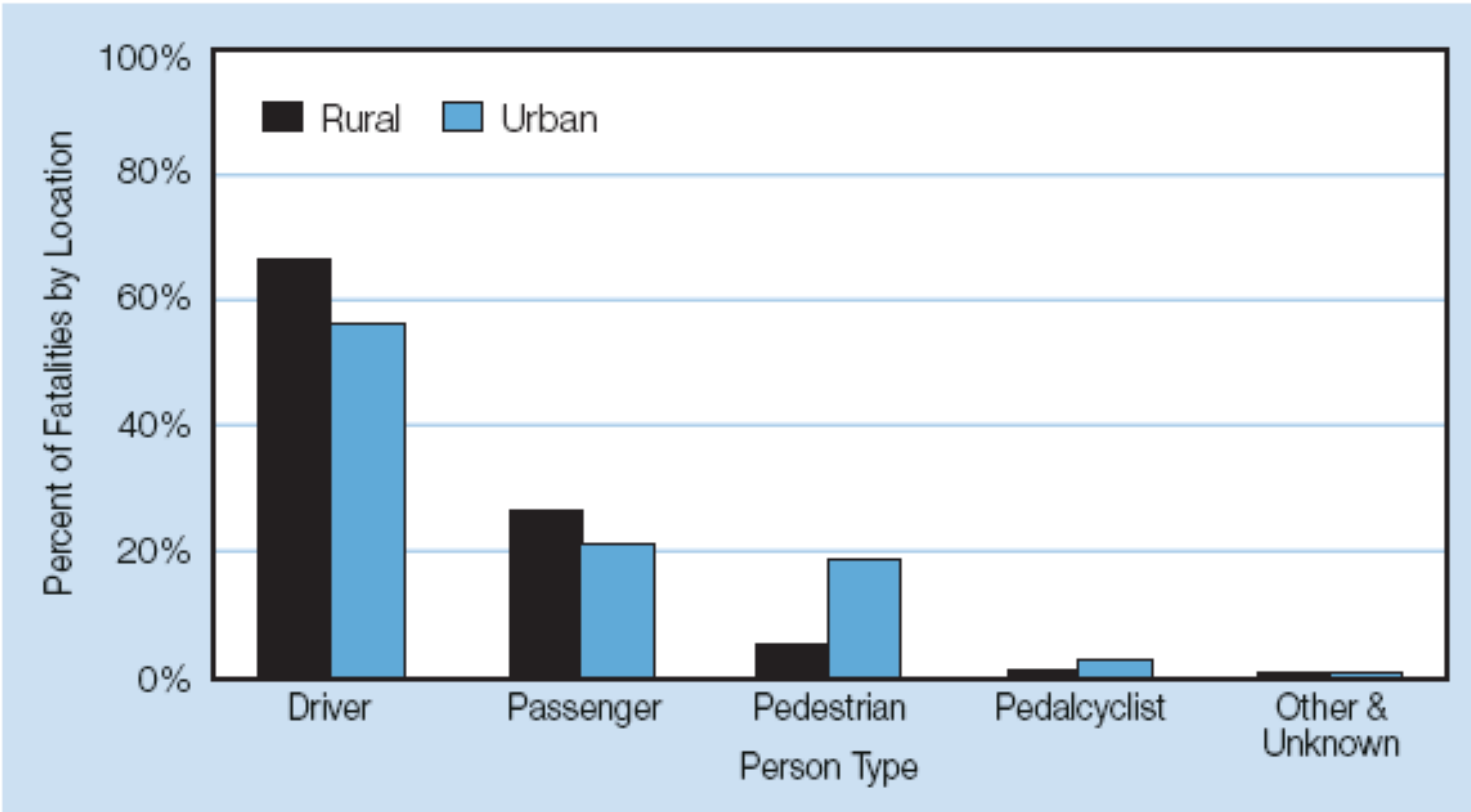


Source: NCSA, NHTSA, FARS 2004

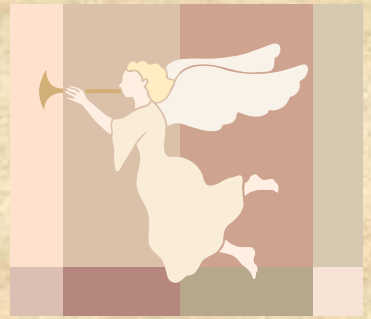
U.S. Rural vs. Urban Highway Fatalities

Figure 6

Fatalities By Person Type and Location, 2004



Source: NCSA, NHTSA, FARS 2004



Why Is Driving in Rural Areas So Dangerous?

- Drivers and passengers aren't wearing their seat belts.
- Wyomingites drive more on average than anyone else in the country.
- Drinking and driving.
- Distractions.
- Swerving to avoid animals.
- Types of vehicles driven.
- Long distances to medical care.

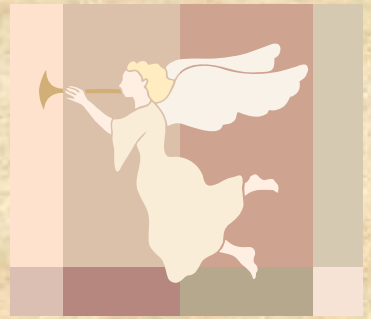
Source: Matteson, C. (2007, February 11). Over and over again. *Casper Star Tribune.* Retrieved March 13, 2007, from http://www.casperstartribune.net/articles/2007/02/11/news/top_story/673da102866aded08725727e00267929.txt

Direct Costs of Nonfatal & Fatal Accidents to Employers

- Workers' Compensation benefits.
- Healthcare costs.
- Increases in medical insurance premiums.
- Auto insurance and liability claims and settlements.
- Physical and vocational rehabilitation costs.
- Life insurance and survivor benefits.
- Group health insurance dependent coverage.

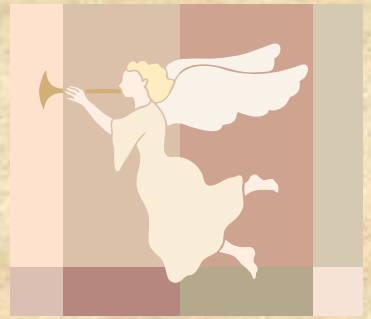
Direct Costs of Nonfatal & Fatal Accidents to Employers *continued*

- Property damage (e.g., equipment, products, etc.).
- Motor vehicle repair and replacement.
- Emergency medical services costs (ambulance or medivac helicopter).
- Vehicle towing, impoundment, and inspection fees.
- Municipality or utility fees for damage to roads, signs, or poles.



Indirect Costs of Accidents to Employers

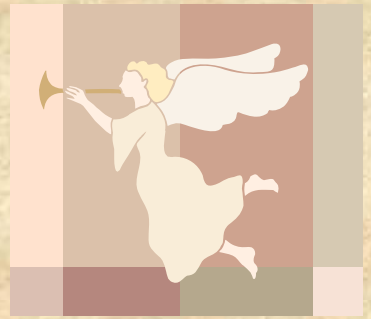
- Supervisor's time (rescheduling, making special arrangements)
- Fleet manager's time to coordinate vehicle repair, replacement, etc.
- Reassignment of personnel to cover for missing employees (less efficient)
- Overtime pay (to cover work of missing employees)
- Employee replacement



Indirect Costs of Accidents to Employers *continued*

- Re-entry & retraining of injured employees
- Administrative costs (documentation of injuries, treatment, absences, crash investigation)
- Inspection costs
- Failure to meet customer requirements resulting in loss of business
- Bad publicity, loss of business

Source: Occupational Safety & Health Administration, National Highway Traffic Safety Administration, and Network of Employers for Traffic Safety. (n.d.). *Guidelines for Employers to Reduce Motor Vehicle Crashes*. Retrieved March 13, 2007, from http://www.osha.gov/Publications/motor_vehicle_guide.pdf



Estimated Cost of a One Accident to a Typical U.S. Employer

- **$16,500** – the estimated costs to an employer for an average crash.
- **$74,000** – the estimated costs to an employer of an on-the-job crash that results in an injury.
- **More than $500,000** – the estimated costs to an employer when there is a fatality.

Source: Occupational Safety & Health Administration, National Highway Traffic Safety Administration, and Network of Employers for Traffic Safety. (n.d.). *Guidelines for Employers to Reduce Motor Vehicle Crashes*. Retrieved March 13, 2007, from http://www.osha.gov/Publications/motor_vehicle_guide.pdf

Costs of Accidents to Employers

Estimated Economic Impact of Motor Vehicle Accidents, 2000[a]

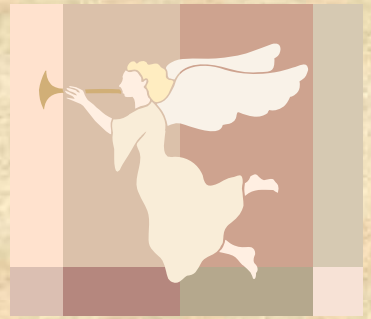
	Overall Cost	From Speeding-Related Crashes
U.S.A	$230.568 Billion	$40.390 Billion
Wyoming	$0.424 Billion	$0.084 Billion

[a]2000 is the most recent year for which data is available.

Employer Accident Prevention Strategies

Network of Employers for Traffic Safety (NETS) 10-Step Program to Minimize Crash Risk

1. Senior management commitment & employee involvement.
2. Written policies & procedures.
3. Driver agreements.
4. Motor vehicle record (MVR) checks.
5. Crash reporting & investigation.



Employer Accident Prevention Strategies

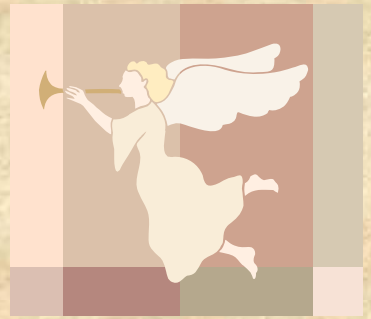
NETS 10-Step Program *continued*

6. Vehicle selection, maintenance, & inspection
7. Disciplinary action system
8. Reward/incentive program
9. Driver training/communication
10. Regulatory compliance

Source: Occupational Safety & Health Administration, National Highway Traffic Safety Administration, and Network of Employers for Traffic Safety. (n.d.). *Guidelines for Employers to Reduce Motor Vehicle Crashes*. Retrieved March 13, 2007, from http://www.osha.gov/Publications/motor_vehicle_guide.pdf

Employer Accident Prevention Strategies

- Don't wait for an accident to happen before you discuss safe travel with your employees.
  - **REMIND THEM TO BUCKLE UP.**
  - Slow down on slick roads.
  - Avoid driving distractions.
  - Help your employees overcome the "it will never happen to me" attitude.
- Employer traffic safety resources on the Internet.



In a Nutshell

- Wyoming transportation accidents (includes all forms of transportation) accounted for 6.3% of nonfatal work-related injuries but 54.3% of fatal workplace injuries
- Highway accidents killed 170 people in Wyoming in 2005, 66% of whom were not wearing seat belts.
- Fatalities on Wyoming's highways are costly, both in lives lost and financially.
- ***Prevention is the key***.

Let's be safe out there