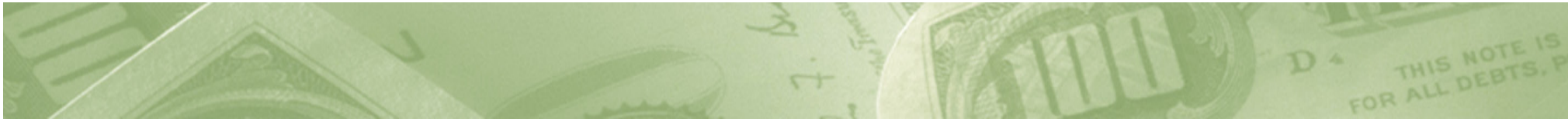
The Cost of Fatal Injuries to Civilian Workers in the United States

1992-2001

Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health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Elyce Anne Biddle, Ph.D.

Department of Health and Human Services
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Foreword

The burden that fatal occupational injury imposes upon society is severe and multidimensional. In addition to the human costs associated with the loss of a family member, an employee, and a coworker, there are costs that are economic in nature. No single metric can capture all the dimensions of loss, either personal or economic; it is extraordinarily difficult to measure the contribution of a family member or that of an active member of a community or group. To understand the dimensions of loss more fully, it is necessary to measure the aspects of fatal occupational injury that can be captured. Demographic data on fatal workplace injury was captured in the National Traumatic Occupational Fatality Surveillance system, maintained by the National Institute for Occupational Safety and Health (NIOSH).

The current document is an attempt to build upon the surveillance data by adding an economic component; the data in this monograph provide a measure of the economic loss to society from the premature deaths of workers in various economic sectors, by states, to society as a whole, over time, by cause of death, and by demographic characteristics. The findings are compelling: over the period studied, 1992–2001, the estimated costs from these premature deaths exceeded $43 billion.

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for Occupational Safety and Health

Acknowledgments

The author wishes to extend her appreciation to the reviewers for their thoughtful and insightful comments. This document draws upon the knowledge and expertise of numerous parties with practical and advanced knowledge of occupational safety, economics, and the consequences of traumatic injury, and it is not possible to thank all of the contributors who have helped to advance the body of knowledge in this area. However, it is possible to individually acknowledge the contribution of the reviewers who have generously donated their time and knowledge to improve the document: Sharada Weir, J. Paul Leigh, Scott Richardson, Jose Benevides, and Steve Newell. Without their insight, this document would be less complete in many ways.

Additionally, the contribution of the numerous parties who have helped to make this document into an accurate, validated, and published reference work must be acknowledged: Dave Hilling for his tireless efforts in developing the computer programs, Lunette Utter for her assiduous work in preparing tables of information, Joyce Spiker for her assistance in text and data table formatting, Kim Clough Thomas for her skills in document design, and Suzanne Marsh for her careful attention to standards of publication. Finally, the pioneering work of D. P. Rice and E. J. MacKenzie must be acknowledged for developing the underlying methods for much of this publication.

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Executive Summary

The National Institute for Occupational Safety and Health (NIOSH), through the National Traumatic Occupational Fatalities (NTOF) surveillance system, collected death certificates from the 52 vital statistics reporting units in the 50 states, New York City, and the District of Columbia. Information was collected for workers aged 16 years or older who died as a result of a work-related injury from 1980 through 2001. Data gathered through this NIOSH program help describe the nature and magnitude of the occupational injury problem in the U.S. Counts of fatalities by demographic and employment groups and by injury characteristics help identify high-risk worker groups and potential injury-risk factors [NIOSH 1993; NIOSH 2001]. This promotes the effective use of resources aimed at preventing injuries in the workplace.

Although important, typical measures of lives lost—frequency and rate—are not the only measures of the impact of occupational fatalities on the American public. Nor are they the only source of guidance for directing efforts to reduce the number of occupational incidents. Economic loss, or cost, is another perspective that can provide a more complete and meaningful outcome evaluation over time and can also assist in directing scarce research and prevention resources. This document presents the number of fatal occupational injuries and their total, mean, and median societal costs (in 2001 U.S. dollars) for each state and by worker and case characteristics for the U.S. for 1992–2001.

The cost-of-illness method, which sums indirect and direct costs, was used to calculate the mean, median, and total societal costs for the fatalities reported in NTOF. Indirect costs are calculated for each incident by accounting for the probability of survival, median annual earnings at the time of death, home production costs, earnings growth rate adjustments, and real discount rate. These costs are then added to the direct cost of medical expenses to arrive at the societal cost of fatal injury. The addition of home production costs to this model represents an advancement in methodology over models which simply account for loss of income from wages and presents a point of departure from previous studies. Limitations of this study are varied and include lack of inclusion of some costs of insurance compensation, lack of comprehensiveness of data drawn from death certificates and pay equity.

Major findings from this study are as follows:

- From 1992–2001, there were 51,684 civilian workers who died from injuries sustained while working in the U.S., generating a total societal cost of just over $43 billion (Table 1).

- Civilian occupational injury fatalities ranged from a high of 5,396 in 1994 to a low

of 4,888 in 2001, while the total societal cost ranged from a low of $4.1 billion in 1998 to a high of just over $4.5 billion in the years 1993 and 1994 (Table 1).

- For the years 1992–2001, the mean and median societal costs of a fatal occupational injury were $834,000 and $841,000, respectively. The mean societal costs ranged from $808,000 in 1998 to a high of $863,000 in 2001, with a similar range of median costs—$817,000 in 1998 to $869,000 in 1993 (Table 1).

- By state, the greatest number and total societal cost of occupational injury fatalities occurred in California (5,173; $4.5 billion), Texas (4,438; $3.8 billion), Florida (3,287; $2.8 billion), New York (2,509; $2.0 billion), and Pennsylvania (2,165; $1.8 billion) (Table 2).

- Five states had mean societal cost of a fatal occupational injury over $900,000—Alaska ($1,005,000), Hawaii ($922,000), Louisiana ($911,000), Utah ($905,000), and Nevada ($903,000). The only mean societal cost below $750,000 occurred in South Dakota ($703,000), North Dakota ($716,000), and Nebraska ($725,000), with only one state below $700,000—Iowa ($664,000) (Table 2).

- The majority of the occupational injury fatalities involved males (93%). Males had about the same share of total societal costs. The mean societal cost of a fatal injury for males was slightly higher than the mean societal cost for females: $835,000 compared to $815,000 (Table 5).

- One age group, 35–44 years of age, had the largest share of occupational fatalities and the largest share of the total societal cost of occupational injury fatalities (25%, 32%) closely followed by those who were 25–34 years of age (22%, 27%) and those who were 45–54 years (21%, 22%) (Table 5).

- Two age groups, 35–44 years and 25–34 years, had the highest mean societal costs of $1.07 million and $1.05 million, respectively. These two age groups had the highest means in every occupation division, industry division, and year. Two age groups, 55–64 years and over 65 years, had the lowest overall mean societal costs, $468,000 and $75,000 respectively (Table 5). These two groups also had the lowest means in every occupation division, industry division, and year (Tables 7, 24, and 31).

- Between 1992 and 1998, the leading International Classification of Diseases, 9th Revision, (ICD-9) external causes of occupational injury death in the U.S. were motor vehicle crashes (25%), homicides (16%), machine-related incidents (11%), and falls (10%). These four causes of death were not only the most common, they also had the highest total societal costs—$7.5 billion, $4.9 billion, $2.8 billion, and $2.9 billion, respectively (Table 10).

- Between 1999 and 2001, the International Classification of Diseases, 10th Revision, (ICD-10) causes of death with the highest total societal costs were motor vehicle

crashes ($3.8 billion with 87% involving motor vehicle traffic incidents), falls ($1.5 billion), homicides ($1.4 billion), and machine-related incidents ($1.0 billion). These four causes of occupational injury death also had the largest number of cases—motor vehicle incidents (4,589 with 84% being motor vehicle traffic incidents), falls (1,923), homicides (1,664), and machine-related incidents (1,227) (Table 11).

- Regardless of sex, race, or age group of the decedent, motor vehicle incidents had the highest total cost of traumatic occupational fatalities during 1992–1998 (Table 10, 14, and 16). Motor vehicle traffic incidents also had the highest total cost regardless of sex, race, or age group for 1999–2001 (Tables 11, 15, and 17).

- The industry divisions with the greatest number of deaths and the highest total societal costs from 1992 to 2001 were (1) Construction and (2) Transportation, Communication, and Public Utilities. Finance, Insurance, and Real Estate had the fewest number of deaths and the lowest total societal cost during this time period (Tables 18 and 19).

- With two exceptions, 1995 and 1996, Public Administration had the highest mean and median costs for the years 1992 through 2001, averaging just over $1 million per fatality. Mining was the only other industry division to exceed $1 million per fatal occupational injury (Tables 18 and 19).

- During 1992–1998, the highest total societal cost by external cause of death was dominated by three categories—motor vehicle incidents (highest for Transportation, Communication, and Public Utilities; Construction; and Services), machine-related incidents (highest for Manufacturing; Construction; and Agriculture, Forestry, and Fishing), and homicides (highest for Retail Trade; Services; and Public Administration). The only remaining total societal cost by external cause of death above $1 billion was falls within the Construction industry (Table 20).

- During 1999–2001, motor vehicle incidents had the highest costs for all industry divisions except Retail Trade; Finance, Insurance, and Real Estate; and Construction. As in the previous time period, the highest total costs for Retail Trade and Finance, Insurance, and Real Estate were for homicides and the highest total costs for Construction were for falls (Tables 11 and 21).

- Without exception, air transportation incidents had the highest mean costs for each industry division from 1992–1998 (Table 22). The same was true for 1999–2001 with the exception that poisoning had the highest mean cost in the Finance, Insurance, and Real Estate industry division (Table 23). During 1992–1998, machine-related deaths were recorded as the lowest mean cost for three of the ten industry divisions—Agriculture, Forestry and Fishing; Transportation, Communication and Public Utilties; and Public Administration. Struck by

falling objects had the lowest mean costs for Manufacturing and Finance, Insurance, and Real Estate, while falls had the lowest mean costs in Retail Trade and Services. Nontraffic motor vehicle incidents recorded the lowest mean cost for five of the ten industry divisions during 1999–2001 (Tables 22 and 23).

- Out of all the occupational divisions, Precision Production/Craft/Repair (Crafts) had the highest number of fatal occupational injuries and total societal costs for 1992–2001—10,423 and $9.5 billion, respectively (Table 25). Furthermore, Crafts had the highest number of fatalities and total costs for each year during this period (Table 26). Similarly, Technicians/Related Support Occupations (Tech/Support) exhibited the highest mean and median costs for each year, averaging $1.4 million and $1.3 million, respectively (Tables 25 and 26).

- Homicides had the highest total societal costs by external cause of death for four of eleven occupation divisions—Executives/Administrators/Managers, Sales, Clerical, and Service occupations—during 1992–1998. Motor vehicle incidents also had the highest total societal costs by external cause of death for three of eleven occupation divisions during this time period— Professional Specialties, Transportation/Material Movers, and Handlers/Equipment Cleaners/Helpers/Laborers (Table 27).

- For five of eleven occupation divisions—Executives/Administrators/Managers, Professional Specialties, Clerical, Farming/Forestry/Fishing, and Transportation/Material Movers occupations—motor vehicle incidents had the highest total societal costs for 1999–2001. For the remaining occupation divisions, homicide (Sales and Service), falls (Precision Production/Craft/Repair and Handlers, Equipment Cleaners/Helpers/Laborers), machines (Machine Operators/Assemblers/Inspectors) and air transport (Technicians/Related Support) had the highest total societal costs (Table 28).

- The mean cost of fatal occupational injury was highest for transportation incidents (air transport, water transport, and rail transport) over the entire study period for the majority of occupation divisions, ranging from $692,000 to $1.59 million. However, the highest mean cost in any occupation division for external cause of death was $1.61 million for explosions in Professional Specialties during 1999–2001 (Tables 29–30).

The Cost of Fatal Injuries to Civilian Workers in the United States, 1992–2001

Introduction

The National Institute for Occupational Safety and Health (NIOSH) began collecting death certificates from all 50 states, New York City, and the District of Columbia in answer to the need for a comprehensive enumeration of workers who sustain a fatal work-related injury. From 1980 through 2001, NIOSH operated the National Traumatic Occupational Fatalities (NTOF) surveillance system to fill gaps in the knowledge of work-related injury deaths in the United States by providing a census of occupational injury deaths for all U.S. workers.

Surveillance data, such as those gathered through the NTOF surveillance system, allow analysis of demographic, employment, and injury characteristics and also enable the examination of trends over time. These data allow the description of the nature and magnitude of the occupational injury problem in the U.S., the identification of potential risk factors, the generation of hypotheses for further research, and the setting of research and prevention priorities.

In 1993, a comprehensive summary of fatal occupational injuries in the U.S. was published based on data collected through the NTOF surveillance system for the years 1980 through 1989 [NIOSH 1993]. A second document, published in 2001, extended the period of analysis to 16 years of data, 1980–1995, providing the most comprehensive summary of fatal occupational injuries in one document for the U.S. as a whole and for each of the 50 states [NIOSH 2001]. Both documents serve as resources to describe the magnitude and circumstances of occupational injury deaths in the U.S. from 1980 through 1995.

This document serves as a supplemental update to the earlier documents, by providing additional components of economic loss. The Cost of Fatal Injuries to Civilian Workers in the United States, 1992–2001 provides the total, mean, and median societal costs and the number of occupational fatal injuries by external cause of death, demographic characteristics, and state of death. In general, cost estimates provide additional information about how fatal injuries affect society. These costs represent the impact on the U.S. gross domestic product and may be used to improve occupational injury prevention and control program planning, policy analysis, evaluation of safety and health interventions, and advocacy for safer work environments.

Methods

Fatality Counts

The fatality counts for this document were obtained from the NIOSH NTOF surveillance

system. This database is composed of information obtained from death certificates from the 52 U.S. vital statistics reporting units in the 50 states, New York City, and the District of Columbia. While various studies have shown that multiple-source surveillance systems are the best approach for capturing occupational fatalities, death certificates were chosen for this surveillance system because they are the single source that identifies the largest number of cases, and death certificates are fairly comparable among all reporting units. Studies show that death certificates alone identify between 67% and 90% of all fatal work injuries among the various states [Baker et al. 1982; Karlson and Baker 1978; Stout and Bell 1991; Biddle and Marsh 2002; Layne 2004]. As a result of reliance on a single reporting measure, the total societal cost of fatal occupational injuries will be underestimated.

For a case to be included in the NTOF database, it must have met three criteria:

(1) Decedent was 16 years of age or older.
(2) External cause of death (see Appendix I) was classified as E800–E999 for 1992–1998 (ICD-9) [WHO 1977] or V01-Y89 for 1999–2001 (ICD-10) [WHO 1992].
(3) "Injury at Work?" item was marked positive by the certifier.

The NTOF database contains 30 variables useful for describing characteristics of victims as well as injury circumstances. Data elements include coded worker characteristics and injury circumstances such as sex, race, occupation, and cause of death. In addition to coded data, there is also narrative text for industry, occupation, causes of death, and injury description.

Codes for the "usual industry" and "usual occupation" were assigned based on the narrative information contained on the death certificates. Narrative information for occupation and industry was individually hand-coded by an expert coder according to the 1990 Bureau of the Census classification scheme [BOC 1992] and the 1987 Standard Industrial Classification (SIC) System [OMB 1987], respectively. Death certificates for which no occupation or industry entry was present or for which the entry was too vague were coded into the "not classified" category. Certificates which had entries such as "housewife" or "student" were also coded into the "not classified" category. Appendix II presents the 1990 Bureau of the Census classification scheme used to classify the decedent's usual occupation at the time of death. Appendix III presents codes included in the tables that provide information for detailed industry and occupation groupings. Appendix IV provides explanations of the abbreviations used in the tables for occupation and industry divisions.

Cause of death codes were assigned based on the ICD-9 supplementary chapter for the classification of external causes of injury and poisoning [WHO 1977] and Chapter XX of the ICD-10 [WHO 1992]. Codes are denoted with a preceding "E" in the ICD-9 and "V, W, X, and Y" in the ICD-10. Both classifications cover the spectrum of unintentional and intentional environmental events and circumstances

as the causes of death. However, the individual classification codes and code groups substantially differ in content and definition, constituting a "break in series." The number of deaths in the different categories of the ICD-9 and ICD-10 systems cannot be compared across these two systems. As a result, data are presented for each classification separately. Tables containing data from 1992–1998 use the ICD-9 classification structure, while tables containing data from 1999–2001 use the ICD-10 classification structure. A table which provides the code rubrics included in each of the classification groupings is shown in Appendix I.

The information presented in this report includes civilians who died at work in the U.S. only, excluding civilians who died at work while abroad, all military personnel, regardless of the duty station, and deaths associated with 9/11/2001. The number of U.S. civilian workers killed while abroad is not known. While NTOF does contain military cases for those who died at work in the U.S., these cases were excluded from this report primarily because of difficulties in establishing a definition of work-relatedness comparable to that of civilians. Unlike civilians, whose death is generally considered work-related if the incident occurred (1) on an employer's premise, or (2) off the worksite premises but while the worker was conducting legitimate work duties, active duty military personnel are considered to be on-duty 24 hours per day [NIOSH 1996].

Issues of Death Certificate Data

Limitations of death certificates used to ascertain work-related fatality information have previously been described [Bell et al. 1990; NIOSH 1993; Russell and Conroy 1991; Stout and Bell 1991]. Incomplete or unclear information on the death certificate can be problematic when determining the work-relationship of fatalities. Motor vehicle crashes and homicides accentuate the difficulty of attempting to identify occupational injuries [CO DOH 1988; Russell and Conroy 1991].

To overcome these difficulties, national guidelines for completing the "Injury at Work?" item were developed in 1992 (Appendix V) and disseminated by the Association for Vital Records and Health Statistics (now the National Association for Public Health Statistics and Information Systems), NIOSH, the National Center for Health Statistics (NCHS), and the National Center for Environmental Health. The extent to which the guidelines improved the quality of the data from earlier years of NTOF, such as their sensitivity in identifying cases and their positive predictive value, is unknown.

There are potential discrepancies in the collection of race and ethnicity in the death and employment data. The first official recommendation to the states to include separate questions for race and ethnicity on their respective death certificate forms was made by NCHS in January 1987 [NCHS 1991]. Studies have shown that race and ethnicity can be confused, and the manner in which the information is gathered affects the subsequent estimates [BLS 1996a; BOC 1996; BOC 1997].

Death certificates query for the "usual"

occupation and industry of the person who died and may not necessarily reflect the occupation or industry engaged in at the time of the fatal injury. Previous studies comparing death certificate entries for usual occupation and industry to employment information for occupation and industry at the time of death found agreement for occupation to exist in 64% to 74% of the cases and for industry to exist in 60% to 76% of the cases [Baker et al. 1982; Davis 1988; Illis et al. 1987; Karlson and Baker 1978; Schade and Swanson 1988]. Some studies have shown, however, that "most recent" occupation and industry is incorrectly entered in the "usual" occupation and industry fields on death certificates for about 6% to 11% of the cases [Davis 1988; Schade and Swanson 1988]. For these reasons, there exists the possibility that for any surveillance system based on death certificates, cases may be misclassified with respect to industry and occupation.

To address some of the limitations of death certificates and other existing data sources in the surveillance of fatal occupational injuries, in 1992 the Bureau of Labor Statistics (BLS) began collecting national work-related fatality data through the Census of Fatal Occupational Injuries (CFOI) system. CFOI is a multisource surveillance system that typically requires at least two source documents to verify work-relatedness of the fatality. Although CFOI and NTOF identified similar patterns for industry and occupation, a study of 1995 data showed that NTOF captured somewhat fewer civilian deaths than CFOI—5,314 compared to 6,210 [BLS 1997; Biddle and Marsh 2002]. In addition to differences in source documents, the two surveillance systems differ in the coding systems used to specify cause of death: NTOF uses External cause codes from the ICD-9 and ICD-10 [WHO 1977, 1992]; CFOI uses the BLS-designed Occupational Injury and Illness Classification System [BLS 1996]. Direct comparisons of the two systems present methodological challenges, but broad results for cause of death are similar [Biddle and Marsh 2002].

Costs of Traumatic Fatal Occupational Injuries

Costs of traumatic fatal occupational injuries were estimated using a model developed by the Division of Safety Research (DSR) within the National Institute for Occupational Safety and Health. This model is based on the concepts and methods initially developed by Rice and MacKenzie, subsequently modified within DSR [Biddle 2004]. The model continues to evolve, to include ongoing modification of data sources and methods in response to changing standards of data enumeration and improvements in accepted methods of cost estimation. The methods used in the current document are completely described within the Methods section of this monograph. Estimated costs by year, state, sex, race, age, occupation, and industry groups are presented in Tables 1–44.

The cost-of-illness method, which combines direct and indirect costs, was employed to derive the societal cost of traumatic fatal occupational injuries. It calculates incidence-based costs—the lifetime cost of all fatal injuries occurring in a given year regardless of what year

the costs are accrued—rather than prevalence-based costs. Base information for each decedent was obtained through the NTOF surveillance system. Worker and case characteristics used in the cost calculations included age, sex, occupation, and race of the worker; employer industry; and year of death. Because of the variables needed for the present-value calculations, 40 cases in which the sex or age was not known were excluded. Although not necessary for the calculations, external cause of death and state of death were obtained from NTOF to present societal costs for these groups. The direct and indirect costs of each fatal occupational injury reported by NTOF were calculated independently. Costs for all individual occupational fatal injuries were then summed for each characteristic or group of characteristics of interest.

The only direct cost was a single nominal value for medical costs of $11,276 (based on the value of the dollar in 1998), which was obtained from the Detailed Claims Information (DCI) database from National Council on Compensation Insurance [NCCI 1995]. This database provides estimates of the costs of injuries and fatalities to workers based on a nationally representative sample. The administrative data collected from state worker's compensation experiences contain information on injuries with lost workdays. Because each state varies in the requirements for worker's compensation payment, the number of days lost prior to inclusion in this database ranges from two to seven days. However, this limitation does not affect the reporting on information for work-related fatalities. For this study, the mean of medical costs for fatalities over a four-year period from the DCI was used. The dollar value was adjusted to 2001 dollars using the CPI-Medical Care Index shown in Appendix VI [BLS 2003a].

The indirect lifetime cost of an individual fatal occupational injury was derived by calculating the present value of lost household production and future earnings of that worker summed from the year of death until that decedent would have reached age 67, accounting for the probability of survival were it not for the premature death—the human capital approach. These calculations build on a similar model developed by Dorothy Rice in 1965 [DHEW 1965]. However, because this model calculates the cost of individual known fatalities, several modifications were made to the Rice model. First, because the decedents were known to be employed at the time of death, the calculation for participation rate in the labor force was eliminated. The assumption was made that if the individuals would have survived, they would have remained in the workforce until the age of retirement. Second, the iterations were ceased when the decedent would have reached 67 rather than the age used in the Rice model, which was age 99. The age used in this model was selected based on the retirement age of a substantial proportion of the current workforce. However, if the victim was older than 67 at the time of death, a single year of indirect cost was included. Further analysis could be conducted to assess the impact of increasing rates of employment past historical retirement age, but for the purposes of this document the assumption of removal from the workforce at age 67 was made. This assumption can be considered to be a limitation of the study.

The indirect lifetime cost calculations are expressed as follows:

$$PVF = \sum_{n=y}^{67} P_{y,q,s}(n)\,[Y_{s,j}(n) + Y_s^h(n)] * (1+g)^{n-y}/(1+r)^{n-y}$$

where:

PVF = present discounted value of loss per person due to an individual fatal occupational injury

$P_{y,q,s}(n)$ = probability that a person of age y, race q, and sex s will survive to age n

q = race of the individual

s = sex of the individual

n = age if the individual had survived

$Y_{s,j}(n)$ = median annual compensation of an employed person of sex s, specific occupation j, and age n (includes benefits by detailed industry and wage growth adjustments)

j = specific occupation of individual at death

$Y_s^h(n)$ = mean annual imputed value of home production (h) of a person of sex s and age n

g = earnings growth rate attributable to overall productivity

y = age of the individual at death

r = real discount rate (3%)

h = value of home production

Indirect losses were adjusted by the probability that the individual would have survived were it not for the premature death that resulted from an occupational event or exposure. The probability estimates used in this study were developed by the National Center for Health Statistics, Division of Vital Statistics. This agency used data from the 1990 Census of Populations as well as data on deaths occurring in the United States to U.S. residents for 3 years, 1989–91 [DHHS 1997]. These current life tables were based on a complete count of resident deaths in the United States during those years. Separate probabilities were calculated for each sex within the white population, the population other than white, and the black population. The initial survival table presented the number of persons in the sample surviving to exact age x. The percent of persons who, having attained age x, will survive to age x + t, where t = time, was calculated by dividing x + t by x and multiplying by 100. The probability of survival by sex and race used in these cost-estimate calculations can be found in Appendix X.

The second major component in the indirect cost calculation is compensation or $Y_{s,j}(n)$. There are four elements of this component used in this model: base earnings, life-cycle wage growth, economy-wide productivity growth, and employee benefits.

NTOF provides information on the occupation of the decedent, but not the wage or salary at the time of death. Therefore, the base wage for this model is an estimate or expected value of the earnings of the decedent established by the decedent's occupation and sex at the time of death. Also because of the lack of detailed employment information, the model assumes that the decedent had worked full-time in that occupation and would not have changed occupations nor left the job between the time of death and retirement age.

The base earnings were assigned to each fatality based on the decedent's sex and

occupation at the time of death and were derived from the CPS, collected by the Bureau of the Census for the Bureau of Labor Statistics (Bureau of Labor Statistics, 1992–2001). This population-based survey includes wage and salaried workers, the self-employed, and all agricultural workers. Earnings from this survey were selected because earnings were estimated using the Bureau of Census (BOC) classification scheme, which is the same system used by NTOF to code occupation (see Appendix II). Under the recommendation of BLS staff and without a valid statistical reason to select mean earnings, median earnings were selected for this model. Base earnings were defined as median annual earnings before taxes and other deductions, enumerated by the 3-digit occupation code taken from the BOC classification scheme, as well as sex, and age group. Base earnings were not available by race, therefore the model assumes the same median annual earnings given sex and occupation for each race. These data were adjusted for inflation using the All Urban Consumer Price Index (CPI-U), which can be found in Appendix VIII [BLS 2003a]. Where data were not available for a specific detailed occupation, earnings from the next hierarchical level were substituted.

The median earnings estimations from the CPS using the BOC classification scheme were derived for age groups by sex, but not for each age. However, for these estimates, median earnings for individual ages by sex were preferred because NTOF presented individual ages for each fatality. To derive median earnings for each age, the median age of each age group was determined and 6-month age intervals were created. This established 20 "ages" for each age group. The CPS-published median earnings for a particular age group were assigned to the median age of that age group. To derive an earnings value for each of the 20 ages, the difference between sequential age groups was calculated as

$$\text{Earnings}_{x+1} - \text{Earnings}_{x}$$

where Earnings = CPS published age group earnings.

This difference was evenly distributed within the age group and then the proportion of the median age earnings for each age was determined. The process was repeated for both males and females and for each year of earnings data. Finally, the base earnings assigned to each fatality were derived by adjusting the median earnings for the occupation of the decedent by the proportion associated with the age, sex, and year of death for that decedent. The adjustments to earnings by age and sex are found in Appendix VIII.

To account for the next component of wage growth, estimates of the life-cycle growth, or the salary growth due to experience of the individual worker, were employed. The growth rate was calculated using wages from the historical income tables of the Current Population Survey (CPS) for the years 1980 through 1998 [BLS 1998]. Wage by age is the single necessary component for deriving career growth estimates and was available in mean,

not median, values. The CPS presented mean wages in constant dollars by sex, race, and age group for each year. The rate of change for mean wages was determined for each sex and race within a specific age group. Wages for the initial age group (x) were subtracted from the wages of the next age group (x+1) and divided by the initial age-group wage: [(x+1)-x]/x. This process was repeated for male and female decedents within each race category. For this study, it was assumed that the salary growth rate was constant within age groups—i.e., equal increments for each year of age within that age group. Specific career growth adjustment factors by age, sex, and race are presented in Appendix XI.

The economy-wide productivity growth element ("g" in the equation on page 10) used the Employment Cost Index (ECI) to estimate how much earnings would rise in concert with the growth of the U.S. economy as a whole [BLS 2000]. The ECI measures the change in the cost of labor and includes both changes in wages and salaries as well as employee benefits costs.

This index is based on establishment surveys of compensation costs that cover all occupations within the private and public sector. The surveys of approximately 5,000 establishments exclude farms, households, the self-employed, and the federal government. The 1987 Standard Industrial Classification (SIC) System was used to classify establishments by industry in the most current surveys [OMB 1987]. After the sample is drawn, weighted probability sampling methods are used, with weighting in proportion to establishment size, to select occupations in each of the sampled establishments. That is, a fixed number of occupations are selected in each establishment using a process that gives occupations with greater employment a greater chance of selection.

The ECI uses the current-cost approach, in which annual costs are calculated based on the current price of benefits and current plan provisions. The annual cost is divided by the annual hours worked to derive the cost per hour worked for each benefit. Values for earnings and benefits are calculated separately by BLS and for this model. Because the model forecasts the decedent's wages for up to 50 years into the future, it uses a long-term productivity growth rate, the average of the percent changes in the ECI from 1976 to 2000. Deaths were assumed to be uniformly distributed by month, and as a result, the wage growth rate was reduced by one-half in the first year. This is an inflation-free change in wages and represents an annual proxy for a change in productivity. The value of benefits was also adjusted using the same methodology.

Finally, to more closely represent the market value of an employee's compensation, the value of employee benefits was added to the base earnings. These data were taken from the U.S. Chamber of Commerce annual survey of employee benefits administered to a sample of employers based on the distribution of U.S. employment [U.S. COC 2002]. The sample includes both public- and private-sector employers selected to represent a cross-section of U.S. business by industry, size of firm, and

geographical region. Mean estimates of benefits were calculated using data from hourly paid and salaried employees. Benefits as a percent of payroll for this study are presented in Appendix IX. These benefits include the employer's share of legally required payments; retirement and savings plan payments; life insurance and death benefits payments; medical and medically related benefit payments; and miscellaneous benefit payments such as employee education expenditures, child care, and discounts on goods and services purchased from company by employee. To avoid double counting, categories of paid rest periods, lunch periods, wash-up time, travel time, clothes changing time, get-ready time, etc., and payments for time not worked such as paid vacations, holidays, sick leave, or State or National Guard duty, are excluded. The benefit dollar amounts were adjusted for inflation using the BLS CPI-U, which can be found in Appendix X.

The home production losses associated with a decedent of sex s and age n, or $Y_s^h(n)$, were derived from time-diary data captured in The National Human Activity Pattern Survey (NHAPS) study commissioned by the Environment Protection Administration (EPA) [Expectancy Data 2000]. A two-stage Mitofsky-Waksberg random digit telephone dial sample design was used in the survey that covered the period from September 17, 1992 to October 1, 1994. Quarterly samples, stratified by the four major census regions (Northeast, Midwest, South, and West) and day of week (weekend versus weekday), were drawn with a total sample of 14,908 households, yielding 9,386 interviews. The University of Maryland's Research Center conducted the survey interviews and requested the following for each activity the respondent performed during a 24-hour period: start and end time of the activity, actual description of the activity, location where activity occurred, and whether smoking occurred during the activity. The activities were initially coded into 11 broad categories and then into 91 micro-categories and 82 locations.

These data were regrouped into five super-categories: Household production, providing care, hygiene and personal care, leisure, and employment and education [Expectancy Data 2000]. Further refinement classified these categories into economic allocation of work and leisure. Finally, household production time was defined as activities that could produce benefit for all members of the household—housework; food cooking and cleanup; outdoor chores, plants, and animals; home and auto maintenance; and obtaining goods and services. Providing care includes childcare, child guidance, playing with children, transporting children, and providing care to others. This subcategory was defined as the time spent providing services that were channeled toward one or more persons. The market replacement value of this time was reported in 1998 dollars and based on the hourly wages plus the employer's legally required benefit costs from the Bureau of Labor Statistics' Occupational Employment Statistics (OES) survey and the employer compensation cost report. Values of time for each subcategory were from a shorter list of the OES occupations that more accurately correlated with those activities

involved in household production or providing care. Finally, daily values were distributed by age and sex for each subcategory [Expectancy Data 2000]. For this study, values of household production and providing care were combined within each age and sex category and multiplied by 365 to obtain annual values. Dollar values were adjusted for inflation using the CPI-U (see Appendix XII). Because household production data were unavailable by race and occupation and available only for age and sex, the model assumes that estimates by age and sex were constant or the same for race and occupation group.

The need for entering a discount rate into the calculations has been discussed at length in various publications [Gold et al. 1996; DHEW 1965; Pigou 1920]; however, a full discussion is beyond the scope of this presentation. For the purposes of the present document, discounting removes the time bias from the cost estimation. For public health interventions that assume a societal perspective, the social discount rate ("r" in the equation on page 10)—the rate at which society as a whole is willing to discount future investment to determine equivalent current investment—is commonly used. The Panel on Cost-Effectiveness in Health and Medicine under the auspices of the Public Health Service recommended applying a constant real discount rate of 3%, a rate exclusive of adjustment for inflation [DHHS 1996]. This Panel recommended recalculating the cost estimates using alternative discount rates to demonstrate the effect of initial assumptions regarding the appropriate societal rate. Cost estimates using multiple discount rates are presented in Appendix XIII. In general, the social discount rate should always be less than the actual cost of capital.

The overall lifetime societal cost of a traumatic fatal occupational injury is obtained by combining these indirect costs (PVF) with the actual dollar expenditures related to the fatal injury (direct costs). This method provides a conservative estimate of direct costs because medical expenses—only one of the many possible direct costs—was the only direct cost included in the total estimate. Because 90% of the fatalities reported through NTOF occurred within one day of the injury event, medical expenses were only included in the first year calculations [NIOSH 2001; Biddle 2004].

Discussion

The cost model used for this document produces a conservative estimate for lifetime economic costs of traumatic occupational fatalities. Moreover, these estimates are not exact; they are approximations based on many factors and are subject to limitations of the model specification and limitations associated with the data inputs.

The model specification does not produce a "complete" cost of occupational fatalities in that intangible losses associated with premature death are not included. While it may be intuitively appealing to provide some quantitative measure of these costs, rather than simply disregard them in determining the overall burden of the fatal injury, it is inescapable that the nature of the losses—

pain, suffering, and emotional harm to the injured and the family—involve a subjective and personal component that is difficult to measure, if not immeasurable. It is for this reason that the intangible dimension is not considered in these calculations, and such consideration would impose additional complexity and theoretical requirements on a model that is designed to provide a straightforward calculation of well-defined measures of costs associated with fatal occupational injury.

An additional qualification of the findings of this study is that the use of a single category—medical expenses—in the model to represent all direct costs of a fatal occupational injury contributes to the conservative nature of these estimates. A qualification of this single category is that it does not represent an actual per decedent cost, but represents an annual mean of fatal occupational injury medical costs. Furthermore, this model does not account for the costs associated with the administration of insurance programs to provide financial remuneration for loss and payment for medical expenses. Because of the limited time period between injury and death that is associated with the majority of fatal occupational traumatic injuries, insurance administration costs would not be anticipated to substantially alter overall cost structures; however, this remains an area for further exploration, and its omission is a limitation of the study.

As a further measure to address the study limitation associated with the use of wage data that is national in scope, occupation-specific, and of summed age categories, it is recommended that modifications to the model should include the use of state-specific estimates, values for multiple-job holders, and age-specific estimates. Additionally, the accuracy of the estimates would benefit from a comprehensive analysis of the career growth-rate estimates. A longitudinal cohort study would shed needed light on the best method of deriving these estimates for the overall population.

Furthermore, the model should be expanded to reflect the lifetime costs of those fatalities as enumerated in the BLS Census of Fatal Occupational Injuries program, which provides a more comprehensive measure of fatal injuries in the U.S. Finally, despite the complexity of such a project, it would also be useful to apply a similar model to severe nonfatal occupational injuries if a comprehensive database with individual records becomes available. Currently, no such data source exists.

Despite the acknowledged limitations of the estimates contained in these findings, the estimates themselves have substantial practical value, providing valuable additional information about how injuries affect society and providing necessary information for decision-makers on relevant costs of fatal occupational injuries in relation to costs and selection of prevention programs. These cost outcomes additionally represent income that is not received and medical expenses incurred because of fatal injuries, and thus have direct bearing on State, regional and national economic measures of

goods and services production, such as gross domestic product (GDP) and other national income measures. These estimates can be further used to plan, augment, and prioritize occupational injury prevention and control programs, policy analysis, evaluation of safety and health interventions, and advocacy for a safer work environment.

To take full advantage of the usefulness of these estimates, additional detailed studies of the economic impact of individual groups or characteristics associated with the occupational incident should be explored. Future studies could answer such questions as the following:

- What is the relative contribution of each of the components of the cost model? Are the overall costs higher simply because of the number of years that the decedent could have worked or is the occupation of the decedent influential?
- What are the drivers for the lower cost of younger workers? How much can be explained by the lower wage value assigned? If the assumption that the younger worker does not change occupations were relaxed, what is the effect on the lifetime costs? Will the age categories with the highest mean costs change as our workforce ages?
- Why are the costs for female decedents generally lower than male decedents? Can this be explained solely by lower earnings? Were the ages of the female decedents substantially different than males, causing a lower cost estimate? Was the higher cost attributable to their occupations?
- What are the underlying reasons for the variation in mean and median costs for different worker and case characteristics? Why are the mean and median costs across years by sex and race relatively constant?
- Why do certain industries and occupations have higher lifetime costs? Why do mean costs for cause of death vary by industry division? For example, the highest mean cost for Finance, Insurance, and Real Estate is Poisoning, while the highest mean costs for all other industry divisions is Air Transportation.
- Are lifetime costs expected to change based on changing employment and demographic characteristics of the workforce?

Finally, researchers should conduct trend analyses to help determine the best allocation of resources that are continually becoming scarcer. The goal of the U.S. occupational public health system is to identify the causes of work-related injuries and diseases, to evaluate the hazards of work practices and new technologies, to develop ways to control these hazards, and to work in conjunction with OSHA by making recommendations for occupational safety and health standards. The use of economic losses—such as frequency, rate of injury, and those calculated using this model—provides an additional measure to assist in defining the overall dimensions of these tragic outcomes.

References

Baker SP, Samkoff JS, Fisher RS, VanBuren CB [1982]. Fatal occupational injuries. JAMA 248:692–697.

Bell CA, Stout NA, Bender TR, Conroy CS, Crouse

WE, Myers JR [1990]. Fatal occupational injuries in the United States, 1980 through 1985. JAMA 236:3047–3050.

Biddle E [2004]. Economic cost of fatal occupational injuries in the United States, 1980–1997. Contemp Econ Policy 22(3):370–381.

Biddle EA, Marsh SM [2002]. Comparison of the National Traumatic Occupational Fatalities and Census of Fatal Occupational Injuries surveillance system. J Safety Res 33:337–354.

BLS [1998]. Employment and earnings: Household data annual averages, 1980–1998. Washington DC: U.S. Department of Labor, Bureau of Labor Statistics, 28–40 (Issue No. 1 of each).

BLS [1996a]. Testing racial and ethnic origin questions in the CPS supplement. In: Monthly labor review, September 1996. By: Tucker GC, Kojetin B. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics.

BLS [1996b]. Using the BLS occupational injury and illness classification system as a safety and health management tool. In: Fatal workplace injuries in 1994: a collection of data and analysis. By: Toscano G, Windau J, Drudi D. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics, Report 908.

BLS [1997]. National census of fatal occupational injuries, 1995. In: Fatal workplace injuries in 1995: a collection of data and analysis. By: Toscano G, Windau J. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics, Report 913.

BLS [2000]. Employment cost index, 2000. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics, Office of Compensation and Working Conditions. [http://stats.bls.gov:80/news.release/eci.toc.htm]. Date accessed: February 3, 2000.

BLS [2003a]. Consumer price index, 1992–2001. Washington, DC: U. S. Department of Labor, Bureau of Labor Statistics, Office of Prices and Living Conditions. [http://stats.bls.gov:80/news.release/eci/toc.htm]. Date accessed: July 7, 2003.

BLS [2003b]. Employment cost index, 1992–2001. Washington, DC: U. S. Department of Labor, Bureau of Labor Statistics, Office of Compensation and Working Conditions. [http://stats.bls.gov:80/news.release/eci/toc.htm]. Date accessed: July 7, 2003.

BLS [2003c]. Household data annual averages, 1992–2001. Employment and earnings. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics, Publications 28-40 (issue no. 1 for each year).

BoC [1992]. 1990 census of population and housing: alphabetic index of industries and occupations. Washington, DC: U.S. Department of Commerce, Bureau of Census, Publication CPH-R-4.

BoC [1996]. Findings on questions on race and Hispanic origin tested in the 1996 national content survey. Population Division Working Paper No. 16. Washington, DC: U.S. Department of Commerce, Bureau of Census.

BoC [1997]. Results of the 1996 race and ethnic targeted test. Population Division Working Paper No. 18. Washington, DC: U.S. Department of Commerce, Bureau of Census.

CO DOH [1988]. Colorado population-based occupational injury and fatality surveillance system report, 1982–1984. Denver, CO: Colorado Department of Health, Health Statistics Section.

Davis H [1988]. The accuracy of industry data from death certificates for workplace homicide victims. Am J Pub Health 78:1579–1581.

DHEW [1965]. Economic costs of cardiovascular diseases and cancer, 1962. By Rice DP. Washington, DC: U.S. Department of Health, Education, and Welfare, DHEW Health Economic Series, No. 5. Pub. No. 947-5.

DHHS [1996]. Cost-effectiveness in health and medicine: Report to the U.S. Public Health Service by the Panel on Cost-Effectiveness in Health and Medicine. Washington, DC: U.S. Department of Health and Human Services.

DHHS [1997]. National Center for Health Statistics: Vital Statistics of the United States Vol 1 No 1, U.S. decennial life tables for 1989–91. Washington, DC: U.S. Department of Health and Human Services.

Expectancy Data [2000]. The dollar value of a day: 1998 dollar valuation. Shawnee Mission, Kansas: Expectancy Data.

Gold MR, Siegel JE, Russell LB, Weinstein MC [1996]. Cost-effectiveness in health and medicine. New York: Oxford U Press.

Illis WR, Swanson GM, Satariano ER, Schwartz AG [1987]. Summary measures of occupational history. Am J Pub Health 77:1532–1534.

Karlson TA, Baker SP [1978]. Fatal occupational injuries associated with motor vehicles. In: Proceedings of the 22nd Conference of the American Association for Automotive Medicine. Vol. 1. Arlington Heights, IL: American Association for Automotive Medicine, pp. 229–241.

Layne L [2004]. Occupational injury mortality surveillance in the United States: an examination of census counts from two different surveillance systems, 1992–1997. Am J Ind Med 45:1-113.

NCCI [1995]. Detailed Claims Information (DCI), 1992–1995. Boca Raton, FL: National Council on Compensation Insurance, Inc. Unpublished database.

NCHS [1991]. The 1989 revision of the U.S. standard certificates and reports. By: Tolson GC, Barnes JM, Hay GA, Kowaleski JL. Washington, DC: U.S. Department of Health and Human Services, National Center for Health Statistics, Vital Health Stat 4(28).

NIOSH [2001]. National Traumatic Occupational Fatalities (NTOF), 1980–2001. Cincinnati, OH: Department of Health and

Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. Unpublished database.

NIOSH [1993]. Fatal injuries to workers in the United States, 1980–1989: a decade of surveillance. National and state profiles. By: Jenkins EL, Kisner SM, Fosbroke DE, Layne LA, Stout NA, Castillo DN, Cutlip PM, Cianfrocco R Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 93-108S.

NIOSH [1996]. National mortality profile of active duty personnel in the U.S. Armed Forces: 1980–1993. By: Helmpkamp JC, Kennedy RD. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 96-103.

NIOSH [2001]. Fatal injuries to civilian workers in the United States, 1980–1995. National and state profiles. By: Marsh SM, Layne LA. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 2001-129 and 2001-129S.

OMB [1987]. Standard industrial classification manual, 1987. Washington, DC: Executive Office of the President, Office of Management and Budget.

Pigou AC [1920]. The economics of welfare. London: Macmillan and Co.

Rice DP, MacKenzie EJ, Associates [1989]. Cost of Injury in the United States: A Report to Congress, San Francisco, CA: Institute for Health & Aging, University of California and Injury Prevention Center, The Johns Hopkins University.

Russell J, Conroy C [1991]. Representativeness of deaths identified through the injury-at-work item on the death certificate: implications for surveillance. Am J Pub Health 81:1613–1618.

Schade WJ, Swanson GM [1988]. Comparison of death certificate occupation and industry data with life-time occupational histories obtained by interview. Am J Ind Med 14:121–136.

Stout NA, Bell CA [1991]. Effectiveness of source documents for identifying fatal occupational injuries: a synthesis of studies. Am J Pub Health 81:725–728.

U.S. COC [2002]. Employee benefits, 1993–2002. Washington, DC: U.S. Chamber of Commerce.

WHO [1977]. International classification of diseases: manual on the international statistical classification of diseases, injuries, and causes of death. 9th Rev. Geneva, Switzerland: World Health Organization.

WHO [1992]. International classification of diseases: manual on the international statistical classification of diseases, injuries, and causes of death. 10th Rev. Geneva, Switzerland: World Health Organization.

Table 1. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Year, U.S., 1992-2001

Year of Death	Number of Deaths	Costs		
		Total	Mean	Median
1992	5,028	$4,215,204	$838	$838
1993	5,281	4,510,441	854	869
1994	5,396	4,516,551	837	842
1995	5,307	4,476,975	844	853
1996	5,320	4,310,991	810	818
1997	5,282	4,320,215	818	825
1998	5,021	4,055,880	808	817
1999	5,095	4,127,732	810	832
2000	5,066	4,344,746	858	863
2001	4,888	4,219,665	863	856
Total	51,684	43,098,400	834	841

[1]Costs are expressed in thousands of 2001 U.S. dollars.

Table 2. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by State of Death, U.S., 1992-2001

State	Number of Deaths	Costs		
		Total	Mean	Median
Alabama	1,027	$853,485	$831	$846
Alaska	433	435,145	1,005	827
Arizona	442	381,447	863	860
Arkansas	845	683,859	809	817
California	5,173	4,460,138	862	858
Colorado	916	812,005	886	888
Connecticut	344	293,138	852	853
Delaware	105	83,796	798	801
Dist Columbia	176	149,689	851	815
Florida	3,287	2,763,071	841	840
Georgia	1,923	1,604,640	834	841
Hawaii	171	157,657	922	926
Idaho	453	365,555	807	789
Illinois	2,048	1,680,021	820	826
Indiana	1,174	983,588	838	854
Iowa	623	413,595	664	731
Kansas	637	494,584	776	800
Kentucky	1,001	793,491	793	835
Louisiana	1,562	1,423,194	911	912
Maine	171	143,239	838	856
Maryland	613	508,780	830	840
Massachusetts	530	457,651	863	864
Michigan	1,426	1,215,143	852	853
Minnesota	689	548,633	796	831
Mississippi	1,058	866,082	819	826
Missouri	1,301	1,022,473	786	832
Montana	380	$312,793	$823	$826
Nebraska	500	362,427	725	773
Nevada	480	433,620	903	897
New Hampshire	139	123,115	886	926
New Jersey	912	765,323	839	834
New Mexico	477	424,767	890	904
New York	2,509	2,040,986	813	808
North Carolina	1,599	1,270,026	794	815
North Dakota	219	156,895	716	753
Ohio	1,389	1,142,547	823	850
Oklahoma	825	681,782	826	842
Oregon	691	566,809	820	820
Pennsylvania	2,165	1,776,737	821	844
Rhode Island	116	98,643	850	840
South Carolina	995	818,484	823	833
South Dakota	285	200,386	703	751
Tennessee	1,148	944,278	823	832
Texas	4,438	3,775,994	851	861
Utah	554	501,157	905	916
Vermont	97	82,109	846	815
Virginia	1,036	864,878	835	835
Washington	912	772,147	847	833
West Virginia	579	510,107	881	897
Wisconsin	855	656,343	768	804
Wyoming	256	221,950	867	897

[1]Costs are expressed in thousands of 2001 U.S. dollars.

Table 3. Number and Total Lifetime Cost[1] of Traumatic Occupational Fatalities by State of Death and Year, U.S., 1992-2001

State of Death	1992		1993		1994		1995		1996		1997		1998		1999		2000		2001	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Alabama	121	$104,411	112	$94,877	111	$85,700	118	$97,193	123	$106,889	95	$78,276	102	$83,089	100	$80,768	68	$55,116	77	$67,165
Alaska	70	65,226	55	56,997	52	48,632	46	47,016	39	37,051	36	42,672	36	35,289	29	27,110	42	45,243	28	29,908
Arizona	36	34,505	34	28,819	48	41,769	57	59,932	49	40,557	46	34,026	38	29,029	31	26,374	50	45,411	53	41,025
Arkansas	74	58,956	93	74,725	76	59,045	65	53,154	95	76,551	117	95,638	80	65,586	82	66,102	95	79,138	68	54,962
California	526	467,567	548	497,436	495	438,034	580	500,768	497	422,777	545	442,231	512	432,829	476	386,224	522	461,062	472	411,209
Colorado	91	85,263	87	74,138	93	80,147	89	75,388	89	75,069	103	92,927	74	62,586	86	66,844	98	93,769	106	105,875
Connecticut	30	26,402	26	23,302	38	35,370	32	26,091	33	29,327	27	19,911	52	44,253	31	27,426	46	39,947	29	21,109
Delaware	6	4,094	12	10,722	10	8,241	8	4,958	14	10,667	14	12,552	9	5,525	13	10,300	13	11,385	6	5,353
Dist Columbia	13	12,011	26	18,253	28	24,674	21	18,218	22	17,959	23	21,112	9	8,726	14	10,576	11	9,970	9	8,189
Florida	292	247,448	303	259,749	323	272,131	365	311,494	315	249,123	358	291,415	362	294,910	326	253,417	295	278,246	348	305,137
Georgia	172	131,697	172	145,469	192	162,788	189	161,426	166	133,105	229	192,596	141	117,459	211	178,647	202	157,987	249	223,466
Hawaii	21	21,440	18	16,061	14	14,931	15	13,984	17	14,843	17	14,510	8	8,120	21	17,753	17	13,707	23	22,308
Idaho	44	36,950	38	30,972	51	40,577	48	37,273	61	44,547	43	33,349	47	40,479	38	28,124	37	37,892	46	35,394
Illinois	230	191,072	215	174,691	210	172,362	218	180,918	212	171,898	201	157,263	195	157,884	180	144,432	188	162,320	199	167,180
Indiana	132	107,762	128	111,791	132	115,837	114	97,657	115	92,049	122	104,917	107	85,497	123	99,121	112	88,994	89	79,964
Iowa	81	53,140	61	42,715	75	47,321	51	36,083	64	45,375	61	42,885	57	34,747	69	45,696	55	35,468	49	30,164
Kansas	54	42,094	68	56,677	69	53,577	62	51,332	59	46,681	73	56,969	70	54,933	67	47,990	57	43,364	58	40,967
Kentucky	94	74,522	117	103,547	106	80,980	111	82,747	115	89,710	121	92,124	91	73,676	83	66,554	88	73,734	75	55,897
Louisiana	144	135,568	167	160,670	182	166,113	132	120,550	155	142,907	186	155,698	161	143,346	156	138,723	162	152,147	117	107,473
Maine	13	7,019	22	20,204	13	10,905	9	9,053	14	11,993	11	9,345	24	19,600	25	20,649	28	24,707	12	9,763
Maryland	91	80,477	42	37,110	34	25,719	65	54,853	79	60,781	61	47,470	59	49,427	54	39,484	67	59,989	61	53,469
Massachusetts	40	36,956	65	59,697	54	47,549	59	49,647	46	37,768	56	43,601	35	26,701	69	62,026	60	52,456	46	41,250
Michigan	127	108,282	144	122,429	163	151,895	126	109,622	137	110,131	143	122,511	147	115,307	155	127,273	148	123,259	136	124,433
Minnesota	61	48,419	83	70,657	54	38,961	72	53,346	82	64,329	79	67,413	77	58,761	60	47,683	57	40,880	64	58,183
Mississippi	106	79,845	110	87,402	107	90,453	118	91,229	95	72,070	89	78,809	100	86,159	124	100,797	107	86,220	102	93,099
Missouri	131	96,092	117	86,980	147	107,838	127	107,481	129	96,529	96	78,848	154	116,088	156	128,764	129	110,336	115	93,519

See footnote at end of table.

Table 3. Number and Total Lifetime Cost[1] of Traumatic Occupational Fatalities by State of Death of Death and Year, U.S., 1992-2001 — Continued

State of Death	1992		1993		1994		1995		1996		1997		1998		1999		2000		2001	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Montana	45	$39,747	35	$28,287	44	$37,556	30	$22,963	36	$27,427	34	$29,511	37	$31,087	37	$27,496	29	$23,141	53	$45,576
Nebraska	46	32,063	64	53,127	70	53,970	52	33,346	50	33,215	42	25,813	50	37,505	44	35,793	40	30,838	42	26,758
Nevada	37	30,023	37	37,914	35	35,436	49	42,052	55	47,253	60	53,264	57	49,302	68	60,428	39	36,514	43	41,434
New Hampshire	9	8,733	12	12,256	17	14,505	8	6,833	13	9,888	23	22,402	17	14,314	15	12,768	16	14,679	9	6,737
New Jersey	88	76,129	97	76,759	79	64,990	87	74,127	95	79,041	89	78,578	94	67,793	94	81,058	81	73,434	108	93,414
New Mexico	25	19,518	54	47,544	59	53,766	54	46,645	60	57,345	45	35,513	47	40,542	42	38,883	35	32,812	56	52,201
New York	294	250,766	297	244,780	307	260,783	253	212,532	263	208,347	233	178,058	226	165,467	226	181,831	232	191,680	178	146,742
North Carolina	133	101,448	170	140,626	165	135,570	158	123,514	169	123,085	149	110,488	165	121,480	165	138,958	167	133,417	158	141,441
North Dakota	20	15,648	31	21,681	19	16,743	24	16,288	20	11,641	23	15,722	18	12,280	19	14,609	23	14,646	22	17,638
Ohio	94	75,081	114	98,599	162	137,238	152	125,430	132	108,417	142	107,772	146	124,296	169	137,058	166	136,529	112	92,127
Oklahoma	41	35,985	63	55,118	71	51,635	171	164,880	67	53,179	82	63,313	68	47,320	86	64,574	77	58,848	99	86,929
Oregon	80	65,665	83	71,504	73	59,555	66	53,147	89	78,459	73	62,696	69	50,393	65	55,902	56	40,860	37	28,627
Pennsylvania	222	185,842	228	193,656	237	189,692	201	171,404	249	194,909	227	184,159	196	155,690	205	167,562	194	162,360	206	171,462
Rhode Island	12	11,627	13	11,369	9	8,339	12	9,203	7	5,363	12	10,958	15	11,446	14	11,301	5	4,620	17	14,419
South Carolina	102	81,391	91	74,277	90	76,944	105	93,147	96	78,704	117	94,642	97	78,004	117	88,921	106	94,442	74	58,013
South Dakota	25	14,957	26	14,225	28	21,752	27	21,340	32	20,731	22	17,612	24	14,332	42	35,670	29	21,302	30	18,466
Tennessee	76	57,385	94	78,713	132	110,251	129	107,724	113	87,277	129	104,663	122	103,276	135	106,807	133	112,870	85	75,311
Texas	427	366,009	446	396,596	463	382,362	418	353,007	459	376,140	412	344,861	462	389,125	397	312,762	482	423,275	472	431,857
Utah	41	42,323	60	55,428	64	55,129	52	44,549	56	52,602	59	52,558	61	52,793	46	37,817	61	58,520	54	49,440
Vermont	13	12,309	6	3,861	7	5,533	12	8,748	6	4,507	9	7,399	14	11,151	13	12,886	9	7,695	8	8,021
Virginia	106	89,343	90	74,248	100	84,935	88	73,168	124	102,447	119	94,632	76	55,094	104	87,964	117	106,416	112	96,632
Washington	100	87,474	101	87,417	105	89,294	86	79,881	122	98,923	75	65,046	90	74,443	68	52,711	66	56,223	99	80,737
West Virginia	70	61,613	67	55,730	60	51,040	51	46,590	63	55,822	52	46,561	54	46,773	55	43,686	45	44,710	62	57,581
Wisconsin	98	73,162	107	82,380	97	76,730	97	72,594	101	77,536	80	63,325	45	31,927	68	52,770	76	57,815	86	68,104
Wyoming	24	23,751	32	28,256	26	21,254	28	22,449	21	18,044	22	21,603	24	20,041	22	18,660	28	24,354	29	23,539

[1]Costs are expressed in thousands of 2001 U.S. dollars.

Table 4. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities by State of Death and Year, U.S., 1992-2001

State of Death	1992		1993		1994		1995		1996		1997		1998		1999		2000		2001	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Alabama	$863	$868	$847	$870	$772	$809	$824	$859	$869	$891	$824	$833	$815	$834	$808	$812	$811	$889	$872	$867
Alaska	932	737	1,036	805	935	872	1,022	992	950	803	1,185	1,192	980	784	935	765	1,077	890	1,068	1,002
Arizona	958	952	848	898	870	831	1,051	1,031	828	842	740	838	764	756	851	843	908	959	774	777
Arkansas	797	787	803	802	777	796	818	830	806	856	817	885	820	800	806	803	833	840	808	810
California	889	862	908	904	885	861	863	858	851	848	811	812	845	844	811	820	883	875	871	906
Colorado	937	957	852	830	862	887	847	847	843	839	902	907	846	862	777	829	957	944	999	961
Connecticut	880	926	896	916	931	945	815	864	889	902	737	822	851	862	885	853	868	852	728	767
Delaware	682	664	894	953	824	983	620	571	762	665	897	1,003	614	552	792	779	876	994	892	722
Dist Columbia	924	918	702	738	881	883	868	817	816	780	918	805	970	86	755	760	906	906	910	800
Florida	847	855	857	883	843	863	853	864	791	798	814	798	815	813	777	801	943	904	877	854
Georgia	766	790	846	810	848	852	854	857	802	796	841	853	833	814	847	853	782	818	897	910
Hawaii	1,021	1,002	892	931	1,066	1,047	932	989	873	779	854	705	1,015	772	845	919	806	732	970	880
Idaho	840	843	815	838	796	797	777	777	730	713	776	775	861	825	740	723	1,024	995	769	776
Illinois	831	834	813	810	821	818	830	840	811	805	782	807	810	807	802	833	863	871	840	853
Indiana	816	806	873	934	878	860	857	881	800	817	860	832	799	816	806	835	795	835	898	927
Iowa	656	728	700	730	631	676	708	810	709	763	703	770	610	697	662	797	645	709	616	724
Kansas	780	846	833	856	776	866	828	827	791	843	780	808	785	781	716	761	761	740	706	776
Kentucky	793	768	885	943	764	838	745	796	780	830	761	807	810	841	802	850	838	877	745	818
Louisiana	941	944	962	974	913	898	913	900	922	913	837	857	890	884	889	905	939	959	919	907
Maine	540	447	918	991	839	851	1,006	1,047	857	965	850	923	817	699	826	890	882	788	814	825
Maryland	884	931	884	898	756	791	844	842	769	788	778	794	838	858	731	770	895	908	877	856
Massachusetts	924	895	918	946	881	942	841	845	821	835	779	710	763	813	899	952	874	820	897	917
Michigan	853	877	850	817	932	932	870	876	804	826	857	877	784	800	821	848	833	851	915	909
Minnesota	794	803	851	866	722	770	741	797	785	842	853	846	763	829	795	849	717	787	909	913
Mississippi	753	800	795	847	845	829	773	806	759	751	885	848	862	865	813	805	806	812	913	913
Missouri	734	791	743	817	734	790	846	865	748	785	821	790	754	775	825	932	855	913	813	844

See footnote at end of table.

Table 4. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities by State of Death and Year, U.S., 1992-2001 — Continued

State of Death	1992		1993		1994		1995		1996		1997		1998		1999		2000		2001	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Montana	$883	$842	$808	$866	$854	$792	$765	$856	$762	$768	$868	$977	$840	$871	$743	$773	$798	$875	$860	$790
Nebraska	697	767	830	772	771	721	641	781	664	750	615	672	750	837	813	844	771	856	637	616
Nevada	811	882	1,025	974	1,012	1,020	858	906	859	905	888	868	865	836	889	855	936	912	964	1,068
New Hampshire	970	972	1,021	1,046	853	783	854	888	761	829	974	1,035	842	753	851	988	917	962	749	792
New Jersey	865	899	791	815	823	891	852	803	832	839	883	836	721	769	862	789	907	822	865	863
New Mexico	781	731	880	918	911	887	864	844	956	913	789	799	863	903	926	917	937	988	932	999
New York	853	816	824	809	849	833	840	827	792	782	764	800	732	760	805	809	826	848	824	826
North Carolina	763	745	827	844	822	812	782	844	728	763	742	745	736	767	842	905	799	787	895	841
North Dakota	782	845	699	659	881	864	679	748	582	494	684	656	682	654	769	878	637	666	802	792
Ohio	799	856	865	928	847	865	825	871	821	836	759	796	851	887	811	840	822	852	823	827
Oklahoma	878	899	875	926	727	735	964	970	794	797	772	751	696	745	751	772	764	818	878	897
Oregon	821	784	861	912	816	815	805	833	882	849	859	862	730	703	860	840	730	738	774	774
Pennsylvania	837	844	849	907	800	813	853	892	783	791	811	856	794	813	817	858	837	877	832	841
Rhode Island	969	906	875	831	927	891	767	736	766	803	913	841	763	850	807	838	924	1,016	848	787
South Carolina	798	800	816	816	855	871	887	843	820	837	809	825	804	820	760	826	891	881	784	809
South Dakota	598	576	547	698	777	728	790	843	648	663	801	862	597	795	849	860	735	771	616	526
Tennessee	755	769	837	830	835	851	835	846	772	815	811	835	847	840	791	820	849	858	886	822
Texas	857	858	889	927	826	832	845	847	819	836	837	832	842	851	788	809	878	879	915	942
Utah	1,032	989	924	972	861	907	857	851	939	865	891	904	865	896	822	848	959	1,022	916	928
Vermont	947	867	644	658	790	791	729	787	751	749	822	823	796	744	991	1,013	855	795	1,003	787
Virginia	843	851	825	816	849	839	831	841	826	834	795	816	725	726	846	841	910	906	863	846
Washington	875	884	866	826	850	861	929	960	811	800	867	797	827	811	775	786	852	802	816	789
West Virginia	880	849	832	874	851	843	914	975	886	880	895	842	866	927	794	805	994	1,035	929	904
Wisconsin	747	748	770	782	791	854	748	785	768	760	792	831	709	802	776	812	761	834	792	826
Wyoming	990	828	883	856	817	852	802	990	859	861	982	998	835	904	848	949	870	817	812	855

[1]Costs are expressed in thousands of 2001 U.S. dollars.

Table 5. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Sex, Race, and Age Group, U.S., 1992-2001

Demographics	Number of Deaths	Costs		
		Total	Mean	Median
Sex				
Male	47,841	$39,968,216	$835	$843
Female	3,843	3,130,184	815	822
Race				
White	42,929	35,969,324	838	851
Black	5,703	4,528,577	794	802
Other[2]	3,052	2,600,499	852	852
Age Group				
16-19	1,307	936,214	716	686
20-24	3,857	3,384,154	877	836
25-34	11,254	11,827,350	1,051	1,009
35-44	13,081	13,947,567	1,066	1,018
45-54	10,791	9,416,370	873	833
55-64	6,959	3,254,808	468	444
65+	4,435	331,937	75	61

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]This category includes cases where the race of the decedent was not known.

Table 6. Number and Total Lifetime Cost[1] of Traumatic Occupational Fatalities for Sex, Race, and Age Group, by Year, U.S., 1992-2001

Demographics		Year of Death									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Sex											
Male	No.	4,685	4,903	4,963	4,882	4,914	4,880	4,640	4,744	4,699	4,531
	Total Cost	$3,938,279	4,186,450	4,149,400	4,129,293	3,995,854	3,997,294	3,747,078	3,858,225	4,048,634	3,917,710
Female	No.	343	378	433	425	406	402	381	351	367	357
	Total Cost	$276,925	323,991	367,151	347,682	315,138	322,922	308,802	269,508	296,112	301,955
Race											
White	No.	4,196	4,388	4,510	4,470	4,506	4,397	4,277	4,132	4,094	3,959
	Total Cost	$3,541,462	3,773,323	3,793,362	3,813,063	3,663,464	3,606,558	3,453,775	3,356,521	3,540,653	3,427,141
Black	No.	531	589	626	610	583	622	518	582	535	507
	Total Cost	$424,170	471,310	491,070	472,900	454,571	490,502	412,542	454,576	427,899	429,038
Other[2]	No.	301	304	260	227	231	263	226	381	437	422
	Total Cost	$249,572	265,807	232,119	191,011	192,956	223,155	189,563	316,635	376,194	363,487
Age Group											
16-19	No.	119	120	128	136	145	138	138	122	142	119
	Total Cost	$86,847	91,259	95,857	100,256	96,041	93,462	93,488	86,027	102,106	90,870
20-24	No.	408	410	444	387	356	423	334	353	384	358
	Total Cost	$353,504	368,386	384,316	342,319	294,624	355,819	290,460	305,682	349,262	339,782
25-34	No.	1,239	1,294	1,296	1,186	1,173	1,108	1,030	972	1,012	944
	Total Cost	$1,309,075	1,364,240	1,344,009	1,234,494	1,177,219	1,139,193	1,064,508	1,014,757	1,104,514	1,075,342
35-44	No.	1,274	1,351	1,345	1,340	1,390	1,307	1,278	1,306	1,260	1,230
	Total Cost	$1,347,259	1,453,979	1,418,408	1,455,556	1,455,559	1,369,414	1,329,883	1,357,161	1,397,325	1,363,023
45-54	No.	944	1,001	1,054	1,104	1,074	1,156	1,051	1,170	1,132	1,105
	Total Cost	$803,815	903,972	919,761	982,954	914,345	993,764	903,228	999,088	1,009,015	986,429
55-64	No.	627	673	700	695	743	732	714	697	706	672
	Total Cost	$284,531	297,063	324,516	326,198	341,063	336,890	338,049	330,554	348,990	326,953
65+	No.	417	432	429	459	439	418	476	475	430	460
	Total Cost	$30,174	31,542	29,684	35,198	32,141	31,673	36,263	34,463	33,534	37,266

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]This category includes cases where the race of the decedent was not known.

Table 7. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities for Sex, Race, and Age Group by Year, U.S., 1992-2001

Demographics		Year of Death									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Sex											
Male	Mean Cost	$841	854	836	846	813	819	808	813	862	865
	Median Cost	$839	868	841	857	824	829	813	836	869	856
Female	Mean Cost	$807	857	848	818	776	803	811	768	807	846
	Median Cost	$825	890	849	835	778	804	830	794	811	854
Race											
White	Mean Cost	$844	860	841	853	813	820	808	812	865	866
	Median Cost	$853	882	849	869	830	835	822	843	875	864
Black	Mean Cost	$799	800	784	775	780	789	796	781	800	846
	Median Cost	$805	813	798	796	792	797	797	777	828	845
Other[2]	Mean Cost	$829	874	893	841	835	849	839	831	861	861
	Median Cost	$787	813	893	834	779	798	794	815	847	830
Age Group											
16-19	Mean Cost	$730	760	749	737	662	677	677	705	719	764
	Median Cost	$734	761	750	746	641	650	631	675	697	685
20-24	Mean Cost	$866	899	866	885	828	841	870	866	910	949
	Median Cost	$833	872	841	852	769	782	843	829	842	923
25-34	Mean Cost	$1,057	1,054	1,037	1,041	1,004	1,028	1,034	1,044	1,091	1,139
	Median Cost	$999	1,011	990	1,007	980	1,008	1,005	1,013	1,060	1,125
35-44	Mean Cost	$1,058	1,076	1,055	1,086	1,047	1,048	1,041	1,039	1,109	1,108
	Median Cost	$993	1,022	1,016	1,023	994	1,015	994	1,006	1,056	1,087
45-54	Mean Cost	$851	903	873	890	851	860	859	854	891	893
	Median Cost	$801	845	827	844	812	819	822	828	855	853
55-64	Mean Cost	$454	441	464	469	459	460	473	474	494	487
	Median Cost	$426	417	435	451	432	437	441	462	468	471
65+	Mean Cost	$72	73	69	77	73	76	76	73	78	81
	Median Cost	$57	59	58	60	59	60	59	58	63	64

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]This category includes cases where the race of the decedent was not known.

Table 8. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities for Race and Age Group, by Sex, U.S., 1992-2001

Demographics	Sex							
	Male				Female			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Race								
White	39,824	$33,456,607	$840	$854	3,105	$2,512,717	$809	$822
Black	5,226	4,125,640	789	798	477	402,937	845	845
Other[2]	2,791	2,385,968	855	822	261	214,530	822	798
Age Group								
16-19	1,184	834,730	705	671	123	101,484	825	768
20-24	3,563	3,104,852	871	830	294	279,302	950	912
25-34	10,379	10,900,145	1,050	1,009	875	927,205	1,060	1,018
35-44	12,064	12,943,585	1,073	1,022	1,017	1,003,982	987	936
45-54	9,969	8,793,877	882	840	822	622,493	757	719
55-64	6,530	3,077,342	471	448	429	177,466	414	402
65+	4,152	313,684	76	61	283	18,253	64	55

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]This category includes cases where the race of the decedent was not known.

Table 9. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Age Group and Race, U.S., 1992-2001

Age Group	Race											
	White				Black				Other[2]			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
16-19	1,103	$794,260	$720	$692	113	$78,910	$698	$662	91	$63,044	$693	$679
20-24	3,197	2,830,424	885	846	350	296,435	847	809	310	257,295	830	776
25-34	9,095	9,710,915	1,068	1,022	1,323	1,291,561	976	940	836	824,875	987	929
35-44	10,684	11,597,767	1,086	1,029	1,598	1,549,057	969	935	799	800,743	1,002	960
45-54	8,978	7,972,618	888	845	1,220	951,433	780	741	593	492,319	830	791
55-64	5,847	2,761,217	472	447	788	339,090	430	418	324	154,501	477	453
65+	4,025	302,123	75	61	311	22,092	71	57	99	7,722	78	63

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]This category includes cases where the race of the decedent was not known.

Table 10. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Sex, U.S., 1992-1998

Cause of Death	Total				Male				Female			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Motor Vehicle	9,144	$7,548,491	$826	$871	8,360	$6,896,479	$825	$874	784	$652,012	$832	$851
Homicide	5,813	4,888,016	841	822	4,694	3,950,302	842	821	1,119	937,715	838	823
Fall	3,775	2,875,385	762	803	3,625	2,794,296	771	806	150	81,089	541	538
Machine	4,188	2,845,286	679	734	4,088	2,772,360	678	732	100	72,926	729	780
Struck by Falling Object	2,064	1,586,250	769	784	2,031	1,558,052	767	783	33	28,198	854	886
Electrocution	1,905	1,849,221	971	972	1,886	1,833,638	972	973	19	15,583	820	846
Suicide	1,450	1,321,739	912	908	1,350	1,232,623	913	911	100	89,116	891	837
Air Transport	1,154	1,561,119	1,353	1,388	1,067	1,459,156	1,368	1,432	87	101,963	1,172	1,203
Nature/Environment	1,104	829,702	752	785	1,054	796,914	756	786	50	32,788	656	713
Flying Object/Caught In	715	581,235	813	818	700	571,457	816	822	15	9,778	652	626
Explosion	679	624,775	920	932	644	597,148	927	950	35	27,627	789	816
Suffocation	601	499,038	830	822	581	486,070	837	829	20	12,968	648	678
Poisoning	531	488,288	920	900	491	453,351	923	902	40	34,937	873	876
Drowning	526	456,350	868	815	503	436,687	868	815	23	19,664	855	866
Water Transport	537	473,989	883	740	524	462,674	883	737	13	11,315	870	815
Fire	432	375,100	868	902	401	352,844	880	907	31	22,256	718	781
Rail Transport	234	235,371	1,006	984	225	227,564	1,011	989	9	7,808	868	912
Other	1,523	1,147,940	754	788	1,409	1,065,446	756	790	114	82,494	724	745
Unknown	260	218,962	842	850	234	196,587	840	849	26	22,375	861	902

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.

Table 11. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Sex, U.S., 1999-2001

Cause of Death	Total				Male				Female			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Motor Vehicle - Traffic	3,852	$3,288,840	$854	$901	3,495	$2,993,384	$856	$912	357	$295,456	$828	$815
Motor Vehicle - Non Traffic	593	365,764	617	671	568	349,589	615	668	25	16,174	647	698
Motor Vehicle - Other	144	108,055	750	844	129	96,270	746	843	15	11,785	786	845
Homicide	1,664	1,447,605	870	855	1,357	1,184,178	873	863	307	263,427	858	838
Fall	1,923	1,500,496	780	819	1,842	1,457,692	791	823	81	42,803	528	603
Machine	1,227	954,540	778	816	1,200	936,176	780	819	27	18,363	680	806
Struck by Falling Object	903	700,236	775	777	890	693,478	779	777	13	6,758	520	560
Electrocution	707	680,318	962	970	—	—	—	—	—	—	—	—
Suicide	575	546,457	950	941	532	505,036	949	953	43	41,421	963	868
Air Transport	460	618,794	1,345	1,354	432	585,276	1,355	1,354	28	33,518	1,197	1,343
Nature/Environment	204	135,657	665	724	198	133,312	673	725	6	2,345	391	386
Flying Object/Caught In	345	305,170	885	881	331	294,938	891	884	14	10,232	731	784
Explosion	241	220,112	913	950	227	208,638	919	962	14	11,475	820	883
Suffocation	263	218,568	831	847	255	212,332	833	846	8	6,236	779	863
Poisoning	247	235,738	954	959	221	212,626	962	971	26	23,111	889	876
Drowning	226	189,425	838	784	219	184,093	841	781	7	5,332	762	810
Water Transport	165	144,354	875	765	160	139,611	873	761	5	4,743	949	821
Fire	186	154,144	829	868	169	143,387	848	893	17	10,757	633	768
Rail Transport	80	85,303	1,066	1,055	77	82,590	1,073	1,085	3	2,713	904	953
Other	890	661,015	743	766	823	609,443	741	756	67	51,572	770	835
Unknown	154	131,554	854	829	—	—	—	—	—	—	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 12. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Year, U.S., 1992-1998

Cause of Death		Year of Death						
		1992	1993	1994	1995	1996	1997	1998
Motor Vehicle	No.	1,128	1,268	1,335	1,319	1,321	1,365	1,408
	Total Cost	$937,511	1,092,911	1,100,180	1,105,859	1,082,180	1,102,870	1,126,981
	Mean Cost	$831	862	824	838	819	808	800
	Median Cost	$871	904	867	887	863	860	844
Homicide	No.	887	949	926	865	827	758	601
	Total Cost	$726,827	834,335	794,531	724,976	658,184	628,336	520,827
	Mean Cost	$819	879	858	838	796	829	867
	Median Cost	$807	850	845	830	783	811	849
Fall	No.	445	476	551	536	590	584	593
	Total Cost	$348,726	361,327	424,938	433,654	436,646	449,131	420,962
	Mean Cost	$784	759	771	809	740	769	710
	Median Cost	$833	827	812	825	786	805	756
Machine	No.	664	623	580	598	542	615	566
	Total Cost	$450,659	409,407	383,071	413,064	371,879	436,189	381,016
	Mean Cost	$679	657	660	691	686	709	673
	Median Cost	$725	724	717	767	747	757	742
Struck by Falling Object	No.	286	295	310	263	328	310	272
	Total Cost	$214,302	237,278	243,580	207,028	248,968	233,735	201,358
	Mean Cost	$749	804	786	787	759	754	740
	Median Cost	$765	835	809	824	723	780	742
Electrocution	No.	270	274	294	302	248	257	260
	Total Cost	$261,829	276,778	281,438	306,895	235,225	244,939	242,117
	Mean Cost	$970	1,010	957	1,016	948	953	931
	Median Cost	$978	1,005	951	1,024	945	951	947
Suicide	No.	196	208	205	228	209	207	197
	Total Cost	$178,607	182,872	190,648	218,937	181,206	189,752	179,717
	Mean Cost	$911	879	930	960	867	917	912
	Median Cost	$917	904	898	944	846	909	907

See footnote at end of table.

Table 12. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Year, U.S., 1992-1998 — Continued

Cause of Death		Year of Death						
		1992	1993	1994	1995	1996	1997	1998
Air Transport	No.	180	188	178	169	176	148	115
	Total Cost	$237,257	268,128	244,748	221,457	234,439	186,842	168,248
	Mean Cost	$1,318	1,426	1,375	1,310	1,332	1,262	1,463
	Median Cost	$1,362	1,389	1,389	1,418	1,400	1,377	1,386
Nature/Environment	No.	157	159	155	153	153	147	180
	Total Cost	$123,675	113,561	114,028	114,571	114,547	113,008	136,312
	Mean Cost	$788	714	736	749	749	769	757
	Median Cost	$779	760	775	805	787	818	768
Flying Object/Caught In	No.	100	91	115	100	101	97	111
	Total Cost	$84,908	79,264	94,289	83,533	78,392	74,099	86,751
	Mean Cost	$849	871	820	835	776	764	782
	Median Cost	$866	846	842	838	806	756	777
Explosion	No.	105	102	99	105	82	87	99
	Total Cost	$106,606	92,862	96,179	96,156	73,512	74,674	84,785
	Mean Cost	$1,015	910	972	916	896	858	856
	Median Cost	$1,047	918	989	944	895	896	878
Suffocation	Number	79	81	82	92	98	86	83
	Total Cost	$65,825	69,372	63,845	78,692	81,836	72,208	67,258
	Mean Cost	$833	856	779	855	835	840	810
	Median Cost	$789	846	774	856	802	836	837
Poisoning	No.	80	74	90	69	72	79	67
	Total Cost	$76,023	70,217	78,509	58,001	71,484	70,969	63,085
	Mean Cost	$950	949	872	841	993	898	942
	Median Cost	$915	945	852	832	929	855	934
Drowning	No.	66	82	79	64	67	72	96
	Total Cost	$61,038	73,020	66,085	53,626	59,241	59,339	84,001
	Mean Cost	$925	890	837	838	884	824	875
	Median Cost	$844	903	790	803	811	807	787

See footnote at end of table.

Table 12. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Year, U.S., 1992-1998 — Continued

Cause of Death		Year of Death						
		1992	1993	1994	1995	1996	1997	1998
Water Transport	No.	101	100	69	67	72	68	60
	Total Cost	$97,926	85,231	59,069	58,377	59,636	59,557	54,194
	Mean Cost	$970	852	856	871	828	876	903
	Median Cost	$738	733	828	737	715	716	735
Fire	No.	53	46	77	69	67	58	62
	Total Cost	$43,637	41,038	71,120	56,141	51,606	54,737	56,821
	Mean Cost	$823	892	924	814	770	944	916
	Median Cost	$839	919	928	878	814	1,006	966
Rail Transport	No.	25	46	36	29	35	35	28
	Total Cost	$28,964	48,036	34,691	28,196	34,410	36,461	24,613
	Mean Cost	$1,159	1,044	964	972	983	1,042	879
	Median Cost	$1,176	1,100	828	980	1,090	996	838
Other	No.	181	189	189	243	243	272	206
	Total Cost	$149,576	149,360	151,106	185,671	166,656	202,762	142,808
	Mean Cost	$826	790	800	764	686	745	693
	Median Cost	$844	868	841	807	697	764	727
Unknown	No.	25	30	26	36	89	37	17
	Total Cost	$21,307	25,444	24,496	32,141	70,944	30,606	14,024
	Mean Cost	$852	848	942	893	797	827	825
	Median Cost	$861	777	982	1,009	841	870	744

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.

Table 13. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Year, U.S., 1999-2001

Cause of Death		Year of Death		
		1999	2000	2001
Motor Vehicle - Traffic	No.	1,293	1,292	1,267
	Total Cost	$1,051,511	1,123,789	1,113,540
	Mean Cost	$813	870	879
	Median Cost	$868	923	920
Motor Vehicle - Non Traffic	No.	251	187	155
	Total Cost	$144,638	112,857	108,269
	Mean Cost	$576	604	699
	Median Cost	$605	683	733
Motor Vehicle - Other	No.	57	49	38
	Total Cost	$39,091	40,019	28,945
	Mean Cost	$686	817	762
	Median Cost	$703	940	820
Homicide	No.	536	582	546
	Total Cost	$451,424	512,932	483,250
	Mean Cost	$842	881	885
	Median Cost	$829	857	879
Fall	No.	628	616	679
	Total Cost	$485,313	486,447	528,735
	Mean Cost	$773	790	779
	Median Cost	$815	824	818
Machine	No.	409	437	381
	Total Cost	$317,881	350,879	285,780
	Mean Cost	$777	803	750
	Median Cost	$819	837	799
Struck by Falling Object	No.	314	287	302
	Total Cost	$231,346	214,318	254,572
	Mean Cost	$737	747	843
	Median Cost	$744	752	819

See footnote at end of table.

Table 13. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Year, U.S., 1999-2001 — Continued

Cause of Death		Year of Death		
		1999	2000	2001
Electrocution	No.	238	229	240
	Total Cost	$216,800	221,989	241,529
	Mean Cost	$911	969	1,006
	Median Cost	$905	977	1,025
Suicide	No.	192	205	178
	Total Cost	$181,509	190,568	174,380
	Mean Cost	$945	930	980
	Median Cost	$932	910	986
Air Transport	No.	136	178	146
	Total Cost	$172,034	250,666	196,094
	Mean Cost	$1,265	1,408	1,343
	Median Cost	$1,315	1,392	1,358
Nature/Environment	No.	82	57	65
	Total Cost	$49,886	39,380	46,392
	Mean Cost	$608	691	714
	Median Cost	$697	744	763
Flying Object/Caught In	No.	106	119	120
	Total Cost	$87,551	107,099	110,520
	Mean Cost	$826	900	921
	Median Cost	$838	882	919
Explosion	No.	102	75	64
	Total Cost	$94,419	69,185	56,507
	Mean Cost	$926	922	883
	Median Cost	$981	914	929
Suffocation	No.	87	94	82
	Total Cost	$69,780	77,609	71,179
	Mean Cost	$802	826	868
	Median Cost	$832	848	851

See footnote at end of table.

Table 13. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Year, U.S., 1999-2001 — Continued

Cause of Death		Year of Death		
		1999	2000	2001
Poisoning	No.	88	71	88
	Total Cost	$82,070	70,580	83,087
	Mean Cost	$933	994	944
	Median Cost	$965	996	886
Drowning	No.	75	88	63
	Total Cost	$58,443	77,308	53,673
	Mean Cost	$779	879	852
	Median Cost	$718	837	781
Water Transport	No.	63	56	46
	Total Cost	$51,853	49,714	42,787
	Mean Cost	$823	888	930
	Median Cost	$726	760	796
Fire	No.	62	59	65
	Total Cost	$54,383	45,281	54,479
	Mean Cost	$877	767	838
	Median Cost	$952	791	841
Rail Transport	No.	33	21	26
	Total Cost	$34,904	22,365	28,034
	Mean Cost	$1,058	1,065	1,078
	Median Cost	$1,021	890	1,153
Other	No.	214	357	319
	Total Cost	$147,364	275,186	238,465
	Mean Cost	$689	771	748
	Median Cost	$718	790	773
Unknown	No.	129	7	18
	Total Cost	$105,533	6,573	19,448
	Mean Cost	$818	939	1,080
	Median Cost	$808	1,030	1,076

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.

Table 14. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Race, U.S., 1992-1998

Cause of Death	Race											
	White				Black				Other[3]			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Motor Vehicle	7,882	$6,510,776	$826	$877	1,037	$853,338	$823	$848	225	$184,378	$819	$822
Homicide	3,887	3,296,250	848	839	1,078	863,402	801	798	848	728,364	859	817
Fall	3,337	2,551,327	765	808	311	224,490	722	756	127	99,568	784	791
Machine	3,752	2,534,095	675	732	333	234,059	703	742	103	77,132	749	770
Struck by Falling Object	1,797	1,402,668	781	794	231	157,657	682	709	36	25,925	720	736
Electrocution	1,722	1,686,715	980	979	152	133,711	880	865	31	28,795	929	898
Suicide	1,282	1,166,679	910	909	80	67,224	840	819	88	87,836	998	956
Air Transport	1,102	1,493,919	1,356	1,396	16	21,392	1,337	1,289	36	45,808	1,272	1,330
Nature/Environment	958	719,808	751	786	112	84,647	756	790	34	25,247	743	696
Flying Object/Caught In	604	499,349	827	838	89	63,073	709	753	22	18,814	855	838
Explosion	602	557,356	926	938	65	55,821	859	894	12	11,597	966	939
Suffocation	545	453,819	833	827	42	32,768	780	781	14	12,450	889	840
Poisoning	452	426,202	943	915	61	47,625	781	793	18	14,461	803	784
Drowning	388	343,725	886	840	100	80,925	809	789	38	31,700	834	725
Water Transport	406	362,002	892	768	48	42,853	893	858	83	69,134	833	714
Fire	356	312,986	879	911	55	40,904	744	743	21	21,210	1,010	1,038
Rail Transport	196	200,261	1,022	1,008	34	31,347	922	893	4	3,763	941	865
Other	1,270	951,429	749	791	200	155,321	777	781	53	41,190	777	754
Unknown	206	175,644	853	897	35	26,507	757	787	19	16,811	885	781

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.
[3]This category includes cases where the race of the decedent was not known.

Table 15. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Race, U.S., 1999-2001

Cause of Death	Race											
	White				Black				Other[3]			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Motor Vehicle - Traffic	3,177	$2,717,215	$855	$903	467	$394,222	$844	$889	208	$177,402	$853	$857
Motor Vehicle - Non-Traffic	511	307,626	602	636	51	33,826	663	693	31	24,312	784	725
Motor Vehicle - Other	134	99,695	744	844	3	1,870	623	620	7	6,490	927	877
Homicide	1,053	931,258	884	870	319	269,118	844	838	292	247,230	847	824
Fall	1,592	1,245,029	782	824	133	92,959	699	724	198	162,507	821	826
Machine	1,030	796,726	774	821	102	77,343	758	791	95	80,471	847	824
Struck by Falling Object	742	582,426	785	787	107	74,166	693	725	54	43,643	808	782
Electrocution	599	585,510	977	998	55	47,477	863	866	53	47,331	893	853
Suicide	480	460,524	959	966	35	31,528	901	812	60	54,405	907	842
Air Transport	437	591,926	1,355	1,361	8	9,531	1,191	1,168	15	17,336	1,156	1,145
Nature/Environment	163	105,908	650	720	20	13,303	665	740	21	16,447	783	753
Flying Object/Caught In	270	237,648	880	883	40	36,528	913	860	35	30,994	886	850
Explosion	201	187,561	933	962	24	17,980	749	790	16	14,571	911	922
Suffocation	224	186,508	833	849	19	16,031	844	852	20	16,030	801	785
Poisoning	201	192,660	959	973	32	29,025	907	884	14	14,052	1,004	822
Drowning	164	139,071	848	809	40	32,020	801	748	22	18,334	833	735
Water Transport	131	112,672	860	759	12	10,778	898	837	22	20,904	950	770
Fire	150	123,783	825	889	23	20,481	890	929	13	9,880	760	782
Rail Transport	59	65,338	1,107	1,098	18	17,061	948	865	3	2,903	968	1,010
Other	747	552,858	740	774	96	69,547	724	700	47	38,611	822	780
Unknown	120	102,375	853	848	20	16,717	836	765	14	12,463	890	862

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.
[3]This category includes cases where the race of the decedent was not known.

Table 16. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Age Group, U.S., 1992-1998

Cause of Death	Age Group															
	16-19				20-24				25-34				35-44			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Motor Vehicle	250	$179,356	$717	$714	658	$590,761	$898	$877	2,058	$2,147,565	$1,044	$1,013	2,211	$2,326,344	$1,052	$1,010
Homicide	179	131,671	736	719	468	393,852	842	786	1,486	1,476,877	994	968	1,497	1,549,407	1,035	1,009
Fall	73	52,068	713	680	239	198,922	832	782	755	753,649	998	963	931	943,435	1,013	972
Machine	102	70,774	694	701	326	268,245	823	792	743	718,042	966	928	887	883,592	996	972
Struck by Falling Object	61	39,444	647	629	142	118,023	831	798	439	420,098	957	896	545	534,780	981	950
Electrocution	56	40,104	716	731	233	209,233	898	889	658	693,940	1,055	1,032	505	554,645	1,098	1,099
Suicide	28	18,612	665	598	99	85,089	859	769	279	307,003	1,100	1,051	379	439,344	1,159	1,105
Air Transport	—	—	—	—	41	47,014	1,147	994	332	512,230	1,543	1,590	323	510,957	1,582	1,689
Nature/Environment	26	18,717	720	757	79	67,549	855	820	248	238,740	963	953	277	275,347	994	948
Flying Object/Caught In	12	8,392	699	680	71	59,152	833	781	157	154,991	987	963	186	186,178	1,001	980
Explosion	10	7,815	781	795	60	51,869	864	801	166	174,336	1,050	1,007	227	246,224	1,085	1,035
Suffocation	23	16,790	730	675	56	46,495	830	776	139	133,737	962	907	170	175,363	1,032	974
Poisoning	9	6,177	686	640	36	31,747	882	902	133	135,779	1,021	987	195	206,684	1,060	999
Drowning	24	15,416	642	599	62	53,764	867	769	149	148,787	999	946	145	149,043	1,028	989
Water Transport	21	16,418	782	772	57	50,379	884	766	172	175,366	1,020	913	146	136,228	933	736
Fire	10	7,119	712	722	32	28,508	891	838	106	114,808	1,083	1,090	121	132,859	1,098	1,062
Rail Transport	—	—	—	—	11	9,848	895	854	28	33,427	1,194	1,223	77	92,363	1,200	1,299
Other	30	22,227	741	730	70	60,105	859	785	226	239,007	1,058	1,006	388	406,639	1,048	1,005
Unknown	—	—	—	—	22	18,873	858	773	52	54,357	1,045	1,019	75	80,625	1,075	1,012

See footnote at end of table.

Table 16. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Age Group, U.S., 1992-1998 — Continued

Cause of Death	Age Group											
	45-54				55-64				65+			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Motor Vehicle	1,958	$1,655,502	$846	$817	1,300	$592,436	$456	$438	709	$56,528	$80	$63
Homicide	1,129	985,927	873	838	695	322,843	465	441	359	27,439	76	65
Fall	769	630,325	820	782	611	267,860	438	418	397	29,125	73	59
Machine	732	579,332	791	768	659	277,615	421	398	739	47,686	65	55
Struck by Falling Object	443	343,419	775	730	281	119,544	425	403	153	10,942	72	57
Electrocution	301	287,926	957	949	118	59,904	508	507	34	3,470	102	68
Suicide	361	346,011	958	909	211	116,907	554	522	93	8,772	94	75
Air Transport	300	400,563	1,335	1,396	120	84,204	702	733	—	—	—	—
Nature/Environment	194	157,036	809	786	150	63,933	426	410	130	8,381	64	54
Flying Object/Caught In	159	127,939	805	763	95	41,592	438	422	35	2,991	85	65
Explosion	120	109,828	915	880	67	31,711	473	472	29	2,993	103	87
Suffocation	109	92,022	844	802	72	32,165	447	431	32	2,464	77	61
Poisoning	100	88,122	881	839	42	18,778	447	432	16	1,001	63	52
Drowning	80	67,170	840	813	44	20,871	474	403	22	1,299	59	54
Water Transport	77	71,103	923	934	48	23,277	485	405	16	1,218	76	56
Fire	79	68,729	870	835	46	20,789	452	429	38	2,288	60	56
Rail Transport	70	71,900	1,027	1,090	44	27,538	626	639	—	—	—	—
Other	354	295,144	834	816	247	110,247	446	416	208	14,571	70	58
Unknown	49	43,841	895	825	34	16,099	473	486	—	—	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 17. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Age Group, U.S., 1999-2001

Cause of Death	Age Group															
	16-19				20-24				25-34				35-44			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Motor Vehicle - Traffic	97	$70,680	$729	$698	268	$250,450	$935	$936	762	$844,111	$1,108	$1,095	950	$1,050,256	$1,106	$1,081
Motor Vehicle - Non-Traffic	19	13,733	723	615	32	27,099	847	806	63	64,365	1,022	1,007	99	103,404	1,044	1,031
Motor Vehicle - Other	—	—	—	—	7	6,083	869	849	25	28,174	1,127	1,057	27	28,186	1,044	979
Homicide	48	33,329	694	634	119	107,122	900	839	362	383,945	1,061	1,039	442	467,056	1,057	1,020
Fall	49	35,874	732	709	141	130,530	926	879	350	353,504	1,010	966	459	467,738	1,019	963
Machine	35	25,897	740	682	107	92,915	868	815	222	227,395	1,024	961	311	313,374	1,008	979
Struck by Falling Object	20	14,290	714	660	60	50,364	839	777	155	155,965	1,006	964	234	232,102	992	972
Electrocution	27	20,180	747	685	87	79,113	909	861	193	215,422	1,116	1,109	207	227,219	1,098	1,111
Suicide	14	9,856	704	608	36	32,541	904	874	108	121,516	1,125	1,045	159	186,508	1,173	1,127
Air Transport	—	—	—	—	24	31,407	1,309	1,291	116	187,514	1,617	1,621	127	211,587	1,666	1,753
Nature/Environment	3	1,818	606	573	13	11,822	909	834	38	37,846	996	989	41	39,874	973	964
Flying Object/Caught In	8	5,868	733	724	28	23,657	845	808	81	88,917	1,098	1,086	88	95,932	1,090	1,051
Explosion	3	2,094	698	731	25	22,722	909	848	47	52,154	1,110	1,021	68	75,622	1,112	1,074
Suffocation	14	9,690	692	669	27	24,180	896	793	54	57,802	1,070	1,060	61	63,691	1,044	1,031
Poisoning	3	2,138	713	718	14	11,762	840	752	37	42,107	1,138	1,106	90	98,472	1,094	1,071
Drowning	4	2,917	729	605	17	14,770	869	752	58	61,598	1,062	971	67	63,065	941	828
Water Transport	7	5,598	800	672	20	16,008	800	703	33	31,166	944	810	53	55,470	1,047	821
Fire	7	5,675	811	785	9	9,155	1,017	998	39	42,393	1,087	1,093	39	45,828	1,175	1,192
Rail Transport	—	—	—	—	5	4,830	966	764	11	14,762	1,342	1,338	22	28,219	1,283	1,284
Other	16	11,219	701	672	44	38,879	884	813	136	143,740	1,057	1,001	217	225,340	1,038	995
Unknown	4	3,318	830	695	12	9,317	776	761	38	40,220	1,058	1,040	35	38,564	1,102	1,011

See footnotes at end of table.

Table 17. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Age Group, U.S., 1999-2001 — Continued

Cause of Death	Age Group											
	45-54				55-64				65+			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Motor Vehicle - Traffic	899	$783,312	$871	$850	556	$265,679	$478	$470	320	$24,352	$76	$62
Motor Vehicle - Non-Traffic	117	98,340	841	835	109	48,107	441	421	154	10,716	70	60
Motor Vehicle - Other	37	32,401	876	902	20	9,528	476	422	—	—	—	—
Homicide	391	342,376	876	854	215	106,171	494	459	87	7,606	87	69
Fall	453	376,082	830	780	262	120,083	458	439	209	16,685	80	66
Machine	252	208,467	827	810	167	76,819	460	428	133	9,673	73	62
Struck by Falling Object	227	183,816	810	780	140	58,736	420	401	67	4,964	74	61
Electrocution	116	105,425	909	890	61	31,420	515	511	16	1,540	96	68
Suicide	149	149,845	1,006	961	75	42,723	570	552	34	3,468	102	79
Air Transport	105	137,794	1,312	1,315	61	45,518	746	782	—	—	—	—
Nature/Environment	38	30,262	796	742	26	11,188	430	383	45	2,847	63	57
Flying Object/Caught In	86	75,254	875	839	32	14,058	439	418	22	1,484	67	62
Explosion	56	51,183	914	939	32	15,482	484	486	10	855	85	60
Suffocation	56	46,309	827	837	30	15,285	509	501	21	1,611	77	63
Poisoning	67	65,559	978	975	26	15,065	579	531	10	635	64	55
Drowning	38	32,204	847	823	26	13,662	525	500	16	1,209	76	61
Water Transport	36	27,890	775	661	13	7,994	615	482	3	230	77	78
Fire	41	35,915	876	840	27	13,624	505	494	24	1,553	65	64
Rail Transport	26	26,746	1,029	1,055	14	8,974	641	639	—	—	—	—
Other	183	155,788	851	822	160	76,447	478	468	134	9,601	72	61
Unknown	34	29,562	869	839	23	9,934	432	428	8	638	80	81

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 18. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Industry Division, U.S., 1992-2001

Industry Division	Number of Deaths	Total Cost	Mean Cost	Median Cost
Ag/For/Fish	5,561	$3,139,968	$565	$640
Mining	1,537	1,577,251	1,026	1,072
Construction	9,969	8,492,981	852	857
Manufacturing	6,881	5,464,448	794	811
Trans/Comm/PU	9,259	8,596,440	928	949
Wholesale Trade	1,547	1,294,223	837	900
Retail Trade	5,267	4,017,851	763	779
Finance/Insur/RE	751	653,188	870	889
Services	6,298	5,558,373	883	863
Public Admin	2,639	2,789,468	1,057	1,148
Not Classified	1,975	1,514,208	767	751

[1]Costs are expressed in thousands of 2001 U.S. dollars.

Table 19. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Industry Division and Year, U.S., 1992-2001

Industry Division		Year of Death									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Ag/For/Fish	No.	598	608	585	556	542	537	563	517	520	535
	Total Cost	$309,916	309,665	304,207	308,137	296,388	302,906	336,552	287,931	343,328	340,940
	Mean Cost	$518	509	520	554	547	564	598	557	660	637
	Median Cost	$612	610	612	642	623	627	673	636	724	694
Mining	No.	147	169	168	159	158	164	134	128	146	164
	Total Cost	$153,012	172,993	170,108	173,352	165,315	158,110	137,434	113,595	153,766	179,567
	Mean Cost	$1,041	1,024	1,013	1,090	1,046	964	1,026	887	1,053	1,095
	Median Cost	$1,115	1,065	1,088	1,145	1,112	1,016	1,073	962	1,071	1,188
Construction	No.	888	885	964	1,001	1,018	1,021	1,053	1,045	988	1,106
	Total Cost	$777,798	790,378	827,042	892,861	850,638	866,624	839,064	853,011	834,360	961,205
	Mean Cost	$876	893	858	892	836	849	797	816	844	869
	Median Cost	$883	912	838	876	843	844	808	843	874	854
Manufacturing	No.	736	713	727	732	769	687	683	711	601	522
	Total Cost	$590,263	596,983	597,699	597,113	608,218	544,544	510,640	546,145	467,973	404,871
	Mean Cost	$802	837	822	816	791	793	748	768	779	776
	Median Cost	$793	850	833	852	794	822	770	787	794	795
Trans/Comm/PU	No.	828	925	896	895	890	995	903	987	1,007	933
	Total Cost	$784,669	889,238	841,936	814,413	789,127	885,285	798,674	909,108	973,052	910,938
	Mean Cost	$948	961	940	910	887	890	884	921	966	976
	Median Cost	$922	957	949	938	928	916	925	961	975	1,036
Wholesale Trade	No.	153	169	177	173	133	127	147	155	169	144
	Total Cost	$134,267	151,845	151,621	135,571	103,223	108,701	116,667	129,316	141,982	121,030
	Mean Cost	$878	898	857	784	776	856	794	834	840	840
	Median Cost	$957	974	917	854	830	914	851	933	894	902
Retail Trade	No.	572	634	631	505	600	506	448	431	493	447
	Total Cost	$447,772	503,192	479,680	375,671	433,588	383,178	346,616	326,058	384,970	337,126
	Mean Cost	$783	794	760	744	723	757	774	757	781	754
	Median Cost	$792	799	780	750	728	777	801	791	790	796

See footnote at end of table.

Table 19. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Industry Division and Year, U.S., 1992-2001 — Continued

Industry Division		Year of Death									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Finance/Insur/RE	No.	76	85	88	92	69	88	69	69	59	56
	Total Cost	$66,626	71,862	75,010	81,919	59,722	75,516	58,038	62,955	46,858	54,683
	Mean Cost	$877	845	852	890	866	858	841	912	794	976
	Median Cost	$926	846	899	937	872	850	890	905	805	1,019
Services	No.	596	642	678	647	666	635	562	624	630	618
	Total Cost	$526,317	564,885	594,615	569,898	602,860	555,353	490,094	531,189	572,383	550,778
	Mean Cost	$883	880	877	881	905	875	872	851	909	891
	Median Cost	$858	838	823	851	867	859	864	863	911	879
Public Admin	No.	246	261	273	345	242	254	254	264	268	232
	Total Cost	$256,509	290,029	279,152	353,879	245,968	263,684	280,565	254,012	303,762	261,909
	Mean Cost	$1,043	1,111	1,023	1,026	1,016	1,038	1,105	962	1,133	1,129
	Median Cost	$1,142	1,187	1,132	1,133	1,095	1,118	1,182	1,049	1,228	1,251
Not Classified	No.	188	190	209	202	233	268	205	164	185	131
	Total Cost	$168,057	169,373	195,481	174,162	155,944	176,314	141,536	114,412	122,311	96,618
	Mean Cost	$894	891	935	862	669	658	690	698	661	738
	Median Cost	$913	940	965	881	648	653	661	666	643	714

[1]Costs are expressed in thousands of 2001 U.S. dollars.

Table 20. Number and Total Lifetime Cost[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Industry Division, U.S., 1992-1998

Cause of Death	Industry Division													
	Ag/For/Fish		Mining		Construction		Manufacturing		Trans/Comm/PU		Wholesale Trade		Retail Trade	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle	726	$414,924	198	$193,492	1,284	$1,084,487	844	$667,065	2,970	$2,464,758	403	$338,040	588	$468,001
Homicide	105	71,817	10	11,008	205	169,138	341	293,318	636	514,657	103	88,520	2,282	1,754,211
Fall	278	142,203	67	65,400	1,877	1,556,713	410	290,950	274	229,033	64	41,138	150	87,155
Machine	1,185	482,670	258	260,156	798	652,375	937	714,513	308	228,873	138	107,070	119	77,534
Struck by Falling Object	218	119,365	142	154,305	451	378,142	668	462,906	164	135,941	57	49,077	77	54,685
Electrocution	184	129,128	57	63,903	779	756,281	220	210,483	317	360,395	35	33,002	48	40,111
Suicide	92	61,120	12	10,036	127	119,414	203	193,404	125	122,325	53	48,048	232	184,733
Air Transport	102	128,717	19	21,984	35	35,727	114	142,676	475	709,935	19	21,764	36	35,962
Nature/Environment	246	114,504	44	49,673	225	195,238	223	161,278	109	93,073	34	27,170	35	23,711
Flying Object/Caught In	65	33,715	42	38,177	156	135,794	194	147,913	102	90,822	27	22,880	24	20,489
Explosion	27	14,702	72	79,942	107	94,678	217	197,888	64	66,734	38	34,579	37	25,977
Suffocation	109	63,866	38	42,265	191	165,165	77	68,607	46	40,872	25	22,581	17	12,760
Poisoning	49	31,501	26	27,020	92	82,276	87	80,862	65	68,045	11	9,561	33	25,589
Drowning	142	89,246	23	22,952	76	68,293	39	37,534	93	97,820	7	6,173	14	10,778
Water Transport	241	159,294	25	26,443	32	31,008	36	28,427	151	177,321	4	3,634	5	4,437
Fire	42	24,177	22	23,529	57	49,571	115	101,986	34	32,079	14	8,767	24	17,299
Rail Transport	5	2,994	8	8,671	8	6,132	24	20,808	167	173,715	3	2,251	—	—
Other	148	68,570	31	27,484	298	236,583	276	204,938	180	151,111	34	29,679	139	96,189
Unknown	25	15,258	5	3,883	32	27,391	22	19,902	52	45,833	10	7,960	—	—

See footnotes at end of table.

Table 20. Number and Total Lifetime Cost[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Industry Division, U.S., 1992-1998 — Continued

Cause of Death	Industry Division							
	Finance/Insur/RE		Services		Public Admin		Not Classified	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle	140	$119,297	1,024	$895,655	638	$647,369	329	$255,402
Homicide	192	177,618	1,076	923,950	536	605,707	327	278,072
Fall	44	27,065	387	269,174	86	70,766	138	95,788
Machine	30	18,905	212	158,194	58	36,016	145	108,979
Struck by Falling Object	8	4,658	187	160,754	35	29,811	57	36,606
Electrocution	13	12,037	154	153,182	33	34,192	65	56,508
Suicide	59	53,131	390	373,162	94	107,811	63	48,556
Air Transport	21	25,238	182	239,718	118	162,729	33	36,669
Nature/Environment	8	7,896	109	93,768	28	28,460	43	34,930
Flying Object/Caught In	5	4,567	55	50,594	17	12,953	28	23,331
Explosion	—	—	72	69,374	13	12,263	—	—
Suffocation	4	3,264	56	50,781	11	9,826	27	19,051
Poisoning	5	5,671	123	123,169	10	9,921	30	24,673
Drowning	11	8,004	69	67,786	23	25,779	29	21,985
Water Transport	—	—	16	18,937	—	—	17	14,400
Fire	—	—	49	36,725	53	64,075	—	—
Rail Transport	—	—	11	13,298	—	—	3	2,424
Other	17	11,630	213	166,778	97	88,358	90	66,620
Unknown	5	5,277	41	39,023	13	11,226	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 21. Number and Total Lifetime Cost[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Industry Division, U.S., 1999-2001

Cause of Death	Industry Division													
	Ag/For/Fish		Mining		Construction		Manufacturing		Trans/Comm/PU		Wholesale Trade		Retail Trade	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle - Traffic	264	$169,373	85	$84,031	504	$412,405	283	$217,136	1,390	$1,221,906	172	$156,606	284	$214,804
Motor Vehicle - Non Traffic	182	70,768	21	15,042	92	69,861	61	37,696	102	77,137	18	10,992	21	12,307
Motor Vehicle - Other	29	16,078	—	—	17	11,610	11	7,345	27	23,032	7	5,497	9	4,780
Homicide	25	17,593	4	3,640	79	66,343	99	83,643	167	148,677	27	22,782	632	508,101
Fall	124	72,326	34	32,338	954	792,422	197	144,215	163	145,401	47	33,652	86	50,949
Machine	252	146,557	82	84,034	279	233,224	281	225,679	110	100,360	43	35,937	35	26,005
Struck by Falling Object	121	78,869	50	55,475	256	210,929	232	153,179	94	81,307	23	16,431	23	19,952
Electrocution	70	56,814	12	13,550	294	282,243	76	71,775	136	151,704	19	15,693	19	15,448
Suicide	34	25,779	5	5,366	65	62,128	60	53,223	63	65,274	18	17,612	85	72,008
Air Transport	50	63,826	6	7,002	22	25,490	22	23,473	197	315,389	4	5,149	12	11,218
Nature/Environment	82	40,696	—	—	40	33,588	24	13,380	12	10,901	—	—	8	4,205
Flying Object/Caught In	29	18,445	21	24,188	84	78,898	81	67,351	66	62,950	12	7,953	9	6,230
Explosion	—	—	24	25,202	37	34,436	77	70,579	29	27,862	17	13,196	11	9,079
Suffocation	43	25,657	12	12,101	85	75,265	27	22,083	32	32,009	11	8,984	12	9,114
Poisoning	17	12,290	11	12,724	37	29,693	38	35,385	40	42,754	4	3,597	23	18,778
Drowning	57	37,689	9	9,956	34	30,369	16	12,506	42	42,706	—	—	5	4,027
Water Transport	85	59,728	5	5,182	18	14,131	8	8,524	34	42,394	—	—	—	—
Fire	—	—	9	9,715	29	23,398	40	34,638	11	12,046	13	8,596	15	9,063
Rail Transport	—	—	—	—	5	3,652	4	3,815	58	64,062	3	2,551	—	—
Other	76	42,461	34	32,702	173	125,721	165	111,508	128	99,850	25	23,908	73	45,606
Unknown	10	5,137	8	8,925	35	32,769	32	21,856	26	25,378	—	—	—	—

See footnotes at end of table.

Table 21. Number and Total Lifetime Cost[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Industry Division, U.S., 1999-2001 — Continued

Cause of Death	Industry Division							
	Finance/Insur/RE		Services		Public Admin		Not Classified	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle - Traffic	30	$25,310	452	$414,952	282	$300,503	106	$71,813
Motor Vehicle - Non Traffic	3	2,592	64	51,608	8	4,152	21	13,610
Motor Vehicle - Other	—	—	30	28,244	10	10,001	—	—
Homicide	44	42,068	325	285,518	165	197,439	97	71,801
Fall	23	12,746	212	157,698	42	34,124	41	24,625
Machine	6	3,887	85	58,339	23	15,668	31	24,849
Struck by Falling Object	—	—	75	62,090	11	10,184	—	—
Electrocution	5	3,992	52	46,769	7	8,059	17	14,271
Suicide	24	24,822	151	156,123	38	39,706	32	24,416
Air Transport	19	19,285	74	81,257	44	59,660	10	7,043
Nature/Environment	3	2,229	—	—	11	9,257	—	—
Flying Object/Caught In	—	—	35	33,480	—	—	—	—
Explosion	—	—	27	23,810	6	7,642	—	—
Suffocation	3	2,853	20	15,389	9	7,747	9	7,364
Poisoning	5	6,936	55	59,998	5	4,961	12	8,622
Drowning	5	3,587	29	24,160	14	14,203	—	—
Water Transport	—	—	6	6,521	—	—	5	3,980
Fire	—	—	27	18,812	21	26,440	—	—
Rail Transport	—	—	—	—	3	3,625	—	—
Other	9	6,773	115	94,597	55	55,971	37	21,917
Unknown	—	—	18	15,417	7	7,556	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 22. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Industry Division, U.S., 1992-1998

Cause of Death	Industry Division																					
	Ag/For/Fish		Mining		Construction		Manufacturing		Trans/Comm/ PU		Wholesale Trade		Retail Trade		Finance/Insur/ RE		Services		Public Admin		Not Classified	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Motor Vehicle	$572	$627	$977	$1,025	$845	$846	$790	$843	$830	$916	$839	$933	$796	$838	$852	$890	$875	$869	$1,015	$1,120	$776	$795
Homicide	684	673	1,101	1,099	825	830	860	881	809	808	859	897	769	769	925	958	859	809	1,130	1,209	850	879
Fall	512	589	976	1,018	829	841	710	760	836	870	643	770	581	653	615	693	696	727	823	858	694	691
Machine	407	395	1,008	1,081	818	846	763	800	743	810	776	821	652	726	630	563	746	797	621	623	752	766
Struck by Falling Object	548	654	1,087	1,176	838	854	693	717	829	846	861	870	710	776	582	543	860	921	852	798	642	645
Electrocution	702	692	1,121	1,170	971	976	957	951	1,137	1,201	943	977	836	800	926	1,070	995	987	1,036	1,039	869	867
Suicide	664	677	836	765	940	915	953	919	979	1,006	907	1,028	796	796	901	931	957	913	1,147	1,225	771	749
Air Transport	1,262	1,306	1,157	1,086	1,021	1,023	1,252	1,339	1,495	1,607	1,145	1,191	999	933	1,202	1,176	1,317	1,358	1,379	1,309	1,111	1,054
Nature/Environment	465	577	1,129	1,191	868	873	723	785	854	878	799	821	677	700	987	883	860	890	1,016	1,143	812	803
Flying Object/Caught In	519	604	909	1,009	870	848	762	776	890	922	847	848	854	886	913	864	920	962	762	753	833	827
Explosion	545	633	1,110	1,116	885	918	912	905	1,043	1,010	910	924	702	698	—	—	964	969	943	905	—	—
Suffocation	586	669	1,112	1,155	865	838	891	829	889	935	903	864	751	675	816	836	907	858	893	903	706	692
Poisoning	643	697	1,039	959	894	868	929	900	1,047	1,022	869	957	775	784	1,134	1,198	1,001	960	992	913	822	909
Drowning	628	665	998	977	899	840	962	984	1,052	1,140	882	961	770	697	728	632	982	959	1,121	1,118	758	747
Water Transport	661	699	1,058	1,043	969	947	790	826	1,174	1,218	909	936	887	828	—	—	1,184	1,331	—	—	847	772
Fire	576	670	1,070	1,123	870	906	887	893	944	989	626	719	721	787	—	—	749	762	1,209	1,264	—	—
Rail Transport	599	580	1,084	1,015	766	867	867	899	1,040	1,095	750	759	—	—	—	—	1,209	1,065	—	—	808	715
Other	463	577	887	967	794	834	743	789	840	888	873	910	692	718	684	748	783	777	911	1,064	740	717
Unknown	610	669	777	825	856	850	905	912	881	907	796	798	—	—	1,055	1,002	952	823	864	973	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 23. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Industry Division, U.S., 1999-2001

Cause of Death	Industry Division																					
	Ag/For/Fish		Mining		Construction		Manufacturing		Trans/Comm/ PU		Wholeseale Trade		Retail Trade		Finance/Insur/ RE		Services		Public Admin		Not Classified	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Motor Vehicle - Traffic	$642	$699	$989	$1,035	$818	$836	$767	$823	$879	$976	$910	$969	$756	$826	$844	$910	$918	$943	$1,066	$1,153	$677	$645
Motor Vehicle - Non-Traffic	389	214	716	635	759	841	618	673	756	809	611	717	586	730	864	1,028	806	816	519	479	648	615
Motor Vehicle - Other	554	621	—	—	683	849	668	756	853	902	785	909	531	585	—	—	941	959	1,000	1,193	—	—
Homicide	704	703	910	957	840	851	845	878	890	914	844	900	804	802	956	985	879	857	1,197	1,316	740	709
Fall	583	636	951	1,005	831	849	732	771	892	957	716	789	592	656	554	551	744	778	812	770	601	641
Machine	582	682	1,025	997	836	856	803	803	912	900	836	842	743	790	648	672	686	747	681	687	802	753
Struck by Falling Object	652	697	1,110	1,214	824	836	660	711	865	893	714	753	867	966	—	—	828	892	926	958	—	—
Electrocution	812	738	1,129	1,234	960	964	944	981	1,115	1,183	826	1,021	813	790	798	684	899	830	1,151	1,138	839	620
Suicide	758	736	1,073	1,106	956	972	887	875	1,036	1,086	978	1,092	847	856	1,034	1,159	1,034	1,005	1,045	1,045	763	658
Air Transport	1,277	1,293	1,167	1,131	1,159	1,152	1,067	1,150	1,601	1,801	1,287	1,145	935	993	1,015	1,194	1,098	1,129	1,356	1,347	704	666
Nature/Environment	496	587	—	—	840	875	557	662	908	769	—	—	526	655	743	639	—	—	842	1,181	—	—
Flying Object/Caught In	636	643	1,152	1,144	939	879	831	850	954	933	663	694	692	729	—	—	957	1,023	—	—	—	—
Explosion	—	—	1,050	1,028	931	1,001	917	913	961	1,013	776	783	825	803	—	—	882	973	1,274	1,116	—	—
Suffocation	597	658	1,008	1,086	885	855	818	763	1,000	1,064	817	774	760	727	951	889	769	875	861	879	818	795
Poisoning	723	716	1,157	1,176	803	822	931	860	1,069	1,019	899	1,029	816	871	1,387	1,348	1,091	1,090	992	1,089	719	708
Drowning	661	715	1,106	1,228	893	857	782	816	1,017	1,011	—	—	805	810	717	699	833	805	1,015	1,068	—	—
Water Transport	703	706	1,036	849	785	808	1,066	994	1,247	1,310	—	—	—	—	—	—	1,087	917	—	—	796	703
Fire	—	—	1,079	1,040	807	864	866	853	1,095	1,142	661	791	604	684	—	—	697	768	1,259	1,280	—	—
Rail Transport	—	—	—	—	730	738	954	837	1,105	1,106	850	766	—	—	—	—	—	—	1,208	1,215	—	—
Other	559	630	962	1,042	727	798	676	735	780	834	956	1,065	625	663	753	875	823	814	1,018	1,106	592	661
Unknown	514	590	1,116	1,110	936	905	683	740	976	1,037	—	—	—	—	—	—	857	782	1,079	1,232	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 24. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Industry Division and Age Group, U.S., 1992-2001

Industry Division		Age Group						
		16-19	20-24	25-34	35-44	45-54	55-64	65+
Ag/For/Fish	No.	141	408	975	1,084	876	822	1,255
	Total Cost	$90,783	303,442	815,535	934,676	624,580	295,213	75,740
	Mean Cost	$644	744	836	862	713	359	60
	Median Cost	$578	669	733	734	638	339	54
Mining	No.	27	125	351	458	343	155	78
	Total Cost	$24,354	130,733	425,673	559,014	344,122	86,382	6,973
	Mean Cost	$902	1,046	1,213	1,221	1,003	557	89
	Median Cost	$975	1,067	1,242	1,248	1,012	551	73
Construction	No.	242	879	2,451	2,752	1,996	1,144	505
	Total Cost	$175,660	755,169	2,481,709	2,831,845	1,671,511	536,293	40,794
	Mean Cost	$726	859	1,013	1,029	837	469	81
	Median Cost	$690	821	982	994	802	461	64
Manufacturing	No.	112	477	1,428	1,754	1,474	1,045	591
	Total Cost	$79,820	402,188	1,425,538	1,806,639	1,228,528	477,098	44,636
	Mean Cost	$713	843	998	1,030	833	457	76
	Median Cost	$692	800	938	967	786	431	61
Trans/Comm/PU	No.	70	440	2,045	2,541	2,295	1,363	505
	Total Cost	$58,103	443,330	2,378,210	2,871,782	2,118,663	682,130	44,223
	Mean Cost	$830	1,008	1,163	1,130	923	500	88
	Median Cost	$756	944	1,053	1,040	863	486	69
Wholesale Trade	No.	24	119	318	407	350	184	145
	Total Cost	$17,540	106,098	335,447	431,967	301,223	90,009	11,939
	Mean Cost	$731	892	1,055	1,061	861	489	82
	Median Cost	$728	873	1,012	1,026	846	475	67
Retail Trade	No.	144	462	1,169	1,254	1,070	715	453
	Total Cost	$101,177	368,536	1,104,792	1,225,522	867,565	316,078	34,181
	Mean Cost	$703	798	945	977	811	442	75
	Median Cost	$699	761	949	998	811	428	64

See footnotes at end of table.

Table 24. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Industry Division and Age Group, U.S., 1992-2001 — Continued

Industry Division		Age Group						
		16-19	20-24	25-34	35-44	45-54	55-64	65+
Finance/Insur/RE	No.	—	36	120	161	201	135	—
	Total Cost	—	33,330	145,390	196,581	196,879	71,597	—
	Mean Cost	—	926	1,212	1,221	979	530	—
	Median Cost	—	861	1,216	1,221	951	508	—
Services	No.	98	448	1,360	1,595	1,330	904	563
	Total Cost	$77,132	419,794	1,485,801	1,823,802	1,248,229	457,263	46,351
	Mean Cost	$787	937	1,093	1,143	939	506	82
	Median Cost	$756	867	1,027	1,047	870	460	69
Public Admin	No.	20	139	712	717	588	319	144
	Total Cost	$17,989	156,723	916,467	914,878	599,656	171,821	11,934
	Mean Cost	$899	1,128	1,287	1,276	1,020	539	83
	Median Cost	$860	1,160	1,292	1,307	1,021	531	68
Not Classified	No.	—	324	325	358	268	173	—
	Total Cost	—	264,811	312,788	350,861	215,415	70,924	—
	Mean Cost	—	817	962	980	804	410	—
	Median Cost	—	787	926	936	717	391	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 25. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Occupation Division, U.S., 1992-2001

Occupation Division	Number of Deaths	Costs		
		Total	Mean	Median
Exec/Adm/Mgr	3,839	$4,171,176	$1,087	$1,161
Prof/Spec	2,322	2,657,745	1,145	1,252
Tech/Support	1,379	1,867,280	1,354	1,294
Sales	3,808	2,969,990	780	815
Clerical	1,081	840,527	778	861
Service	3,989	3,289,039	825	780
Farm/For/Fish	6,045	3,149,295	521	629
Crafts	10,423	9,537,182	915	977
Mach Operators	2,397	1,858,559	775	858
Transport	9,516	7,980,895	839	925
Laborers	5,283	3,649,381	691	751
Other	528	366,932	695	688
Non-Classifiable	1,074	760,398	708	706

[1]Costs are expressed in thousands of 2001 U.S. dollars.

Table 26. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Occupation Division and Year, U.S., 1992-2001

Occupation Division		Year of Death									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Exec/Adm/Mgr	No.	330	387	393	422	424	391	351	378	414	349
	Total Cost	$369,404	421,042	433,475	468,956	443,518	412,271	378,399	401,249	444,406	398,457
	Mean Cost	$1,119	1,088	1,103	1,111	1,046	1,054	1,078	1,062	1,073	1,142
	Median Cost	$1,109	1,109	1,136	1,187	1,172	1,134	1,191	1,121	1,127	1,273
Prof/Spec	No.	227	251	240	246	249	228	221	213	226	221
	Total Cost	$268,515	300,453	279,926	283,366	297,025	249,706	232,077	233,557	263,126	249,995
	Mean Cost	$1,183	1,197	1,166	1,152	1,193	1,095	1,050	1,097	1,164	1,131
	Median Cost	$1,282	1,319	1,263	1,259	1,276	1,222	1,182	1,180	1,275	1,298
Tech/Support	No.	129	125	144	141	148	145	134	122	171	120
	Total Cost	$164,892	186,072	206,475	181,098	193,346	183,193	188,926	157,672	242,791	162,815
	Mean Cost	$1,278	1,489	1,434	1,284	1,306	1,263	1,410	1,292	1,420	1,357
	Median Cost	$1,289	1,580	1,389	1,320	1,217	1,279	1,206	1,252	1,283	1,344
Sales	No.	436	466	469	403	388	377	325	318	328	298
	Total Cost	$346,851	379,136	368,569	296,624	286,861	294,410	258,639	252,848	266,350	219,704
	Mean Cost	$796	814	786	736	739	781	796	795	812	737
	Median Cost	$807	817	814	763	777	811	856	826	867	784
Clerical	No.	105	106	155	130	92	97	109	99	91	97
	Total Cost	$87,055	90,338	117,990	101,256	68,553	71,479	83,392	70,076	70,364	80,025
	Mean Cost	$829	852	761	779	745	737	765	708	773	825
	Median Cost	$884	920	850	857	823	829	873	840	858	875
Service	No.	384	413	446	431	385	414	340	373	389	414
	Total Cost	$319,021	342,675	360,958	354,767	296,852	337,909	287,566	294,479	337,969	356,843
	Mean Cost	$831	830	809	823	771	816	846	789	869	862
	Median Cost	$782	791	763	785	727	770	794	757	820	818
Farm/For/Fish	No.	672	665	638	605	627	589	618	545	545	541
	Total Cost	$331,859	334,428	310,860	317,641	319,293	309,560	334,213	275,482	313,181	302,778
	Mean Cost	$494	503	487	525	509	526	541	505	575	560
	Median Cost	$619	626	618	648	623	615	644	611	669	664

See footnote at end of table.

Table 26. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Occupation Division and Year, U.S., 1992-2001 — Continued

Occupation Division		Year of Death									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Crafts	No.	1,011	1,075	1,034	1,079	1,061	1,055	1,047	1,063	974	1,024
	Total Cost	$961,416	1,008,539	946,304	1,023,912	959,387	947,883	886,990	932,333	892,473	977,944
	Mean Cost	$951	938	915	949	904	898	847	877	916	955
	Median Cost	$1,007	1,002	958	1,007	977	970	929	957	972	1,023
Mach Operators	No.	242	230	252	275	242	245	227	259	233	192
	Total Cost	$185,682	178,373	199,157	213,780	186,309	188,573	174,172	197,015	184,682	150,816
	Mean Cost	$767	776	790	777	770	770	767	761	793	785
	Median Cost	$872	876	865	869	841	844	857	843	862	852
Transport	No.	853	941	914	922	967	1,025	972	1,012	981	929
	Total Cost	$716,878	795,708	769,297	763,502	779,514	861,407	792,309	839,173	848,617	814,488
	Mean Cost	$840	846	842	828	806	840	815	829	865	877
	Median Cost	$899	934	917	916	901	914	905	920	966	991
Laborers	No.	503	470	555	520	552	511	534	546	534	558
	Total Cost	$345,440	338,619	379,703	358,384	375,766	347,821	359,764	373,847	375,480	394,557
	Mean Cost	$687	720	684	689	681	681	674	685	703	707
	Median Cost	$759	783	740	739	740	729	738	754	767	767
Other	No.	18	39	37	49	53	81	52	64	66	69
	Total Cost	$15,795	34,427	37,472	40,773	29,998	44,104	27,551	36,467	37,767	62,577
	Mean Cost	$877	883	1,013	832	566	544	530	570	572	907
	Median Cost	$1,032	1,045	1,051	955	626	630	601	656	643	1,056
Non-Classifiable	No.	118	113	119	84	132	124	91	103	114	76
	Total Cost	$102,397	100,631	106,363	72,917	74,570	71,900	51,881	63,531	67,540	48,668
	Mean Cost	$868	891	894	868	565	580	570	617	592	640
	Median Cost	$915	963	924	881	597	600	582	634	606	640

[1]Costs are expressed in thousands of 2001 U.S. dollars.

Table 27. Number and Lifetime Total Cost[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Occupation Division, U.S., 1992-1998

Cause of Death	Occupation Division															
	Exec/Adm/Mgr		Prof/Spec		Tech/Support		Sales		Clerical		Service		Farm/For/Fish		Crafts	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle	552	$618,010	416	$464,589	162	$166,045	519	$419,272	247	$193,103	687	$609,400	681	$343,293	1,019	$902,466
Homicide	802	804,636	259	301,222	49	56,488	1,583	1,248,641	231	197,058	1,032	883,776	90	53,518	378	312,367
Fall	215	198,343	146	130,077	32	33,533	99	54,400	68	37,289	207	123,831	294	143,501	1,634	1,389,712
Machine	154	147,304	90	85,498	32	30,036	93	52,351	57	38,876	94	52,947	1,253	515,125	858	764,948
Struck by Falling Object	89	93,738	41	53,047	10	9,918	37	27,619	17	14,992	42	27,320	599	349,735	525	482,851
Electrocution	97	127,256	32	39,368	24	27,262	33	30,031	7	6,293	62	47,216	185	126,077	1,016	1,078,255
Suicide	262	299,477	148	177,052	35	37,376	201	161,531	31	27,475	179	143,935	90	52,030	238	210,681
Air Transport	143	192,641	207	274,707	525	833,308	46	43,952	12	12,267	64	61,734	36	24,923	79	86,051
Nature/Environment	38	44,365	48	50,492	9	10,338	23	17,360	15	10,951	51	37,585	290	139,826	265	248,898
Flying Object/Caught In	30	33,507	20	20,107	7	8,844	18	16,700	15	11,583	16	9,992	110	62,005	167	158,065
Explosion	43	55,244	19	28,795	19	20,865	21	16,675	7	5,252	24	19,889	25	13,707	233	230,014
Suffocation	40	51,268	16	20,605	5	5,832	15	11,740	10	6,496	20	12,998	111	65,955	138	136,837
Poisoning	28	37,534	37	54,525	13	14,173	24	19,881	10	8,720	51	33,466	48	29,651	147	144,989
Drowning	28	31,795	44	52,002	5	5,801	6	6,873	—	—	46	35,440	135	79,479	72	72,150
Water Transport	13	17,206	25	35,024	4	4,465	5	3,458	3	1,853	7	4,435	232	147,636	51	47,403
Fire	21	23,897	12	16,039	4	3,817	13	8,111	8	7,753	62	68,005	41	19,973	128	118,264
Rail Transport	7	8,825	8	12,224	3	3,283	—	—	—	—	9	6,553	4	2,419	31	29,093
Other	116	120,407	76	72,411	21	23,572	101	70,992	44	29,476	134	102,131	163	73,707	338	282,139
Unknown	20	21,613	18	23,283	7	9,045	—	—	7	6,155	26	19,096	27	15,296	45	39,246

See footnotes at end of table.

Table 27. Number and Lifetime Total Cost[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Occupation Division, U.S., 1992-1998 — Continued

Cause of Death	Occupation Division									
	Mach Operators		Transport		Laborers		Non-Classifiable		Other	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle	175	$121,174	3,712	$3,034,787	739	$506,074	170	$122,739	65	$47,539
Homicide	128	96,375	585	450,308	407	267,961	197	163,517	72	52,149
Fall	188	144,535	194	143,334	605	420,081	57	32,547	36	24,203
Machine	344	253,315	629	510,440	500	339,582	57	40,254	27	14,611
Struck by Falling Object	158	120,584	247	196,843	261	184,280	28	17,556	10	7,768
Electrocution	76	65,463	115	107,495	209	155,302	29	23,123	20	16,080
Suicide	52	42,255	102	89,228	59	40,491	41	30,647	12	9,559
Air Transport	9	7,699	7	3,823	5	3,486	15	12,978	6	3,549
Nature/Environment	75	59,946	121	99,483	140	93,039	22	14,335	7	3,085
Flying Object/Caught In	89	71,730	104	93,043	121	83,097	9	7,035	9	5,526
Explosion	130	111,954	52	46,572	87	61,919	12	9,005	7	4,883
Suffocation	30	23,686	70	59,690	124	88,610	15	10,022	7	5,298
Poisoning	42	36,001	50	47,657	57	42,283	17	13,478	7	5,930
Drowning	29	26,735	75	84,437	62	43,990	17	13,129	—	—
Water Transport	15	13,604	139	165,550	25	18,815	14	11,041	4	3,500
Fire	60	48,141	31	29,382	38	22,547	10	6,514	4	2,657
Rail Transport	12	10,749	124	136,337	31	20,956	—	—	—	—
Other	95	68,040	194	143,901	155	99,607	63	46,617	23	14,940
Unknown	6	4,060	43	36,305	20	13,377	—	—	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.

[2]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.

NOTE: Dashes indicate data that do not meet publication criteria.

Table 28. Number and Lifetime Total Cost[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Occupation Division, U.S., 1999-2001

Cause of Death	Occupation Division															
	Exec/Adm/Mgr		Prof/Spec		Tech/Support		Sales		Clerical		Service		Farm/For/Fish		Crafts	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle - Traffic	221	$249,557	171	$198,708	60	$60,372	206	$161,680	97	$69,968	287	$277,972	236	$137,571	382	$348,647
Motor Vehicle - Non-Traffic	41	34,735	17	16,146	4	5,325	21	11,096	11	6,522	19	10,771	191	72,188	83	65,455
Motor Vehicle - Other	13	9,744	10	13,967	—	—	—	—	4	3,033	—	—	30	16,796	21	18,037
Homicide	222	233,367	81	90,295	14	13,439	404	329,786	55	48,717	326	296,729	28	18,817	109	92,080
Fall	134	130,288	75	60,141	25	28,095	56	32,638	32	22,961	130	73,419	121	66,678	787	678,581
Machine	58	61,501	23	21,416	9	11,718	28	17,268	13	9,860	51	28,835	248	137,140	282	261,282
Struck by Falling Object	47	48,429	12	15,032	5	6,014	21	18,202	9	7,596	16	10,107	223	125,031	244	226,735
Electrocution	38	47,497	6	8,772	12	13,227	17	13,621	3	2,015	24	18,712	66	47,879	363	382,714
Suicide	117	141,245	56	68,342	10	11,383	64	54,150	14	12,246	67	54,036	34	21,581	99	92,798
Air Transport	50	60,078	70	88,999	226	357,902	18	18,097	8	7,108	26	29,448	10	6,804	27	30,596
Nature/Environment	7	6,799	6	6,189	3	4,659	—	—	6	4,222	8	6,677	83	39,188	26	21,051
Flying Object/Caught In	25	32,826	14	14,190	3	3,501	6	3,036	5	3,495	7	4,761	35	16,371	86	87,571
Explosion	18	23,505	6	9,637	4	4,111	7	5,269	—	—	8	5,495	9	5,447	94	91,000
Suffocation	21	24,200	6	6,164	—	—	3	3,170	—	—	16	10,217	41	23,057	62	60,805
Poisoning	16	20,569	30	43,363	7	8,983	18	16,633	3	2,084	22	15,189	15	10,657	64	60,353
Drowning	14	15,231	12	14,996	4	4,922	3	2,316	—	—	22	16,456	55	34,501	35	33,366
Water Transport	11	15,447	5	6,343	3	3,359	—	—	—	—	—	—	83	55,538	9	9,209
Fire	13	10,437	8	8,522	—	—	12	7,022	—	—	34	37,010	13	3,970	46	43,939
Rail Transport	4	5,692	4	6,186	—	—	—	—	—	—	—	—	—	—	15	14,735
Other	61	61,560	40	39,174	16	17,708	44	33,222	21	15,391	87	69,748	93	42,904	192	150,828
Unknown	10	11,405	8	10,093	—	—	7	5,563	—	—	10	9,062	—	—	35	32,969

See footnotes at end of table.

Table 28. Number and Lifetime Total Cost[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Occupation Division, U.S., 1999-2001 — Continued

Cause of Death	Occupation Division									
	Mach Operators		Transport		Laborers		Non-Classifiable		Other	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle - Traffic	80	$57,169	1,710	$1,455,160	289	$200,131	73	$46,530	40	$25,374
Motor Vehicle - Non-Traffic	21	14,957	117	86,134	46	29,332	15	8,452	7	4,651
Motor Vehicle - Other	6	3,865	28	20,706	9	5,587	3	810	—	—
Homicide	36	26,891	173	150,493	124	84,243	52	34,751	40	27,997
Fall	91	72,439	87	67,704	345	243,793	20	11,053	20	12,706
Machine	104	86,379	186	160,941	189	134,206	12	7,668	24	16,328
Struck by Falling Object	59	41,551	108	89,371	145	104,199	10	5,543	4	2,427
Electrocution	29	25,862	52	49,510	81	60,384	11	6,816	5	3,309
Suicide	20	17,321	34	32,506	28	19,740	21	13,177	11	7,931
Air Transport	3	2,671	7	7,525	—	—	—	—	5	3,159
Nature/Environment	9	6,091	24	20,213	27	17,773	—	—	—	—
Flying Object/Caught In	33	28,767	65	62,780	59	43,447	3	1,862	4	2,564
Explosion	50	41,973	13	10,686	24	15,719	—	—	4	4,426
Suffocation	16	11,418	37	34,703	50	35,579	—	—	3	3,182
Poisoning	15	11,741	26	23,273	17	12,575	9	5,426	5	4,890
Drowning	11	9,639	29	29,489	26	19,288	—	—	7	4,562
Water Transport	6	4,133	28	35,577	11	8,104	3	1,845	—	—
Fire	19	13,875	13	11,163	20	12,829	—	—	—	—
Rail Transport	4	3,079	35	39,602	9	6,905	3	1,981	—	—
Other	58	42,124	121	89,340	119	76,667	27	14,891	11	7,458
Unknown	14	10,569	29	25,401	—	—	3	2,116	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 29. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Occupation Division, U.S., 1992-1998

Cause of Death	Occupation Division															
	Exec/Adm/Mgr		Prof/Spec		Tech/Support		Sales		Clerical		Service		Farm/For/Fish		Crafts	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Motor Vehicle	$1,120	$1,283	$1,117	$1,221	$1,025	$1,093	$808	$849	$782	$852	$887	$861	$504	$596	$886	$953
Homicide	1,003	1,020	1,163	1,226	1,153	1,130	789	798	853	911	856	794	595	667	826	904
Fall	923	975	891	956	1,048	1,075	549	472	548	520	598	673	488	597	850	909
Machine	957	1,080	950	1,102	939	1,058	563	497	682	777	563	645	411	426	892	985
Struck by Falling Object	1,053	1,245	1,294	1,468	992	1,101	746	851	882	857	650	710	584	670	920	985
Electrocution	1,312	1,431	1,230	1,284	1,136	1,172	910	1,026	899	887	762	756	681	691	1,061	1,091
Suicide	1,143	1,231	1,196	1,300	1,068	1,125	804	902	886	918	804	742	578	657	885	943
Air Transport	1,347	1,474	1,327	1,361	1,587	1,721	955	968	1,022	1,020	965	919	692	714	1,089	1,109
Nature/Environment	1,167	1,441	1,052	1,182	1,149	1,077	755	838	730	891	737	733	482	622	939	982
Flying Object/Caught In	1,117	1,203	1,005	1,186	1,263	1,285	928	1,063	772	813	624	733	564	644	947	1,006
Explosion	1,285	1,420	1,516	1,559	1,098	1,179	794	954	750	922	829	759	548	633	987	1,052
Suffocation	1,282	1,409	1,288	1,264	1,166	1,172	783	737	650	644	650	696	594	677	992	1,024
Poisoning	1,341	1,533	1,474	1,395	1,090	1,069	828	849	872	876	656	713	618	692	986	1,002
Drowning	1,136	1,226	1,182	1,249	1,160	1,113	1,145	1,224	—	—	770	712	589	661	1,002	1,055
Water Transport	1,324	1,491	1,401	1,367	1,116	1,161	692	828	618	843	634	701	636	696	929	962
Fire	1,138	1,448	1,337	1,405	954	1,084	624	819	969	1,009	1,097	1,221	487	604	924	993
Rail Transport	1,261	1,381	1,528	1,605	1,094	1,093	—	—	—	—	728	754	605	620	938	996
Other	1,038	1,201	953	1,079	1,122	1,083	703	755	670	793	762	763	452	576	835	947
Unknown	1,081	1,165	1,294	1,416	1,292	1,310	—	—	879	914	734	742	567	661	872	965

See footnotes at end of table.

Table 29. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Occupation Division, U.S., 1992-1998 — Continued

Cause of Death	Occupation Division									
	Mach Operators		Transport		Laborers		Non-Classifiable		Other	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Motor Vehicle	$692	$822	$818	$925	$685	$743	$722	$756	$731	$707
Homicide	753	838	770	808	658	694	830	869	724	761
Fall	769	872	739	842	694	759	571	618	672	658
Machine	736	829	812	898	679	746	706	763	541	506
Struck by Falling Object	763	826	797	870	706	747	627	591	777	690
Electrocution	861	899	935	967	743	782	797	810	804	705
Suicide	813	887	875	966	686	714	747	664	797	700
Air Transport	855	870	546	609	697	738	865	901	592	591
Nature/Environment	799	859	822	887	665	752	652	761	441	601
Flying Object/Caught In	806	869	895	944	687	752	782	795	614	652
Explosion	861	910	896	976	712	740	750	739	698	654
Suffocation	790	816	853	945	715	762	668	649	757	744
Poisoning	857	895	953	994	742	752	793	803	847	747
Drowning	922	911	1,126	1,183	710	764	772	759	—	—
Water Transport	907	976	1,191	1,220	753	797	789	735	875	878
Fire	802	889	948	984	593	718	651	701	664	820
Rail Transport	896	935	1,099	1,181	676	748	—	—	—	—
Other	716	794	742	854	643	720	740	749	650	675
Unknown	677	830	844	909	669	731	—	—	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 30. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Occupation Division, U.S., 1999-2001

Cause of Death	Occupation Division															
	Exec/Adm/Mgr		Prof/Spec		Tech/Support		Sales		Clerical		Service		Farm/For/Fish		Crafts	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Motor Vehicle - Traffic	$1,129	$1,249	$1,162	$1,250	$1,006	$1,083	$785	$823	$721	$815	$969	$1,057	$583	$668	$913	$1,000
Motor Vehicle - Non-Traffic	847	1,028	950	1,157	1,331	1,336	528	730	593	784	567	635	378	238	789	945
Motor Vehicle - Other	750	792	1,397	1,403	—	—	—	—	758	970	—	—	560	630	859	972
Homicide	1,051	1,070	1,115	1,180	960	1,044	816	847	886	912	910	818	672	679	845	915
Fall	972	1,160	802	889	1,124	1,204	583	544	718	762	565	656	551	640	862	924
Machine	1,060	1,138	931	1,039	1,302	1,288	617	685	758	876	565	673	553	660	927	991
Struck by Falling Object	1,030	1,045	1,253	1,324	1,203	1,224	867	973	844	803	632	649	561	635	929	982
Electrocution	1,250	1,500	1,462	1,613	1,102	1,232	801	904	672	934	780	748	725	712	1,054	1,092
Suicide	1,207	1,327	1,220	1,337	1,138	1,163	846	887	875	876	807	781	635	664	937	996
Air Transport	1,202	1,246	1,271	1,308	1,584	1,792	1,005	1,134	888	957	1,133	1,265	680	712	1,133	1,174
Nature/Environment	971	945	1,032	1,186	1,553	1,537	—	—	704	848	835	752	472	524	810	979
Flying Object/Caught In	1,313	1,487	1,014	1,172	1,167	1,160	506	405	699	742	680	744	468	566	1,018	1,049
Explosion	1,306	1,468	1,606	1,635	1,028	1,107	753	740	—	—	687	705	605	699	968	1,024
Suffocation	1,152	1,146	1,027	1,309	—	—	1,057	1,096	—	—	639	638	562	655	981	1,033
Poisoning	1,286	1,467	1,445	1,424	1,283	1,277	924	1,029	695	889	690	708	710	715	943	991
Drowning	1,088	1,168	1,250	1,301	1,231	1,094	772	718	—	—	748	764	627	711	953	1,024
Water Transport	1,404	1,454	1,269	1,438	1,120	1,084	—	—	—	—	—	—	669	700	1,023	1,004
Fire	803	768	1,065	1,124	—	—	585	723	—	—	1,089	1,248	305	323	955	1,005
Rail Transport	1,423	1,386	1,547	1,770	—	—	—	—	—	—	—	—	—	—	982	1,085
Other	1,009	1,066	979	1,037	1,107	1,169	755	789	733	915	802	796	461	551	786	901
Unknown	1,141	1,606	1,262	1,402	—	—	795	905	—	—	906	828	—	—	942	1,004

See footnotes at end of table.

Table 30. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities by Cause of Death[2] and Occupation Division, U.S., 1999-2001 — Continued

Cause of Death	Occupation Division									
	Mach Operators		Transport		Laborers		Non-Classifiable		Other	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Motor Vehicle - Traffic	$715	$792	$851	$962	$692	$762	$637	$637	$634	$653
Motor Vehicle - Non-Traffic	712	790	736	859	638	703	563	583	664	749
Motor Vehicle - Other	644	723	739	902	621	697	270	214	—	—
Homicide	747	794	870	914	679	694	668	675	700	674
Fall	796	887	778	870	707	774	553	627	635	647
Machine	831	874	865	915	710	784	639	637	680	689
Struck by Falling Object	704	780	828	927	719	777	554	596	607	482
Electrocution	892	902	952	1,027	745	772	620	615	662	698
Suicide	866	899	956	1,051	705	756	627	620	721	732
Air Transport	890	854	1,075	1,096	—	—	—	—	632	605
Nature/Environment	677	834	842	971	658	758	—	—	—	—
Flying Object/Caught In	872	924	966	1,030	736	789	621	637	641	639
Explosion	839	913	822	912	655	764	—	—	1,107	1,101
Suffocation	714	816	938	1,003	712	768	—	—	1,061	1,138
Poisoning	783	848	895	980	740	762	603	704	978	1,005
Drowning	876	888	1,017	1,060	742	784	—	—	652	688
Water Transport	689	669	1,271	1,319	737	796	615	637	—	—
Fire	730	807	859	929	641	775	—	—	—	—
Rail Transport	770	784	1,131	1,179	767	766	660	633	—	—
Other	726	836	738	861	644	732	552	634	678	665
Unknown	755	886	876	975	—	—	705	704	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 31. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Occupation Division and Age Group, U.S., 1992-2001

Occupation Division		Age Group						
		16-19	20-24	25-34	35-44	45-54	55-64	65+
Exec/Adm/Mgr	No.	20	135	602	952	972	718	440
	Total Cost	$19,361	170,649	876,631	1,427,813	1,170,749	461,433	44,542
	Mean Cost	$968	1,264	1,456	1,500	1,204	643	101
	Median Cost	$931	1,323	1,525	1,578	1,233	629	85
Prof/Spec	No.	15	100	450	571	561	347	278
	Total Cost	$16,530	129,212	677,412	883,102	692,739	231,382	27,367
	Mean Cost	$1,102	1,292	1,505	1,547	1,235	667	98
	Median Cost	$1,083	1,244	1,465	1,493	1,179	656	85
Tech/Support	No.	11	82	403	371	300	154	58
	Total Cost	$11,528	106,332	636,862	594,059	402,927	108,321	7,252
	Mean Cost	$1,048	1,297	1,580	1,601	1,343	703	125
	Median Cost	$971	1,120	1,590	1,689	1,388	689	101
Sales	No.	61	216	679	884	871	626	471
	Total Cost	$44,043	183,728	707,796	944,072	761,643	291,969	36,739
	Mean Cost	$722	851	1,042	1,068	874	466	78
	Median Cost	$700	779	1,123	1,148	898	460	65
Clerical	No.	18	86	206	253	242	159	117
	Total Cost	$14,724	79,234	211,287	256,694	199,018	70,477	9,092
	Mean Cost	$818	921	1,026	1,015	822	443	78
	Median Cost	$759	913	1,021	972	806	434	60
Service	No.	70	346	1,107	1,034	771	403	258
	Total Cost	$46,904	289,758	1,138,307	1,032,328	607,761	157,337	16,646
	Mean Cost	$670	837	1,028	998	788	390	65
	Median Cost	$630	748	949	846	692	372	49
Farm/For/Fish	No.	145	441	1,078	1,213	956	917	1,295
	Total Cost	$88,896	303,304	823,431	946,823	603,703	306,722	76,415
	Mean Cost	$613	688	764	781	631	334	59
	Median Cost	$578	664	731	726	611	333	54

See footnote at end of table.

Table 31. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Occupation Division and Age Group, U.S., 1992-2001 — Continued

Occupation Division		Age Group						
		16-19	20-24	25-34	35-44	45-54	55-64	65+
Crafts	No.	146	746	2,468	2,915	2,259	1,292	597
	Total Cost	$122,562	725,078	2,738,256	3,250,824	2,028,237	624,251	47,975
	Mean Cost	$839	972	1,110	1,115	898	483	80
	Median Cost	$818	950	1,092	1,105	887	489	64
Mach Operators	No.	45	210	581	667	466	290	138
	Total Cost	$32,280	177,049	546,138	623,192	349,661	120,791	9,447
	Mean Cost	$717	843	940	934	750	417	68
	Median Cost	$726	844	945	940	764	417	55
Transport	No.	95	498	2,067	2,612	2,281	1,459	504
	Total Cost	$80,670	468,554	2,150,167	2,687,293	1,885,379	669,447	39,385
	Mean Cost	$849	941	1,040	1,029	827	459	78
	Median Cost	$805	927	1,026	1,018	820	470	60
Laborers	No.	254	697	1,382	1,373	912	482	183
	Total Cost	$166,336	508,142	1,114,605	1,095,852	581,479	171,307	11,660
	Mean Cost	$655	729	807	798	638	355	64
	Median Cost	$654	733	812	806	645	359	50
Other	No.	16	58	107	127	111	65	44
	Total Cost	$10,722	48,168	94,525	110,837	75,739	24,245	2,697
	Mean Cost	$670	830	883	873	682	373	61
	Median Cost	$590	800	782	731	605	371	47
Non-Classifiable	No.	411	242	124	109	89	47	52
	Total Cost	$281,658	194,946	111,934	94,678	57,336	17,127	2,720
	Mean Cost	$685	806	903	869	644	364	52
	Median Cost	$640	772	839	782	603	368	46

[1]Costs are expressed in thousands of 2001 U.S. dollars.

Table 32. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Industry Division and Occupation Division, U.S., 1992-2001

Industry Division		Occupation Division												
		Exec/Adm/Mgr	Prof/Spec	Tech/Support	Sales	Clerical	Service	Farm/For/Fish	Crafts	Mach Operators	Transport	Laborers	Non-Classified	Other
Ag/For/Fish	No.	48	109	115	8	6	41	4,959	53	37	144	29	—	—
	Total Cost	$60,704	143,673	168,136	7,055	5,296	35,945	2,498,997	47,280	28,754	118,519	19,666	—	—
	Mean Cost	$1,265	1,318	1,462	882	883	877	504	892	777	823	678	—	—
	Median Cost	$1,438	1,390	1,677	815	887	861	618	997	886	933	770	—	—
Mining	No.	74	49	23	7	5	9	—	896	53	324	86	—	—
	Total Cost	$81,640	62,074	24,259	6,222	4,474	5,674	—	991,100	44,590	288,325	62,513	—	—
	Mean Cost	$1,103	1,267	1,055	889	895	630	—	1,106	841	890	727	—	—
	Median Cost	$1,230	1,446	1,134	852	906	693	—	1,199	922	966	778	—	—
Construction	No.	645	101	54	11	22	14	24	5,013	247	1,155	2,665	—	—
	Total Cost	$737,698	125,549	55,543	9,999	18,259	7,126	14,164	4,414,280	214,100	970,372	1,916,296	—	—
	Mean Cost	$1,144	1,243	1,029	909	830	509	590	881	867	840	719	—	—
	Median Cost	$1,349	1,500	1,097	1,147	966	667	671	940	925	944	777	—	—
Manufacturing	No.	454	195	155	140	115	197	920	1,558	1,516	842	715	—	—
	Total Cost	$530,144	235,143	174,234	116,330	78,416	109,880	551,368	1,367,135	1,131,134	660,906	461,822	—	—
	Mean Cost	$1,168	1,206	1,124	831	682	558	599	877	746	785	646	—	—
	Median Cost	$1,373	1,386	1,174	843	793	656	674	993	832	871	734	—	—
Trans/Comm/PU	No.	431	164	644	47	344	115	11	1,142	141	5,620	560	—	—
	Total Cost	$507,982	209,671	994,453	39,321	274,426	79,243	6,530	1,197,305	114,592	4,758,204	387,015	—	—
	Mean Cost	$1,179	1,278	1,544	837	798	689	594	1,048	813	847	691	—	—
	Median Cost	$1,373	1,360	1,681	857	885	741	727	1,120	893	928	752	—	—
Wholesale Trade	No.	94	6	10	463	28	16	9	163	78	484	177	—	—
	Total Cost	$96,856	8,228	11,197	380,459	21,177	10,000	5,972	152,529	62,818	410,130	118,510	—	—
	Mean Cost	$1,030	1,371	1,120	822	756	625	664	936	805	847	670	—	—
	Median Cost	$1,223	1,377	1,128	957	829	667	676	1,005	870	937	720	—	—
Retail Trade	No.	639	49	10	2,754	81	548	6	210	14	413	505	—	—
	Total Cost	$563,347	52,143	12,295	2,102,913	64,897	353,849	2,953	172,641	10,938	338,021	320,239	—	—
	Mean Cost	$882	1,064	1,229	764	801	646	492	822	781	818	634	—	—
	Median Cost	$968	1,143	1,213	794	869	689	619	900	805	911	675	—	—

See footnotes at end of table.

Table 32. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities by Industry Division and Occupation Division, U.S., 1992-2001 — Continued

Industry Division		Occupation Division												
		Exec/Adm/Mgr	Prof/Spec	Tech/Support	Sales	Clerical	Service	Farm/For/Fish	Crafts	Mach Operators	Transport	Laborers	Non-Classified	Other
Finance/Insur/RE	No.	254	13	8	234	98	89	9	22	—	11	5	—	—
	Total Cost	$251,146	18,894	8,361	201,860	78,644	55,520	4,348	17,534	—	8,480	3,154	—	—
	Mean Cost	$989	1,453	1,045	863	802	624	483	797	—	771	631	—	—
	Median Cost	$1,117	1,660	1,106	975	874	699	636	917	—	666	711	—	—
Services	No.	867	1,445	224	116	228	1,318	84	1,114	216	327	316	—	—
	Total Cost	$966,738	1,555,953	248,213	84,637	177,145	826,464	51,551	953,238	175,426	277,478	211,198	—	—
	Mean Cost	$1,115	1,077	1,108	730	777	627	614	856	812	849	668	—	—
	Median Cost	$1,257	1,189	1,097	773	853	717	677	941	909	929	734	—	—
Public Admin	No.	214	170	123	—	126	1,597	12	156	37	82	71	—	34
	Total Cost	$233,619	217,832	156,622	—	94,997	1,774,332	5,992	138,467	29,442	61,858	42,118	—	21,224
	Mean Cost	$1,092	1,281	1,273	—	754	1,111	499	888	796	754	593	—	624
	Median Cost	$1,184	1,318	1,220	—	840	1,214	566	969	822	874	691	—	656
Not Classified	No.	119	21	13	—	28	45	—	96	—	114	154	1,054	238
	Total Cost	$141,301	28,585	13,967	—	22,795	31,008	—	85,673	—	88,601	106,852	747,550	175,981
	Mean Cost	$1,187	1,361	1,074	—	814	689	—	892	—	777	694	709	739
	Median Cost	$1,391	1,371	1,224	—	944	737	—	975	—	871	757	706	702

[1]Costs are expressed in thousands of 2001 U.S. dollars.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 33. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities for Ten Occupations[2] with the Largest Number of Fatalities, U.S., 1992-2001

Occupation	Number of Deaths	Costs		
		Total	Mean	Median
Truck Drivers	6,499	$5,368,333	$934	$826
Construction Laborers	2,660	1,913,103	777	719
Farmers, Exc Horticultural	2,584	1,055,839	323	409
Sales Occ Supervisors	2,158	1,754,927	965	813
Laborers, Not Construction	1,580	1,064,800	746	674
Carpenters	1,020	820,888	914	805
Farm Workers	921	505,779	627	549
Logging Occupations	904	547,023	683	605
Police/Detectives	886	1,083,211	1,306	1,223
Electricians	861	859,362	1,108	998

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Excludes occupations designated as “not elsewhere classified.”

Table 34. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities for Ten Occupations[2] with the Largest Number of Fatalities by Year, U.S., 1992-2001

Occupation		Year of Death									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Truck Drivers	No.	523	583	604	631	665	688	694	729	697	685
	Total Cost	$419,359	478,299	502,124	520,560	530,524	559,252	557,915	607,424	594,103	598,773
	Mean Cost	$802	820	831	825	798	813	804	833	852	874
	Median Cost	$909	935	933	938	915	920	926	935	968	1,006
Construction Laborers	No.	240	210	267	259	266	278	263	315	259	303
	Total Cost	$173,748	164,240	189,328	187,262	191,484	196,303	182,697	222,645	185,878	219,518
	Mean Cost	$724	782	709	723	720	706	695	707	718	724
	Median Cost	$802	865	757	777	775	757	749	775	794	781
Farmers, Exc Horticultural	No.	315	301	286	284	262	227	255	219	205	230
	Total Cost	$115,536	106,384	88,138	116,635	108,233	95,307	121,077	92,945	109,230	102,355
	Mean Cost	$367	353	308	411	413	420	475	424	533	445
	Median Cost	$339	306	182	270	307	397	426	285	475	214
Sales Occ Supervisors	No.	254	252	243	241	223	216	191	177	198	163
	Total Cost	$212,061	226,047	193,003	180,571	173,757	178,088	158,390	145,383	163,087	124,540
	Mean Cost	$835	897	794	749	779	824	829	821	824	764
	Median Cost	$998	1,056	956	919	963	984	983	937	947	868
Laborers, Not Construction	No.	158	167	168	143	154	148	154	150	172	166
	Total Cost	$100,855	114,207	112,665	96,436	101,777	100,305	103,602	98,494	121,357	115,101
	Mean Cost	$638	684	671	674	661	678	673	657	706	693
	Median Cost	$744	760	739	733	739	730	745	727	782	761
Carpenters	No.	97	87	89	106	107	103	99	112	107	113
	Total Cost	$76,037	72,853	71,444	86,535	86,715	81,806	73,183	86,160	85,122	101,034
	Mean Cost	$784	837	803	816	810	794	739	769	796	894
	Median Cost	$901	942	882	922	896	916	865	900	920	961
Farm Workers	No.	88	93	89	87	75	116	103	88	94	88
	Total Cost	$49,016	51,725	47,686	47,116	41,901	63,344	59,385	43,750	52,116	49,740
	Mean Cost	$557	556	536	542	559	546	577	497	554	565
	Median Cost	$620	619	626	634	623	603	659	598	645	662

See footnote at end of table.

Table 34. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities for Ten Occupations[2] with the Largest Number of Fatalities by Year, U.S., 1992-2001 — Continued

Occupation		Year of Death									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Logging Occupations	No.	115	90	106	92	109	90	82	78	84	58
	Total Cost	$72,369	63,299	72,122	64,443	61,020	55,262	42,153	40,925	42,742	32,688
	Mean Cost	$629	703	680	700	560	614	514	525	509	564
	Median Cost	$699	805	785	804	662	697	624	616	617	646
Police/Detectives	No.	85	87	86	94	80	97	88	79	99	91
	Total Cost	$106,831	107,252	107,015	112,710	91,269	117,206	105,808	91,148	126,427	117,547
	Mean Cost	$1,257	1,233	1,244	1,199	1,141	1,208	1,202	1,154	1,277	1,292
	Median Cost	$1,303	1,316	1,311	1,302	1,218	1,250	1,303	1,256	1,387	1,426
Electricians	No.	85	71	85	99	92	78	103	87	78	83
	Total Cost	$87,518	71,613	82,287	103,178	90,643	76,285	95,892	83,662	78,437	89,847
	Mean Cost	$1,030	1,009	968	1,042	985	978	931	962	1,006	1,083
	Median Cost	$1,147	1,105	1,125	1,144	1,098	1,114	1,043	1,038	1,115	1,192

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Excludes occupations designated as “not elsewhere classified.”

Table 35. Number and Total Lifetime Cost[1] of Traumatic Occupational Fatalities for Ten Occupations[2] with the Largest Number of Fatalities by Cause of Death[3], U.S., 1992-1998

Cause of Death	Occupation																			
	Truck Drivers		Construction Laborers		Farmers, Exc Horticultural		Sales Occ Supervisors		Laborers, Not Construction		Carpenters		Farm Workers		Logging Occupations		Police/Detectives		Electricians	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle	3,244	$2,671,540	395	$279,973	323	$135,991	203	$163,484	179	$116,960	53	$40,752	171	$94,800	42	$23,485	225	$274,304	47	$43,701
Homicide	148	120,998	60	44,518	—	—	958	814,202	103	71,717	20	15,545	25	15,737	—	—	263	322,871	10	9,814
Fall	107	70,161	428	311,596	99	29,854	52	30,829	120	74,997	276	217,595	38	19,492	28	19,016	17	20,458	100	93,332
Machine	205	153,674	200	142,283	853	291,590	62	36,238	221	148,291	—	—	181	94,265	100	63,954	—	—	51	43,109
Struck by Falling Object	150	112,895	152	109,059	103	40,554	26	17,892	79	54,589	63	50,675	—	—	361	225,536	—	—	9	8,600
Electrocution	75	65,717	141	107,186	52	35,099	19	16,090	42	31,167	57	48,296	34	21,340	—	—	—	—	281	300,240
Suicide	60	53,027	16	12,333	36	18,042	125	103,590	23	15,739	22	18,128	17	10,793	6	3,201	38	46,062	8	6,973
Air Transport	4	2,445	3	2,251	16	10,189	22	18,906	—	—	—	—	5	3,200	5	3,675	15	17,914	—	—
Nature/ Environment	64	49,220	68	49,008	140	47,646	12	9,128	51	31,146	29	22,797	54	31,558	46	29,248	5	6,032	16	14,174
Flying Object/ Caught In	51	40,112	58	40,342	35	15,336	11	10,673	43	29,217	17	15,776	11	6,576	45	29,819	—	—	—	—
Explosion	27	23,575	19	13,771	15	7,827	15	13,488	40	28,950	4	2,310	6	3,465	—	—	—	—	15	14,823
Suffocation	37	31,597	79	58,076	77	43,559	10	6,047	35	23,280	10	8,452	19	11,974	—	—	—	—	6	5,073
Poisoning	26	23,779	25	19,008	23	13,190	13	11,733	21	15,656	16	14,433	7	3,497	—	—	—	—	4	4,613
Drowning	14	12,137	30	22,490	17	7,453	3	3,475	24	16,115	7	5,226	30	16,361	4	3,055	4	5,198	3	3,019
Water Transport	—	—	11	8,951	5	3,410	3	1,367	8	5,843	7	5,097	—	—	6	3,806	—	—	—	—
Fire	19	18,083	10	5,697	19	6,056	11	6,091	19	10,624	3	2,817	7	3,003	3	1,953	—	—	—	—
Rail Transport	4	3,130	3	2,583	—	—	—	—	22	14,662	—	—	—	—	—	—	—	—	—	—
Other	126	93,483	75	48,390	85	30,917	56	42,635	56	36,974	46	35,092	16	7,437	20	10,833	34	39,331	27	24,870
Unknown	—	—	10	7,547	10	3,956	—	—	—	—	4	3,165	4	2,682	4	2,429	4	4,043	4	4,598

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Excludes occupations designated as “not elsewhere classified.”
[3]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 36. Number and Total Lifetime Cost[1] of Traumatic Occupational Fatalities for Ten Occupations[2] with the Largest Number of Fatalities by Cause of Death[3], U.S., 1999-2001

Cause of Death	Occupation																			
	Truck Drivers		Construction Laborers		Farmers, Exc Horticultural		Sales Occ Supervisors		Laborers, Not Construction		Carpenters		Farm Workers		Logging Occupations		Police/Detectives		Electricians	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle-Traffic	1,502	$1,297,864	158	$109,990	93	$52,335	67	$52,729	70	$47,358	22	$17,593	57	$30,966	15	$7,872	114	$143,875	23	$20,749
Motor Vehicle-Non-Traffic	82	64,330	22	15,519	137	45,580	11	5,256	—	—	4	1,314	30	13,985	11	5,445	—	—	—	—
Motor Vehicle-Other	21	16,948	—	—	11	4,866	—	—	4	3,266	—	—	9	4,856	—	—	4	5,563	—	—
Homicide	62	58,090	20	14,355	3	2,566	277	235,522	30	20,900	12	9,224	6	4,045	3	1,539	92	121,205	3	2,517
Fall	48	31,740	249	179,408	46	21,307	27	16,691	78	52,814	161	135,200	16	7,858	9	5,148	8	8,366	38	36,004
Machine	66	54,609	88	61,389	153	80,700	24	15,408	82	60,757	14	11,601	42	22,254	—	—	—	—	23	21,458
Struck by Falling Object	68	52,808	92	68,004	40	17,401	16	13,012	43	30,173	26	20,824	11	6,034	118	65,809	—	—	—	—
Electrocution	37	34,123	53	40,020	16	13,821	—	—	18	13,358	18	15,298	20	12,043	—	—	—	—	102	111,885
Suicide	24	25,167	9	6,476	16	8,478	33	28,350	14	9,668	10	8,686	—	—	—	—	14	16,296	—	—
Air Transport	—	—	—	—	5	4,634	11	10,214	—	—	—	—	—	—	—	—	10	12,950	—	—
Nature/ Environment	7	4,026	13	9,987	44	15,675	—	—	8	4,602	4	2,926	20	11,169	—	—	—	—	—	—
Flying Object/ Caught In	37	34,540	25	19,680	—	—	4	2,536	19	12,821	8	7,421	6	3,386	11	4,969	—	—	—	—
Explosion	7	6,641	4	2,741	3	1,103	7	5,269	18	11,892	—	—	—	—	—	—	—	—	4	3,938
Suffocation	23	22,235	33	23,788	27	15,506	—	—	11	7,299	—	—	9	4,224	—	—	—	—	—	—
Poisoning	19	16,850	9	6,986	4	3,352	11	10,324	5	3,454	6	4,896	—	—	—	—	—	—	5	4,730
Drowning	—	—	12	9,110	7	2,492	—	—	11	8,186	3	1,996	6	4,170	—	—	—	—	—	—
Water Transport	—	—	9	6,784	—	—	—	—	—	—	4	3,558	3	1,922	—	—	—	—	—	—
Fire	5	3,906	5	2,994	5	568	9	4,590	12	8,208	—	—	4	1,912	—	—	—	—	5	6,301
Rail Transport	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other	80	56,351	61	40,593	30	10,520	20	15,934	36	22,626	22	15,389	17	7,965	22	9,110	17	17,567	12	10,371
Unknown	14	12,005	8	5,794	3	626	3	2,966	8	4,492	10	8,540	—	—	5	2,847	—	—	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Excludes occupations designated as "not elsewhere classified."
[3]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 37. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities for Ten Occupations[2] with the Largest Number of Fatalities by Cause of Death[3], U.S., 1992-1998

Cause of Death	Occupation																			
	Truck Drivers		Construction Laborers		Farmers, Exc Horticultural		Sales Occ Supervisors		Laborers, Not Construction		Carpenters		Farm Workers		Logging Occupations		Police/ Detectives		Electricians	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Motor Vehicle	$824	$931	$709	$765	$421	$426	$805	$984	$653	$736	$769	$872	$554	$619	$559	$655	$1,219	$1,303	$930	$1,035
Homicide	818	934	742	785	—	—	850	1,003	696	765	777	828	629	660	—	—	1,228	1,288	981	1,063
Fall	656	669	728	780	302	149	593	522	625	690	788	896	513	627	679	725	1,203	1,227	933	1,035
Machine	750	902	711	779	342	193	584	646	671	742	—	—	521	603	640	704	—	—	845	923
Struck by Falling Object	753	839	717	764	394	284	688	864	691	729	804	888	—	—	625	690	—	—	956	1,117
Electrocution	876	939	760	797	675	731	847	1,002	742	764	847	926	628	646	—	—	—	—	1,068	1,148
Suicide	884	976	771	783	501	541	829	1,004	684	752	824	915	635	657	534	565	1,212	1,278	872	939
Air Transport	611	713	750	738	637	713	859	939	—	—	—	—	640	660	735	771	1,194	1,206	—	—
Nature/Environment	769	863	721	765	340	180	761	965	611	712	786	889	584	634	636	709	1,206	1,322	886	1,078
Flying Object/Caught In	787	870	696	776	438	436	970	1,098	679	725	928	974	598	656	663	688	—	—	—	—
Explosion	873	950	725	777	522	697	899	1,052	724	759	578	604	577	624	—	—	—	—	988	1,105
Suffocation	854	942	735	777	566	685	605	655	665	748	845	980	630	655	—	—	—	—	845	981
Poisoning	915	985	760	801	573	686	903	965	746	778	902	947	500	432	—	—	—	—	1,153	1,180
Drowning	867	947	750	794	438	557	1,158	1,212	671	761	747	885	545	621	764	769	1,300	1,309	1,006	1,020
Water Transport	—	—	814	830	682	702	456	178	730	790	728	936	—	—	634	710	—	—	—	—
Fire	952	973	570	736	319	56	554	229	559	730	939	999	429	452	651	687	—	—	—	—
Rail Transport	782	720	861	863	—	—	—	—	666	734	—	—	—	—	—	—	—	—	—	—
Other	742	873	645	780	364	212	761	936	660	718	763	907	465	553	542	699	1,157	1,273	921	1,100
Unknown	—	—	755	827	396	202	—	—	—	—	791	824	670	676	607	680	1,011	1,263	1,149	1,164

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Excludes occupations designated as "not elsewhere classified."
[3]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 38. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities for Ten Occupations[2] with the Largest Number of Fatalities by Cause of Death[3], U.S., 1999-2001

Cause of Death	Occupation																			
	Truck Drivers		Construction Laborers		Farmers, Exc Horticultural		Sales Occ Supervisors		Laborers, Not Construction		Carpenters		Farm Workers		Logging Occupations		Police/Detectives		Electricians	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Motor Vehicle - Traffic	$864	$972	$696	$776	$563	$619	$787	$884	$677	$755	$800	$930	$543	$618	$525	$611	$1,262	$1,337	$902	$954
Motor Vehicle - Non-Traffic	785	897	705	767	333	63	478	67	—	—	328	132	466	539	495	600	—	—	—	—
Motor Vehicle - Other	807	902	—	—	442	421	—	—	816	846	—	—	540	638	—	—	1,391	1,405	—	—
Homicide	937	1,013	718	763	855	1,005	850	951	697	768	769	866	674	685	513	649	1,317	1,370	839	1,192
Fall	661	738	721	777	463	370	618	668	677	752	840	923	491	501	572	668	1,046	1,329	947	1,072
Machine	827	913	698	789	527	511	642	685	741	788	829	937	530	665	—	—	—	—	933	1,054
Struck by Falling Object	777	856	739	783	435	326	813	966	702	771	801	939	549	628	558	642	—	—	—	—
Electrocution	922	1,017	755	817	864	989	—	—	742	755	850	934	602	676	—	—	—	—	1,097	1,153
Suicide	1,049	1,093	720	776	530	540	859	1,005	691	768	869	964	—	—	—	—	1,164	1,317	—	—
Air Transport	—	—	—	—	927	943	929	1,017	—	—	—	—	—	—	—	—	1,295	1,312	—	—
Nature/Environment	575	626	768	821	356	62	—	—	575	741	731	927	558	656	—	—	—	—	—	—
Flying Object/ Caught In	934	1,015	787	826	—	—	634	630	675	696	928	953	564	657	452	509	—	—	—	—
Explosion	949	994	685	780	368	60	753	740	661	774	—	—	—	—	—	—	—	—	984	1,026
Suffocation	967	1,061	721	780	574	655	—	—	664	755	—	—	469	595	—	—	—	—	—	—
Poisoning	887	1,005	776	762	838	848	939	1,134	691	812	816	840	—	—	—	—	—	—	946	912
Drowning	—	—	759	797	356	61	—	—	744	779	665	533	695	687	—	—	—	—	—	—
Water Transport	—	—	754	796	—	—	—	—	—	—	889	935	641	658	—	—	—	—	—	—
Fire	781	929	599	578	114	63	510	515	684	792	—	—	478	519	—	—	—	—	1,260	1,254
Rail Transport	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other	704	856	665	755	351	88	797	819	629	731	700	834	469	630	414	371	1,033	1,207	864	993
Unknown	858	1,002	724	789	209	285	989	975	562	695	854	859	—	—	569	662	—	—	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Excludes occupations designated as "not elsewhere classified."
[3]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 39. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities for Ten Industry Major Groups with the Largest Number of Fatalities, U.S., 1992-2001

Industry	Number of Deaths	Costs		
		Total	Mean	Median
Motor Freight Transportation & Warehousing	4,598	$3,847,430	$837	$931
Special Trade Contractors	3,950	3,498,642	886	925
Heavy Construction, Ex. Building	3,579	2,902,245	811	818
Agricultural Production - Crops, Livestock	3,781	1,761,663	466	539
General Building Contractors	1,877	1,582,977	843	868
Justice, Public Order, and Safety	1,626	1,850,090	1,138	1,223
Lumber and Wood Products	1,572	1,065,871	678	713
Food Stores	1,359	1,019,965	751	723
Business Services	1,252	1,053,597	842	799
Electric, Gas, and Sanitary Services	1,216	1,196,052	984	974

[1]Costs are expressed in thousands of 2001 U.S. dollars.

Table 40. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities for Ten Industry Major Groups with the Largest Number of Fatalities by Year, U.S., 1992-2001

Industry		Year of Death									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Motor Freight Transportation & Warehousing	No.	371	410	426	442	469	506	501	509	487	477
	Total Cost	$307,655	343,426	361,263	366,252	374,056	409,242	400,859	436,449	421,392	426,836
	Mean Cost	$829.259	838	848	829	798	809	800	857	865	895
	Median Cost	$909.387	935	944	925	915	907	920	952	966	1,006
Special Trade Contractors	No.	435	419	374	382	415	361	438	371	367	388
	Total Cost	$392,299	372,634	329,484	361,007	359,612	321,964	358,909	322,657	326,302	353,773
	Mean Cost	$902	889	881	945	867	892	819	870	889	912
	Median Cost	$950	942	907	965	894	929	875	915	912	952
Heavy Construction, Ex. Building	No.	291	332	356	360	365	383	364	360	349	419
	Total Cost	$237,558	300,646	298,970	300,960	290,138	316,890	273,295	273,022	275,673	335,092
	Mean Cost	$816	906	840	836	795	827	751	758	790	800
	Median Cost	$836	904	809	818	817	819	772	805	837	805
Agricultural Production - Crops, Livestock	No.	429	426	400	387	363	378	393	348	319	338
	Total Cost	$178,088	173,551	154,483	178,797	165,378	184,630	207,658	165,732	183,019	170,325
	Mean Cost	$415	407	386	462	456	488	528	476	574	504
	Median Cost	$482	492	389	552	498	561	625	540	654	535
General Building Contractors	No.	73	118	188	178	169	164	166	297	258	266
	Total Cost	$67,225	104,311	156,603	157,030	140,411	133,003	130,724	237,575	218,066	238,027
	Mean Cost	$921	884	833	882	831	811	787	800	845	895
	Median Cost	$874	915	858	882	850	870	850	846	897	912
Justice, Public Order, and Safety	No.	145	170	152	178	145	176	161	154	174	171
	Total Cost	$164,740	197,372	178,494	195,776	155,361	195,877	177,584	171,855	208,394	204,637
	Mean Cost	$1,136	1,161	1,174	1,100	1,071	1,113	1,103	1,116	1,198	1,197
	Median Cost	$1,214	1,247	1,234	1,207	1,161	1,178	1,204	1,188	1,327	1,292
Lumber and Wood Products	No.	204	164	159	157	180	149	152	151	144	112
	Total Cost	$137,601	123,269	116,110	115,233	119,501	98,567	93,705	97,584	91,797	72,504
	Mean Cost	$675	752	730	734	664	662	616	646	637	647
	Median Cost	$733	810	779	792	684	739	659	696	699	701

See footnote at end of table.

Table 40. Number and Lifetime Costs[1] of Traumatic Occupational Fatalities for Ten Industry Major Groups with the Largest Number of Fatalities by Year, U.S., 1992-2001 — Continued

Industry		Year of Death									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Food Stores	No.	151	171	180	151	157	138	98	100	112	101
	Total Cost	$115,047	135,314	128,099	108,368	107,111	111,624	74,751	75,295	88,465	75,891
	Mean Cost	$762	791	712	718	682	809	763	753	790	751
	Median Cost	$722	737	691	696	677	778	737	780	751	715
Business Services	No.	109	116	160	144	125	129	95	120	122	132
	Total Cost	$87,782	94,674	130,340	118,473	105,383	110,900	81,836	103,114	109,781	111,314
	Mean Cost	$805	816	815	823	843	860	861	859	900	843
	Median Cost	$814	789	765	789	779	799	808	811	840	844
Electric, Gas, and Sanitary Services	No.	114	128	114	110	117	118	114	119	149	133
	Total Cost	$114,250	136,829	111,694	115,153	112,620	111,525	106,449	107,045	143,670	136,818
	Mean Cost	$1,002	1,069	980	1,047	963	945	934	900	964	1,029
	Median Cost	$1,009	1,059	973	1,065	956	962	966	889	951	1,036

[1]Costs are expressed in thousands of 2001 U.S. dollars.

Table 41. Number and Total Lifetime Cost[1] of Traumatic Occupational Fatalities for Ten Industry Major Groups with the Largest Number of Fatalities by Cause of Death[2], U.S., 1992-1998

Cause of Death	Industry																			
	Motor Freight Transportation & Warehousing		Special Trade Contractors		Heavy Construction, Ex. Building		Agricultural Production - Crops, Livestock		General Building Contractors		Justice, Public Order, and Safety		Lumber and Wood Products		Food Stores		Business Services		Electric, Gas, and Sanitary Services	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle	2,284	$1,890,047	317	$277,063	736	$601,754	564	$284,376	120	$105,452	394	$435,477	164	$117,907	80	$59,818	190	$157,242	261	$223,436
Homicide	123	103,337	81	66,575	73	59,517	63	38,937	37	30,439	416	481,857	10	8,396	810	612,145	283	209,607	21	20,775
Fall	85	59,275	949	797,057	401	322,521	143	51,975	428	350,917	36	36,099	44	33,095	20	9,596	115	92,054	53	50,147
Machine	136	98,692	243	201,875	403	328,578	1,086	414,216	80	62,195	10	4,961	217	154,449	16	9,121	21	16,523	59	49,229
Struck by Falling Object	96	72,065	170	150,967	168	133,295	127	52,951	71	61,029	12	9,124	469	304,189	9	4,651	18	17,933	25	25,107
Electrocution	38	32,660	484	480,121	168	157,397	96	63,684	87	79,752	10	12,031	14	11,368	10	6,729	38	37,854	199	237,713
Suicide	60	54,983	62	56,707	23	22,810	61	34,912	29	25,987	60	69,992	20	14,437	38	30,088	53	42,545	13	15,457
Air Transport	—	—	—	—	—	—	21	13,442	11	9,442	40	48,354	17	21,155	—	—	31	43,321	18	23,356
Nature/ Environment	44	33,644	93	83,006	85	69,097	203	84,595	32	28,842	13	13,193	68	43,371	5	3,174	13	11,502	25	22,643
Flying Object/ Caught In	51	40,987	54	48,900	66	52,141	49	23,727	20	18,956	—	—	70	44,643	—	—	7	6,121	—	—
Explosion	23	21,120	52	45,562	35	31,983	24	13,247	11	9,487	5	5,220	4	3,764	5	4,138	4	2,687	27	30,364
Suffocation	21	19,023	60	58,008	90	72,796	98	56,252	26	19,500	—	—	7	5,061	—	—	—	—	10	9,953
Poisoning	28	27,434	44	39,975	19	16,387	33	19,009	21	19,447	3	3,463	4	3,042	5	3,157	20	15,323	14	15,398
Drowning	6	5,288	21	19,831	39	34,835	48	25,175	—	—	10	13,022	4	2,854	—	—	17	19,003	18	15,857
Water Transport	—	—	11	11,464	12	12,224	—	—	8	6,358	—	—	—	—	—	—	4	5,816	3	2,625
Fire	14	11,677	30	28,186	14	10,919	27	9,695	10	8,273	47	57,691	8	4,793	7	4,063	4	3,227	10	10,532
Rail Transport	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other	90	69,857	128	105,348	99	72,681	106	41,166	49	41,032	59	62,599	33	21,542	31	25,170	39	30,315	32	30,043
Unknown	20	17,147	14	14,082	8	7,215	15	7,626	6	3,814	—	—	—	—	5	4,423	—	—	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 42. Number and Total Lifetime Cost[1] of Traumatic Occupational Fatalities for Ten Industry Major Groups with the Largest Number of Fatalities by Cause of Death[2], U.S., 1999-2001

Cause of Death	Industry																			
	Motor Freight Transportation & Warehousing		Special Trade Contractors		Heavy Construction, Ex. Building		Agricultural Production - Crops, Livestock		General Building Contractors		Justice, Public Order, and Safety		Lumber and Wood Products		Food Stores		Business Services		Electric, Gas, and Sanitary Services	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Motor Vehicle - Traffic	1,018	$897,370	138	$117,600	268	$208,608	182	$109,891	85	$71,100	192	$226,169	68	$48,141	40	$28,719	89	$76,102	117	$106,158
Motor Vehicle - Non-Traffic	57	42,375	—	—	50	34,749	170	62,503	22	16,546	—	—	20	11,702	—	—	8	7,974	16	12,370
Motor Vehicle -Other	13	9,252	5	3,576	10	7,090	23	12,365	—	—	6	7,660	—	—	—	—	—	—	5	4,716
Homicide	39	36,773	24	19,913	27	22,025	12	8,986	25	22,258	145	176,525	7	4,447	220	171,881	76	66,829	7	6,242
Fall	43	31,744	405	355,800	199	147,045	66	29,382	339	278,806	23	21,519	17	9,209	12	5,963	63	54,194	33	29,884
Machine	46	38,755	77	70,464	149	115,010	215	120,464	49	43,382	6	3,344	54	38,311	4	3,459	11	5,706	26	24,072
Struck by Falling Object	49	39,983	75	63,523	110	85,618	54	26,601	65	55,697	—	—	150	87,395	—	—	—	—	18	15,189
Electrocution	17	14,930	153	149,193	75	68,085	36	27,664	60	59,632	—	—	7	4,993	—	—	16	15,212	90	105,143
Suicide	25	26,517	34	34,062	8	6,043	23	13,550	21	19,368	21	24,226	3	2,346	10	8,850	29	29,557	10	11,222
Air Transport	—	—	5	5,415	9	12,420	6	4,193	7	7,075	18	24,074	—	—	—	—	4	5,095	3	4,968
Nature/ Environment	—	—	9	7,211	20	17,322	69	30,670	10	8,199	3	3,861	5	3,152	—	—	—	—	—	—
Flying Object/ Caught In	32	29,199	22	20,374	41	35,654	—	—	17	18,060	—	—	19	12,344	3	2,262	5	4,729	10	8,243
Explosion	7	6,510	21	19,321	7	7,384	5	2,638	8	6,582	4	5,043	—	—	—	—	—	—	10	9,022
Suffocation	22	22,169	26	25,434	40	31,694	38	22,250	17	14,884	3	3,519	—	—	—	—	—	—	6	6,969
Poisoning	15	14,614	12	9,795	7	5,447	10	7,341	17	13,733	—	—	3	2,224	—	—	9	6,304	10	11,763
Drowning	3	2,250	10	9,350	15	13,471	14	8,137	9	7,548	—	—	—	—	—	—	10	8,791	9	7,788
Water Transport	—	—	3	3,083	10	7,589	4	3,152	—	—	—	—	—	—	—	—	—	—	—	—
Fire	—	—	10	9,607	7	5,064	9	2,479	11	7,863	20	25,433	—	—	—	—	3	2,707	4	4,887
Rail Transport	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other	67	52,164	65	49,427	66	45,158	47	18,193	38	26,630	39	41,916	33	23,079	9	6,268	22	17,526	18	12,670
Unknown	11	10,824	12	11,744	—	—	—	—	13	11,769	4	5,338	12	6,928	—	—	6	3,856	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 43. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities for Ten Industry Major Groups with the Largest Number of Fatalities by Cause of Death[2], U.S., 1992-1998

Cause of Death	Industry																			
	Motor Freight Transportation & Warehousing		Special Trade Contractors		Heavy Construction, Ex. Building		Agricultural Production - Crops, Livestock		General Building Contractors		Justice, Public Order, and Safety		Lumber and Wood Products		Food Stores		Business Services		Electric, Gas, and Sanitary Services	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Motor Vehicle	$828	$929	$901	$874	$818	$824	$504	$586	$879	$866	$1,105	$1,190	$719	$797	$748	$744	$828	$804	$856	$812
Homicide	840	916	887	822	815	808	618	659	823	817	1,158	1,218	840	858	756	717	741	757	989	950
Fall	697	827	880	840	804	799	363	315	820	856	1,003	1,162	752	750	480	547	800	780	946	1,035
Machine	726	839	877	831	815	830	381	339	777	847	496	357	712	751	570	726	787	798	834	811
Struck by Falling Object	751	839	935	888	793	806	417	382	860	889	760	789	649	699	517	582	996	923	1,004	1,049
Electrocution	859	928	1,012	992	937	855	663	670	917	883	1,203	1,272	812	843	673	773	996	960	1,195	1,258
Suicide	916	980	917	915	992	885	572	651	896	888	1,167	1,235	722	705	792	722	803	750	1,189	1,163
Air Transport	—	—	—	—	—	—	640	706	858	987	1,209	1,205	1,244	1,146	—	—	1,397	1,489	1,298	1,394
Nature/ Environment	765	841	907	893	813	805	417	475	901	905	1,015	1,168	638	698	635	670	885	825	906	848
Flying Object/ Caught In	804	837	969	906	790	786	484	587	948	953	—	—	638	682	—	—	874	858	—	—
Explosion	918	950	915	876	914	949	552	631	862	917	1,044	1,016	941	836	828	865	672	776	1,125	1,017
Suffocation	906	950	955	967	809	823	574	671	750	802	—	—	723	716	—	—	—	—	995	990
Poisoning	980	992	930	909	862	807	576	661	926	863	1,154	1,016	760	783	631	701	766	772	1,100	1,123
Drowning	881	923	963	944	893	825	524	621	—	—	1,302	1,369	713	685	—	—	1,118	1,153	881	1,106
Water Transport	—	—	1,009	1,042	1,019	904	—	—	795	861	—	—	—	—	—	—	1,454	1,442	875	790
Fire	834	937	966	940	780	766	359	296	827	853	1,227	1,274	599	693	580	662	807	817	1,053	1,023
Rail Transport	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other	776	891	885	823	734	787	388	292	837	890	1,061	1,157	653	745	812	800	777	769	939	955
Unknown	857	963	1,003	1,006	902	911	508	627	636	675	—	—	—	—	885	997	—	—	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based on the World Health Organization ICD-9 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 44. Lifetime Mean and Median Costs[1] of Traumatic Occupational Fatalities for Ten Industry Major Groups with the Largest Number of Fatalities by Cause of Death[2], U.S., 1999-2001

Cause of Death	Industry																			
	Motor Freight Transportation & Warehousing		Special Trade Contractors		Heavy Construction, Ex. Building		Agricultural Production-Crops, Livestock		General Building Contractors		Justice, Public Order, and Safety		Lumber and Wood Products		Food Stores		Business Services		Electric, Gas, and Sanitary Services	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Motor Vehicle - Traffic	$882	$991	$877	$852	$778	$811	$604	$665	$836	$832	$1,178	$1,273	$708	$750	$718	$782	$855	$837	$907	$874
Motor Vehicle - Non-Traffic	743	785	—	—	695	787	368	167	752	811	—	—	585	612	—	—	997	898	773	731
Motor Vehicle - Other	712	877	904	715	709	791	538	621	—	—	1,277	1,311	—	—	—	—	—	—	943	860
Homicide	943	1,048	924	830	816	802	749	738	890	874	1,217	1,327	635	649	781	742	879	830	892	863
Fall	738	839	918	879	739	791	445	387	822	858	936	1,048	542	640	497	524	860	826	906	939
Machine	842	873	945	915	772	824	560	671	885	913	557	522	709	723	865	814	519	305	926	905
Struck by Falling Object	816	902	902	847	778	807	493	480	857	878	—	—	583	653	—	—	—	—	844	852
Electrocution	878	991	1,024	975	908	873	768	723	994	954	—	—	713	693	—	—	951	882	1,168	1,245
Suicide	1,061	1,106	1,020	1,002	755	783	589	579	922	924	1,154	1,140	782	762	885	977	1,019	1,028	1,122	1,150
Air Transport	—	—	1,048	1,083	1,380	1,328	699	712	1,011	881	1,337	1,312	—	—	—	—	1,274	1,480	1,656	1,526
Nature/Environment	—	—	850	801	866	894	444	453	820	987	1,287	1,255	630	705	—	—	—	—	—	—
Flying Object/Caught In	912	889	943	926	870	850	—	—	1,062	982	—	—	650	677	754	698	946	800	824	803
Explosion	930	1,013	943	920	1,055	1,039	528	724	823	903	1,261	1,116	—	—	—	—	—	—	902	945
Suffocation	1,008	1,072	1,051	978	792	817	586	627	876	861	1,173	1,145	—	—	—	—	—	—	1,161	1,040
Poisoning	974	1,032	880	816	778	762	734	704	808	855	—	—	741	685	—	—	700	800	1,176	1,161
Drowning	750	874	1,030	935	898	854	581	687	839	813	—	—	—	—	—	—	879	793	865	888
Water Transport	—	—	1,004	1,028	759	788	788	737	—	—	—	—	—	—	—	—	—	—	—	—
Fire	—	—	983	961	723	840	275	172	715	898	1,272	1,281	—	—	—	—	902	893	1,222	1,238
Rail Transport	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other	779	890	826	760	684	783	387	181	701	737	1,075	1,149	699	716	696	663	797	773	704	717
Unknown	984	1,054	988	979	—	—	—	—	905	848	1,335	1,349	577	680	—	—	643	689	—	—

[1]Costs are expressed in thousands of 2001 U.S. dollars.
[2]Cause of death codes were assigned based upon the World Health Organization ICD-10 classification structure.
NOTE: Dashes indicate data that do not meet publication criteria.

Appendix I

International Classification of Disease (ICD) Rubrics for Cause of Death Categories—ICD-9

Category	ICD-9 Rubric
Rail Transport	E800–E807
Motor Vehicle	E810–E829, E846–E849
Water Transport	E830–E838
Air Transport	E840–E845
Poisoning	E850–E858, E860–E869
Falls	E880–E888
Fires	E890–E899
Nature/Environment	E900–E909, E928
Drowning	E910
Suffocation	E911–E913
Struck by Falling Object	E916
Flying Object/Caught In	E917–E918
Machine	E919
Explosion	E921, E923
Electrocution	E925
Suicide	E950–E959
Homicide	E960–E969
Other	E870–E879, E914, E915, E920, E922, E924, E926, E927, E929, E930–E949, E970–E978, E990–E999
Unknown/Undetermined	E980–E989, Blank

Source: International Classification of Diseases, Ninth Revision.

International Classification of Disease (ICD) Rubrics for Cause of Death Categories – ICD-10

Category	ICD-10 Rubric
MV Traffic	V021, V029, V031, V039, V041, V049, V092, V123–V129, V133–V139, V143–V149, V194–V196, V203–V209, V213–V219, V223–V229, V233–V239, V243–V249, V253–V259, V263–V269, V273–V279, V283–V289, V294–V299, V304–V309, V314–V319, V324–V329, V334–V339, V344–V349, V354–V359, V364–V369, V374–V379, V384–V389, V394–V399, V404–V409, V414–V419, V424–V429, V434–V439, V444–V449, V454–V459, V464–V469, V474–V479, V484–V489, V494–V499, V504–V509, V514–V519, V524–V529, V534–V539, V544–V549, V554–V559, V564–V569, V574–V579, V584–V589, V594–V599, V604–V609, V614–V619, V624–V629, V634–V639, V644–V649, V654–V659, V664–V669, V674–V679, V684–V689, V694–V699, V704–V709, V714–V719, V724–V729, V734–V739, V744–V749, V754–V759, V764–V769, V774–V779, V784–V789, V794–V799, V803, V804, V805, V811, V821, V830–V833, V840–V843, V850–V853, V860–V863, V870–V878, V892
MV Nontraffic	V020, V030, V040, V090, V120–V122, V130–V132, V140–V142, V190–V192, V200–V202, V210–V212, V220–V222, V230–V232, V240–V242, V250–V252, V260–V262, V270–V272, V280–V282, V290–V293, V300–V303, V310–V313, V320–V323, V330–V333, V340–V343, V350–V353, V360–V363, V370–V373, V380–V383, V390–V393, V400–V403, V410–V413, V420–V423, V430–V433, V440–V443, V450–V453, V460–V463, V470–V473, V480–V483, V490–V493, V500–V503, V510–V513, V520–V523, V530–V533, V540–V543, V550–V553, V560–V563, V570–V573, V580–V583, V590–V593, V600–V603, V610–V613, V620–V623, V630–V633, V640–V643, V650–V653, V660–V663, V670–V673, V680–V683, V690–V693, V700–V703, V710–V713, V720–V723, V730–V733, V740–V743, V750–V753, V760–V763, V770–V773, V780–V783, V790–V793, V810, V820, V834–V839, V844–V849, V854–V859, V864–V869, V880–V888, V890
Other Vehicle	V010, V011, V019, V060, V061, V069, V091, V093, V099, V100–V109, V110–V119, V160–V169, V170–V179, V180–V189, V193, V198, V199, V800, V801, V802, V806, V807, V808, V809, V822–V829, V879, V889, V891, V893, V899, V98, V99
Rail Transport	V05, V15, V812–V819

International Classification of Disease (ICD) Rubrics for Cause of Death Categories – ICD-10

Category	ICD-10 Rubric
Water Transport	V90, V91, V92, V93, V94
Air Transport	V95, V96, V97
Falls	W00, W01, W02, W03, W04, W05, W06, W07, W08, W09, W10, W11, W12, W13, W14, W15, W16, W17, W18, W19
Struck by falling	W20
Fly object/Caught	W21, W22, W23, W50, W51, W52
Machine	W24, W30, W31
Explosion	W35, W36, W37, W38, W39, W40
Nature/Environment	W41, W42, W43, W49, W53, W54, W55, W56, W57, W58, W59, W60, W64, W92, W93, W94, W99, X20, X21, X22, X23 X24, X25, X26, X27, X28, X29, X30, X31, X32, X33, X34, X35, X36, X37, X38, X39, X51, X52, X53, X54, X57
Drowning	W65, W66, W67, W68, W69, W70, W73, W74
Suffocation	W75, W76, W77, W78, W79, W80, W81, W83, W84
Electrocution	W85, W86, W87
Fires	X00, X01, X02, X03, X04, X05, X06, X08, X09
Poisoning	X40, X41, X42, X43, X44, X45, X46, X47, X48, X49
Suicide	X60, X61, X62, X63, X64, X65, X66, X67, X68, X69, X70, X71, X72, X73, X74, X75, X76, X77, X78, X79, X80, X81, X82, X83, X84, Y870, U03
Homicide	X85, X86, X87, X88, X89, X90, X91, X92, X93, X94, X95, X96, X97, X98, X99, Y00, Y01, Y02, Y03, Y04, Y05, Y06, Y07, Y08, Y09, Y871, U01, U02

International Classification of Disease (ICD) Rubrics for Cause of Death Categories – ICD-10

Category	ICD-10 Rubric
Other	A00–T98, W25, W26, W27, W28, W29, W32, W33, W34, W44, W45, W88, W89, W90, W91, X10, X11, X12, X13, X14, X15, X16, X17, X18, X19, X50, X58, Y35, Y36, Y40, Y41, Y42, Y43, Y44, Y45, Y46, Y47, Y48, Y49, Y50, Y51, Y52, Y53, Y54, Y55, Y56, Y57, Y58, Y59, Y60, Y61, Y62, Y63, Y64, Y65, Y66, Y69, Y70, Y71, Y72, Y73, Y74, Y75, Y76, Y77, Y78, Y79, Y80, Y81, Y82, Y83, Y84, Y85, Y86, Y88 Y890, Y891
Unknown	X59, Y10, Y11, Y12, Y13, Y14, Y15, Y16, Y17, Y18, Y19, Y20, Y21, Y22, Y23, Y24, Y25, Y26, Y27, Y28, Y29, Y30, Y31, Y32, Y33, Y34, Y872, Y899, Blank

Source: International Classification of Diseases, Tenth Revision.

Appendix II

1990 Bureau of the Census Occupational (BOC) Classification System

MANAGERIAL AND PROFESSIONAL SPECIALTY OCCUPATIONS

Census Code	Occupation
	Executive, Administrative, and Managerial Occupations
003	Legislators
004	Chief executives and general administrators, public administration
005	Administrators and officials, public administration
006	Administrators, protective services
007	Financial managers
008	Personnel and labor relations managers
009	Purchasing managers
013	Managers, marketing, advertising, and public relations
014	Administrators, education and related fields
015	Managers, medicine and health
016	Postmasters and mail superintendents
017	Managers, food serving and lodging establishments
018	Managers, properties and real estate
019	Funeral directors
021	Managers, service organizations, n.e.c.
022	Managers and administrators, n.e.c.
	Management Related Occupations
023	Accountants and auditors
024	Underwriters
025	Other financial officers
026	Management analysts
027	Personnel, training, and labor relations specialists
028	Purchasing agents and buyers, farm products
029	Buyers, wholesale and retail trade except farm products
033	Purchasing agents and buyers, n.e.c.
034	Business and promotion agents
035	Construction inspectors
036	Inspectors and compliance officers, except construction
037	Management related occupations, n.e.c.

PROFESSIONAL SPECIALTY OCCUPATIONS

	Engineers, Architects, and Surveyors
043	Architects
	Engineers
044	Aerospace
045	Metallurgical and materials
046	Mining
047	Petroleum
048	Chemical
049	Nuclear
053	Civil
054	Agricultural
055	Electrical and electronic
056	Industrial
057	Mechanical
058	Marine and naval architects
059	Engineers, n.e.c.
063	Surveyors and mapping scientists

Mathematical and Computer Scientists

064 Computer systems analysts and scientists
065 Operations and systems researchers and analysts
066 Actuaries
067 Statisticians
068 Mathematical scientists, n.e.c.

Natural Scientists

069 Physicists and astronomers
073 Chemists, except biochemists
074 Atmospheric and space scientists
075 Geologists and geodesists
076 Physical scientists, n.e.c.
077 Agricultural and food scientists
078 Biological and life scientists
079 Forestry and conservation scientists
083 Medical scientists

Health Diagnosing Occupations

084 Physicians
085 Dentists
086 Veterinarians
087 Optometrists
088 Podiatrists
089 Health diagnosing practitioners, n.e.c.

Health Assessment and Treating Occupations

095 Registered nurses
096 Pharmacists
097 Dietitians

Therapists

098 Respiratory therapists
099 Occupational therapists
103 Physical therapists
104 Speech therapists
105 Therapists, n.e.c.
106 Physicians' assistants

Teachers, Postsecondary

113 Earth, environmental, and marine science teachers
114 Biological science teachers
115 Chemistry teachers
116 Physics teachers
117 Natural science teachers, n.e.c.
118 Psychology teachers
119 Economics teachers
123 History teachers
124 Political science teachers
125 Sociology teachers
126 Social science teachers, n.e.c.
127 Engineering teachers
128 Mathematical science teachers
129 Computer science teachers
133 Medical science teachers
134 Health specialties teachers
135 Business, commerce, and marketing teachers
136 Agriculture and forestry teachers
137 Art, drama, and music teachers
138 Physical education teachers
139 Education teachers
143 English teachers
144 Foreign language teachers
145 Law teachers
146 Social work teachers
147 Theology teachers
148 Trade and industrial teachers
149 Home economics teachers
153 Teachers, postsecondary, n.e.c.
154 Postsecondary teachers, subject not specified

Teachers, Except Postsecondary

155 Teachers, prekindergarten and kindergarten

156 Teachers, elementary school
157 Teachers, secondary school
158 Teachers, special education
159 Teachers, n.e.c.
163 Counselors, educational and vocational

Librarians, Archivists, and Curators

164 Librarians
165 Archivists and curators

Social Scientists and Urban Planners

166 Economists
167 Psychologists
168 Sociologists
169 Social scientists, n.e.c.
173 Urban planners

Social, Recreation, and Religious Workers

174 Social workers
175 Recreation workers
176 Clergy
177 Religious workers, n.e.c.

Lawyers and Judges

178 Lawyers
179 Judges

Writers, Artists, Entertainers, and Athletes

183 Authors
184 Technical writers
185 Designers
186 Musicians and composers
187 Actors and directors
188 Painters, sculptors, craft-artists, and artist printmakers
189 Photographers
193 Dancers
194 Artists, performers, and related workers, n.e.c.
195 Editors and reporters
197 Public relations specialists
198 Announcers
199 Athletes

TECHNICAL, SALES AND ADMINISTRATIVE SUPPORT OCCUPATIONS

Technicians and Related Support occupations

Health Technologists and Technicians

203 Clinical laboratory technologists and technicians
204 Dental hygienists
205 Health record technologists and technicians
206 Radiologic technicians
207 Licensed practical nurses
208 Health technologists and technicians, n.e.c.

Technologists and Technicians, Except Health Engineering and Related Technologists and Technicians

213 Electrical and electronic technicians
214 Industrial engineering technicians
215 Mechanical engineering technicians
216 Engineering technicians, n.e.c.
217 Drafting occupations
218 Surveying and mapping technicians

Science Technicians

223 Biological technicians
224 Chemical technicians
225 Science technicians

Technicians: Except Health, Engineering and Science

226 Airplane pilots and navigators
227 Air traffic controllers
228 Broadcast equipment operators
229 Computer programmers
233 Tool programmers, numerical control

234 Legal assistants
235 Technicians, n.e.c.

Sales Occupations

243 Supervisors and proprietors, sales occupations

Sales Representatives, Finance and Business Services

253 Insurance sales occupations
254 Real estate sales occupations
255 Securities and financial services sales occupations
256 Advertising and related sales occupations
257 Sales occupations, other business services

Sales Representatives, Commodities Except Retail

258 Sales engineers
259 Sales representatives, mining, manufacturing, and wholesale

Sales Workers, Retail and Personal Services

263 Sales workers, motor vehicles and boats
264 Sales workers, apparel
265 Sales workers, shoes
266 Sales workers, furniture and home furnishings
267 Sales workers; radio, TV, hi-fi, and appliances
268 Sales workers, hardware and building supplies
269 Sales workers, parts
274 Sales workers, other commodities
275 Sales counter clerks
276 Cashiers
277 Street and door-to-door sales workers
278 News vendors

Sales Related Occupations

283 Demonstrators, promoters and models, sales
284 Auctioneers
285 Sales support occupations, n.e.c.

Administrative Support Occupations, Including Clerical

Supervisors, Administrative Support Occupations

303 Supervisors, general office
304 Supervisors, computer equipment operators
305 Supervisors, financial records processing
306 Chief communications operators
307 Supervisors; distribution, scheduling, and adjusting clerks

Computer Equipment Operators

308 Computer operators
309 Peripheral equipment operators

Secretaries, Stenographers, and Typists

313 Secretaries
314 Stenographers
315 Typists

Information Clerks

316 Interviewers
317 Hotel clerks
318 Transportation ticket and reservation agents
319 Receptionists
323 Information clerks, n.e.c.

Records Processing Occupations, Except Financial

325 Classified-ad clerks
326 Correspondence clerks
327 Order clerks

328 Personnel clerks, except payroll and timekeeping
329 Library clerks
335 File clerks
336 Records clerks

Financial Records Processing Occupations

337 Bookkeepers, accounting, and auditing clerks
338 Payroll and timekeeping clerks
339 Billing clerks
343 Cost and rate clerks
344 Billing, posting, and calculating machine operators

Duplicating, Mail and Other Office Machine Operators

345 Duplicating machine operators
346 Mail preparing and paper handling machine operators
347 Office machine operators, n.e.c.

Communications Equipment Operators

348 Telephone operators
353 Communications equipment operators, n.e.c.

Mail and Message Distributing Occupations

354 Postal clerks, exc. mail carriers
355 Mail carriers, postal service
356 Mail clerks, exc. postal service
357 Messengers

Material Recording, Scheduling, and Distributing Clerks

359 Dispatchers
363 Production coordinators
364 Traffic, shipping, and receiving clerks
365 Stock and inventory clerks
366 Motor readers
368 Weighers, measurers, checkers and samplers
373 Expediters
374 Material recording, scheduling, and distributing clerks, n.e.c.

Adjusters and Investigators

375 Insurance adjusters, examiners, and investigators
376 Investigators and adjusters except insurance
377 Eligibility clerks, social welfare
378 Bill and account collectors

Miscellaneous Administrative Support Occupations

379 General office clerks
383 Bank tellers
384 Proofreaders
385 Data-entry keyers
386 Statistical clerks
387 Teachers' aides
389 Administrative support occupations, n.e.c.

SERVICE OCCUPATIONS

Private Household Occupations

403 Launderers and ironers
404 Cooks, private household
405 Housekeepers and butlers
406 Child care workers, private household
407 Private household cleaners and servants

Protective Service Occupations

Supervisors Protective Service Occupations

413 Supervisors, firefighting and fire prevention occupations
414 Supervisors, police and detectives
415 Supervisors, guards

Firefighting and Fire Prevention Occupations

416 Fire inspection and fire prevention occupations
417 Firefighting occupations

Police and Detectives

418 Police and detectives, public service
423 Sheriffs, bailiffs, and other law enforcement officers
424 Correctional institution officers

Guards

425 Crossing guards
426 Guards and police, except public service
427 Protective service occupations, n.e.c.

Service Occupations, Except Protective and Household

Food Preparation and Service Occupations

433 Supervisors, food preparation and service occupations
434 Bartenders
435 Waiters and waitresses
436 Cooks
438 Food counter, fountain and related occupations
439 Kitchen workers, food preparation
443 Waiters'/waitresses' assistants
444 Miscellaneous food preparation occupations

Health Service Occupations

445 Dental assistants
446 Health aides, except nursing
447 Nursing aides, orderlies, and attendants

Cleaning and Building Service Occupations, except Household

448 Supervisors cleaning and building service workers
449 Maids and houseman
453 Janitors and cleaners
454 Elevator operators
455 Pest control occupations

Personal Service Occupations

456 Supervisors, personal service occupations
457 Barbers
458 Hairdressers and cosmetologists
459 Attendants, amusement and recreation facilities
461 Guides
462 Ushers
463 Public transportation attendants
464 Baggage porters and bellhops
465 Welfare service aides
466 Family child care providers
467 Early childhood teacher's assistants
468 Child care workers, n.e.c.
469 Personal service occupations, n.e.c.

FARMING, FORESTRY AND FISHING OCCUPATIONS

Farm Operators and Managers

473 Farmers, except horticultural
474 Horticultural specialty farmers
475 Managers, farms, except horticultural
476 Managers, horticultural specialty farms

Other Agricultural and Related Occupations

Farm Occupations Except Managerial

477 Supervisors, farm workers
479 Farm workers
483 Marine life cultivation workers
484 Nursery workers

Related Agricultural Occupations

485 Supervisors related agricultural occupations

486 Groundskeepers and gardeners, except farm
487 Animal caretakers, except farm
488 Graders and sorters, agricultural products
489 Inspectors, agricultural products

Forestry and Logging Occupations

494 Supervisors, forestry, and logging workers
495 Forestry workers, except logging
496 Timber cutting and logging occupations

Fishers, Hunters, and Trappers

497 Captains and other officers, fishing vessels
498 Fishers
499 Hunters and trappers

PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS

Mechanics and Repairers

503 Supervisors, mechanics and repairers

Mechanics and Repairers, Except Supervisors

Vehicle and Mobile Equipment Mechanics and Repairers

505 Automobile mechanics
506 Automobile mechanic apprentices
507 Bus, truck, and stationary engine mechanics
508 Aircraft engine mechanics
509 Small engine repairers
514 Automobile body and related repairers
515 Aircraft mechanics, exc. engine
516 Heavy equipment mechanics
517 Farm equipment mechanics
518 Industrial machinery repairers
519 Machinery maintenance occupations

Electrical and Electronic Equipment Repairers

523 Electronic repairers, communications and industrial equipment
525 Data processing equipment repairers
526 Household appliance and power tool repairers
527 Telephone line installers and repairers
529 Telephone installers and repairers
533 Miscellaneous electrical and electronic equipment repairers
534 Heating, air conditioning, and refrigeration mechanics

Miscellaneous Mechanics and Repairers

535 Camera, watch, and musical instrument repairers
536 Locksmiths and safe repairers
538 Office machine repairers
539 Mechanical controls and valve repairers
543 Elevator installers and repairers
544 Millwrights
547 Specified mechanics and repairers, n.e.c.
549 Not specified mechanics and repairers

Construction Trades

Supervisors, Construction Occupations

553 Supervisors; brickmasons, stonemasons, and tile setters
554 Supervisors; carpenters and related workers
555 Supervisors; electricians and power transmission installers
556 Supervisors; painters, paperhangers, and plasterers
557 Supervisors; plumbers, pipefitters, and steamfitters
558 Supervisors; n.e.c.

Construction Trades Except Supervisors

563 Brickmasons and stonemasons
564 Brickmason and stonemason apprentices
565 Tile setters, hard and soft
566 Carpet installers
567 Carpenters
569 Carpenter apprentices
573 Drywall installers
575 Electricians
576 Electrician apprentices
577 Electrical power installers and repairers
579 Painters, construction and maintenance
583 Paperhangers
584 Plasterers
585 Plumbers, pipefitters, and steamfitters
587 Plumber, pipefitter, and steamfitter apprentices
588 Concrete and terrazzo finishers
589 Glaziers
593 Insulation workers
594 Paving, surfacing, and tamping equipment operators
595 Roofers
596 Sheetmetal duct installers
597 Structural metal workers
598 Drillers, earth
599 Construction trades, n.e.c.

Extractive Occupations

613 Supervisors, extractive occupations
614 Drillers, oil well
615 Explosives workers
616 Mining machine operators
617 Mining occupations, n.e.c.

Precision Production Occupations

628 Supervisors, production occupations

Precision Metal Working Occupations

634 Tool and die makers
635 Tool and die maker apprentices
636 Precision assemblers, metal
637 Machinists
639 Machinist apprentices
643 Boilermakers
644 Precision grinders, filers, and tool sharpeners
645 Patternmakers and model makers, metal
646 Lay-out workers
647 Precious stones and metals workers (Jewelers)
649 Engravers, metal
653 Sheet metal workers
654 Sheet metal worker apprentices
655 Miscellaneous precision metal workers

Precision Woodworking Occupations

656 Patternmakers and model makers, wood
657 Cabinet makers and bench carpenters
658 Furniture and wood finishers
659 Miscellaneous precision woodworkers

Precision Textile, Apparel, and Furnishings Machine Workers

666 Dressmakers
667 Tailors
668 Upholsterers
669 Shoe repairers
674 Miscellaneous precision apparel and fabric workers

Precision Workers, Assorted Materials

675 Hand molders and shapers, except jewelers
676 Patternmakers, lay-out workers, and cutters
677 Optical goods workers
678 Dental laboratory and medical appliance technicians
679 Bookbinders
683 Electrical and electronic equipment

assemblers
684 Miscellaneous precision workers, n.e.c.

Precision Food Production Occupations

686 Butchers and meat cutters
687 Bakers
688 Food batchmakers

Precision Inspectors, Testers, and Related Workers

689 Inspectors, testers, and graders
693 Adjusters and calibrators

Plant and System Operators

694 Water and sewage treatment plant operators
695 Power plant operators
696 Stationary engineers
699 Miscellaneous plant and system operators

OPERATORS, FABRICATORS, AND LABORERS

Machine Operators, Assemblers, and Inspectors

Machine Operators and Tenders, except Precision

Metal Working and Plastic Working Machine Operators

703 Lathe and turning machine set-up operators
704 Lathe and turning machine operators
705 Milling and planing machine operators
706 Punching and stamping press machine operators
707 Rolling machine operators
708 Drilling and boring machine operators
709 Grinding, abrading, buffing, and polishing machine operators
713 Forging machine operators
714 Numerical control machine operators
715 Miscellaneous metal, plastic, stone, and glass working machine operators
717 Fabricating machine operators, n.e.c.

Metal and Plastic Processing Machine Operators

719 Molding and canting machine operators
723 Metal plating machine operators
724 Heat treating equipment operators
725 Miscellaneous metal and plastic processing machine operators

Woodworking Machine Operators

726 Wood lathe, routing, and planing machine operators
727 Sawing machine operators
728 Shaping and joining machine operators
729 Nailing and tacking machine operators
733 Miscellaneous woodworking machine operators

Printing Machine Operators

734 Printing press operators
735 Photoengravers and lithographers
736 Typesetters and compositors
737 Miscellaneous printing machine operators

Textile, Apparel, and Furnishings Machine Operators

738 Winding and twisting machine operators
739 Knitting, looping, taping, and weaving machine operators
743 Textile cutting machine operators
744 Textile serving machine operators
745 Shoe machine operators
747 Pressing machine operators
748 Laundering and dry cleaning machine operators
749 Miscellaneous textile machine operators

Machine Operators, Assorted Materials

753 Cementing and gluing machine

operators
754 Packaging and filling machine operator
755 Extruding and forming machine operators
756 Mixing and blending machine operators
757 Separating, filtering, and clarifying machine operators
758 Compressing and compacting machine operators
759 Painting and paint spraying machine operators
763 Roasting and baking machine operators, food
764 Washing, cleaning, and pickling machine operators
765 Folding machine operators
766 Furnace, kiln, and oven operators, exc. food
768 Crushing and grinding machine operators
769 Slicing and cutting machine operators
773 Motion picture projectionists
774 Photographic process machine operators
777 Miscellaneous machine operators, n.e.c.
779 Machine operators, not specified

Fabricators, Assemblers, and Hand Working Occupations

783 Welders and cutters
784 Solderers and brazers
785 Assemblers
786 Hand cutting and trimming occupations
787 Hand molding, casting, and forming occupations
789 Hand painting, coating, and decorating occupations
793 Hand engraving and printing occupations
795 Miscellaneous hand working occupations

Production Inspectors, Testers, Samplers, and Weighers

796 Production inspectors, checkers, and examiners
797 Production testers
798 Production samplers and weighers
799 Graders and sorters, exc. agricultural

Transportation and Material Moving Occupations

Motor Vehicle Operators

803 Supervisors, motor vehicle operators
804 Truck drivers
806 Driver-sales workers
808 Bus drivers
809 Taxicab drivers and chauffeurs
813 Parking lot attendants
814 Motor transportation occupations, n.e.c.

Transportation Occupations, Except Motor Vehicles

Rail Transportation Occupations

823 Railroad conductors and yardmasters
824 Locomotive operating occupations
825 Railroad brake, signal, and switch operators
826 Rail vehicle operators, n.e.c.

Water Transportation Occupations

828 Ship captains and mates, except fishing boats
829 Sailors and deckhands
833 Marine engineers
834 Bridge, lock, and lighthouse tenders

Material Moving Equipment Operators

843 Supervisors, material moving equipment operators
844 Operating engineers
845 Longshore equipment operators

848 Hoist and winch operators
849 Crane and tower operators
853 Excavating and loading machine operators
855 Grader, dozer, and scraper operators
856 Industrial truck and tractor equipment operators
859 Miscellaneous material moving equipment operators

Handlers, Equipment Cleaners, Helpers, and Laborers

864 Supervisors, handlers, equipment cleaners, and laborers, n.e.c.
865 Helpers, mechanics and repairers

Helpers, Construction and Extractive Occupations

866 Helpers, construction trades
867 Helpers, surveyor
868 Helpers, extractive occupations
869 Construction laborers
874 Production helpers

Freight, Stock, and Material Handlers

875 Garbage collectors
876 Stevedores
877 Stock handlers and baggers
878 Machine feeders and offbearers
883 Freight, stock, and material handlers, n.e.c.
885 Garage and service station related occupations
887 Vehicle washers and equipment cleaners
888 Hand packers and packagers
889 Laborers, except construction

Appendix III

Selected 1990 Bureau of the Census (BOC) Occupation Codes Standard Industrial Classification (SIC) Major Groups.

BOC Occupation Code	Occupation Description
804	Truck Drivers
869	Construction Laborers
473	Farmers, Exc Hort
243	Sales Occ Supervisors
889	Laborers, Not Const
567	Carpenters
479	Farm Workers
496	Logging Occupations
418	Police/Detectives
575	Electricians

Selected 1987 Standard Industrial Classification (SIC) Major Groups

SIC Industry Code	Industry Description
42	Motor Freight Transportation & Warehousing
17	Special Trade Contractors
16	Heavy Construction, Ex Building
02	Agricultural Production – Crops, Livestock
15	General Building Contractors
92	Justice, Public Order, and Safety
24	Lumber and Wood Products
54	Food Stores
73	Business Services
49	Electric, Gas, and Sanitary Services

Appendix IV

Abbreviations for 1990 Bureau of the Census (BOC) Occupation Divisions and 1987 Standard Industrial Classification (SIC) Industry Divisions

Industry Abbreviation	Description (SIC)
Ag/For/Fish	Agriculture/Forestry/Fisheries
Mining	Mining (includes oil and gas extraction)
Construction	Construction
Manufacturing	Manufacturing
Trans/Comm/PU	Transportation/Communications/Public Utilities
Wholesale Trade	Wholesale Trade
Retail Trade	Retail Trade
Finance/Insur/RE	Finance/Insurance/Real Estate
Services	Services
Public Admin	Public Administration

Occupation Abbreviation	Description (BOC)
Exec/Adm/Mgr	Executives/Administrators/Managers
Prof/Spec	Professional Specialty
Tech/Support	Technicians and Related Support
Sales	Sales
Clerical	Administrative Support Occupations, Including Clerical
Service	Service
Farm/For/Fish	Farming/Forestry/Fishing
Crafts	Precision Production/Craft/Repair
Mach Operators	Machine Operators/Assemblers/Inspectors
Transport	Transportation and Material Movers
Laborers	Handlers/Equipment Cleaners/Helpers/Laborers

Appendix V

Operational Guidelines for Determination of Injury at Work

1. Complete the injury at work item if any other than natural cause of death is mentioned in Part I or Part II of the medical certification, including homicides, suicides, and accidents, including motor vehicle deaths.
2. The injury at work item must be completed for decedents ages 14 or over and may be completed for those less than 14 years of age if warranted. Consider possibility of work injury regardless of whether injury occurred in the course of work in "usual" or other occupation and /or industry. If decedent's "usual" occupation is housewife, student, or retired consider possible injury during other employment.
3. Consider available information with regard to location and activity at time of injury. If location is farm, suspect work-related and evaluate per criteria.

Criteria	Injury at Work	
On Employer Premises	**Yes**	**No**
•Engaged in work activity, apprentice, vocational training	√	
•On break, in hallways, rest room, cafeteria, storage area	√	
•In employer parking lots while working arriving, or leaving	√	
•Engaged in recreational activities on employer controlled facili ties (games, etc.) for personal enjoyment		√
•As a visitor for nonwork purposes, not on official business		√
Off Employer Premises		
•Working for pay or compensation, including at home	√	
•Working as a volunteer EMS, firefighter, or law enforcement offi cer	√	
•Working in a family business, including family farm. Activity sh ould be clearly related to a profit -oriented business.	√	
•Traveling on business, including to and from customer/business c ontacts	√	
•Engaged in work activity where vehicle is considered the work en vironment (e.g., taxi driver, truck driver, etc.)	√	
•Homemaker working at homemaking activities		√
•Work for self —non profit, i.e., mowing lawn repairing own roof, hobby, or recreation activities		√
•Student engaged in school activities		√
•Operating vehicle (personal or commercial) for nonwork purposes		√
•Commuting to or from work site		√

These guidelines were developed jointly by: The Association for Vital Records and Health Statistics (AVRHS), the National Institute for Occupational Safety and Health (NIOSH), the National Center for Health Statistics (NCHS), and the National Center for Environmental Health and Injury Control (NCEHIC).
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For questions contact your state Vital Statistics Office

Appendix VI

Inflation Adjustment Factors Based on Consumer Product Index-Medical Care

Year of Death	Index	Dollar Year									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
1992	190.10	1	0.94	0.90	0.86	0.83	0.81	0.79	0.76	0.73	0.70
1993	201.40	1.06	1	0.95	0.91	0.88	0.86	0.83	0.80	0.77	0.74
1994	211.00	1.11	1.05	1	0.96	0.92	0.90	0.87	0.84	0.81	0.77
1995	220.50	1.16	1.09	1.05	1	0.97	0.94	0.91	0.88	0.85	0.81
1996	228.20	1.20	1.13	1.08	1.03	1	0.97	0.94	0.91	0.88	0.84
1997	234.60	1.23	1.16	1.11	1.06	1.03	1	0.97	0.94	0.90	0.86
1998	242.10	1.27	1.20	1.15	1.10	1.06	1.03	1	0.97	0.93	0.89
1999	250.60	1.32	1.24	1.19	1.14	1.10	1.07	1.04	1	0.96	0.92
2000	260.80	1.37	1.29	1.24	1.18	1.14	1.11	1.08	1.04	1	0.96
2001	272.80	1.44	1.35	1.29	1.24	1.20	1.16	1.13	1.09	1.05	1

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index (Medical Care Major Group)

Appendix VII

Probability of Surviving an Additional Year by Age, Race and Sex

Age	White		Black		Other	
	Male	Female	Male	Female	Male	Female
16 to 17	0.99898	0.99960	0.99827	0.99955	0.99847	0.99957
17 to 18	0.99882	0.99955	0.99795	0.99949	0.99820	0.99951
18 to 19	0.99873	0.99953	0.99769	0.99942	0.99799	0.99945
19 to 20	0.99868	0.99952	0.99748	0.99936	0.99783	0.99941
20 to 21	0.99864	0.99951	0.99726	0.99928	0.99766	0.99935
21 to 22	0.99859	0.99950	0.99702	0.99920	0.99748	0.99930
22 to 23	0.99855	0.99949	0.99683	0.99912	0.99733	0.99924
23 to 24	0.99852	0.99949	0.99670	0.99904	0.99724	0.99918
24 to 25	0.99850	0.99949	0.99662	0.99897	0.99717	0.99912
25 to 26	0.99849	0.99949	0.99656	0.99890	0.99713	0.99906
26 to 27	0.99847	0.99949	0.99649	0.99882	0.99708	0.99900
27 to 28	0.99844	0.99947	0.99637	0.99873	0.99699	0.99893
28 to 29	0.99838	0.99945	0.99618	0.99862	0.99685	0.99884
29 to 30	0.99831	0.99942	0.99593	0.99849	0.99667	0.99874
30 to 31	0.99823	0.99938	0.99567	0.99835	0.99649	0.99863
31 to 32	0.99815	0.99934	0.99542	0.99822	0.99631	0.99853
32 to 33	0.99807	0.99930	0.99515	0.99809	0.99611	0.99843
33 to 34	0.99799	0.99926	0.99487	0.99797	0.99589	0.99833
34 to 35	0.99790	0.99922	0.99456	0.99784	0.99565	0.99822
35 to 36	0.99781	0.99918	0.99423	0.99771	0.99538	0.99811
36 to 37	0.99770	0.99912	0.99388	0.99757	0.99511	0.99800
37 to 38	0.99760	0.99906	0.99355	0.99741	0.99484	0.99787
38 to 39	0.99750	0.99898	0.99325	0.99725	0.99462	0.99774
39 to 40	0.99740	0.99889	0.99298	0.99707	0.99442	0.99761
40 to 41	0.99729	0.99879	0.99270	0.99687	0.99421	0.99746
41 to 42	0.99717	0.99869	0.99238	0.99665	0.99397	0.99729
42 to 43	0.99702	0.99857	0.99201	0.99641	0.99369	0.99711
43 to 44	0.99683	0.99843	0.99159	0.99616	0.99335	0.99690

Age	White		Black		Other	
	Male	Female	Male	Female	Male	Female
44 to 45	0.99659	0.99827	0.99110	0.99589	0.99295	0.99665
45 to 46	0.99630	0.99807	0.99054	0.99558	0.99248	0.99637
46 to 47	0.99596	0.99785	0.98990	0.99522	0.99195	0.99604
47 to 48	0.99559	0.99760	0.98919	0.99481	0.99136	0.99567
48 to 49	0.99521	0.99735	0.98845	0.99436	0.99074	0.99527
49 to 50	0.99482	0.99709	0.98768	0.99388	0.99009	0.99485
50 to 51	0.99436	0.99679	0.98686	0.99336	0.98939	0.99439
51 to 52	0.99380	0.99644	0.98596	0.99279	0.98862	0.99388
52 to 53	0.99317	0.99606	0.98496	0.99219	0.98775	0.99335
53 to 54	0.99247	0.99566	0.98381	0.99157	0.98674	0.99279
54 to 55	0.99169	0.99524	0.98252	0.99090	0.98559	0.99219
55 to 56	0.99087	0.99479	0.98115	0.99021	0.98434	0.99157
56 to 57	0.98996	0.99429	0.97971	0.98946	0.98302	0.99090
57 to 58	0.98891	0.99372	0.97819	0.98858	0.98162	0.99013
58 to 59	0.98769	0.99307	0.97660	0.98753	0.98016	0.98923
59 to 60	0.98634	0.99236	0.97494	0.98637	0.97866	0.98824
60 to 61	0.98497	0.99163	0.97328	0.98518	0.97716	0.98722
61 to 62	0.98359	0.99088	0.97158	0.98398	0.97560	0.98619
62 to 63	0.98212	0.99007	0.96967	0.98273	0.97387	0.98509
63 to 64	0.98053	0.98919	0.96750	0.98141	0.97191	0.98390
64 to 65	0.97882	0.98823	0.96511	0.98003	0.96975	0.98260
65 to 66	0.97703	0.98722	0.96261	0.97858	0.96750	0.98123
66 to 67	0.97517	0.98617	0.96011	0.97709	0.96525	0.97982
67 to 68	0.97311	0.98500	0.95756	0.97558	0.96294	0.97838
68 to 69	0.97074	0.98366	0.95489	0.97399	0.96050	0.97688
69 to 70	0.96800	0.98209	0.95199	0.97226	0.95782	0.97527
70 to 71	0.96491	0.98031	0.94869	0.97035	0.95476	0.97350
71 to 72	0.96152	0.97832	0.94500	0.96823	0.95133	0.97149
72 to 73	0.95785	0.97614	0.94115	0.96589	0.94770	0.96925

Age	White		Black		Other	
	Male	Female	Male	Female	Male	Female
73 to 74	0.95402	0.97382	0.93745	0.96344	0.94414	0.96685
74 to 75	0.95007	0.97140	0.93401	0.96096	0.94079	0.96436
75 to 76	0.94586	0.96889	0.93069	0.95848	0.93749	0.96183
76 to 77	0.94125	0.96613	0.92715	0.95588	0.93397	0.95918
77 to 78	0.93628	0.96293	0.92325	0.95295	0.93012	0.95623
78 to 79	0.93080	0.95910	0.91855	0.94939	0.92556	0.95274
79 to 80	0.92467	0.95458	0.91287	0.94508	0.92011	0.94854
80 to 81	0.91754	0.94947	0.90597	0.93992	0.91356	0.94353
81 to 82	0.90951	0.94394	0.89831	0.93419	0.90630	0.93791
82 to 83	0.90109	0.93785	0.89063	0.92821	0.89894	0.93197
83 to 84	0.89285	0.93122	0.88422	0.92256	0.89251	0.92630
84 to 85	0.88481	0.92393	0.87938	0.91736	0.88727	0.92104
85 to 86	0.87564	0.91555	0.87485	0.91203	0.88173	0.91548
86 to 87	0.86478	0.90598	0.86914	0.90572	0.87493	0.90895
87 to 88	0.85305	0.89569	0.86204	0.89871	0.86682	0.90169
88 to 89	0.84073	0.88488	0.85264	0.89067	0.85667	0.89333
89 to 90	0.82781	0.87327	0.84088	0.88140	0.84440	0.88367
90 to 91	0.81383	0.85985	0.82715	0.87058	0.83023	0.87248
91 to 92	0.79841	0.84464	0.81249	0.85862	0.81498	0.86021
92 to 93	0.78227	0.82899	0.79838	0.84682	0.80001	0.84804
93 to 94	0.76624	0.81374	0.78776	0.83667	0.78802	0.83732
94 to 95	0.75107	0.79852	0.78085	0.82768	0.77939	0.82755
95 to 96	0.73671	0.78263	0.77341	0.81756	0.77097	0.81662
96 to 97	0.72086	0.76566	0.76208	0.80444	0.75952	0.80318
97 to 98	0.70601	0.74909	0.75018	0.79054	0.74750	0.78911
98 to 99	0.69131	0.73285	0.73769	0.77586	0.73487	0.77443
99 to 100	0.67587	0.71682	0.72458	0.76242	0.72162	0.76089

Source: National Center for Health Statistics: Vital Statistics of the United States, Vol 1 No 1, U.S. Decennial Life Tables

Appendix VIII

Adjustment to Earnings by Age of Decedent at Time of Death

Male										
	Year of Death									
Age	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
16	0.38	0.37	0.38	0.39	0.38	0.38	0.38	0.40	0.41	0.43
17	0.41	0.41	0.41	0.42	0.41	0.42	0.42	0.43	0.44	0.46
18	0.45	0.44	0.45	0.45	0.45	0.45	0.45	0.46	0.47	0.50
19	0.48	0.48	0.48	0.49	0.48	0.48	0.49	0.50	0.51	0.53
20	0.52	0.51	0.51	0.52	0.51	0.52	0.52	0.53	0.54	0.56
21	0.55	0.56	0.55	0.55	0.54	0.55	0.55	0.57	0.57	0.60
22	0.59	0.60	0.58	0.58	0.58	0.58	0.59	0.60	0.61	0.63
23	0.62	0.63	0.61	0.62	0.61	0.62	0.62	0.64	0.64	0.67
24	0.66	0.67	0.65	0.65	0.64	0.65	0.65	0.67	0.67	0.70
25	0.69	0.70	0.68	0.68	0.68	0.68	0.69	0.70	0.71	0.73
26	0.73	0.74	0.71	0.72	0.71	0.72	0.72	0.74	0.74	0.77
27	0.76	0.77	0.75	0.75	0.74	0.75	0.75	0.77	0.77	0.80
28	0.80	0.81	0.78	0.78	0.78	0.78	0.79	0.81	0.81	0.83
29	0.83	0.84	0.81	0.82	0.81	0.82	0.82	0.84	0.84	0.87
30	0.87	0.88	0.85	0.85	0.84	0.85	0.86	0.87	0.88	0.90
31	0.89	0.89	0.88	0.88	0.87	0.88	0.88	0.90	0.90	0.93
32	0.92	0.91	0.90	0.90	0.89	0.90	0.90	0.92	0.92	0.95
33	0.94	0.93	0.93	0.92	0.91	0.92	0.93	0.94	0.94	0.97
34	0.96	0.95	0.95	0.95	0.94	0.95	0.95	0.96	0.96	0.99
35	0.98	0.98	0.98	0.97	0.96	0.97	0.97	0.98	0.98	1.01
36	1.00	1.00	1.00	1.00	0.98	0.99	0.99	1.00	1.00	1.03
37	1.02	1.02	1.03	1.02	1.01	1.01	1.01	1.02	1.02	1.05
38	1.04	1.04	1.05	1.04	1.03	1.04	1.03	1.04	1.03	1.07
39	1.07	1.06	1.08	1.07	1.05	1.06	1.05	1.06	1.05	1.09

Male										
	Year of Death									
Age	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
40	1.09	1.09	1.10	1.09	1.07	1.08	1.08	1.08	1.07	1.11
41	1.10	1.10	1.12	1.11	1.09	1.10	1.09	1.09	1.09	1.12
42	1.11	1.11	1.13	1.12	1.10	1.11	1.10	1.10	1.09	1.13
43	1.12	1.12	1.14	1.13	1.11	1.12	1.11	1.11	1.10	1.13
44	1.13	1.13	1.15	1.14	1.13	1.13	1.12	1.12	1.11	1.14
45	1.14	1.15	1.16	1.15	1.14	1.14	1.13	1.13	1.11	1.15
46	1.15	1.16	1.17	1.16	1.15	1.15	1.13	1.14	1.12	1.15
47	1.16	1.17	1.18	1.17	1.16	1.16	1.14	1.15	1.13	1.16
48	1.17	1.18	1.19	1.18	1.17	1.17	1.15	1.16	1.13	1.17
49	1.18	1.19	1.20	1.19	1.18	1.18	1.16	1.16	1.14	1.17
50	1.19	1.20	1.20	1.20	1.19	1.19	1.17	1.17	1.15	1.18
51	1.19	1.20	1.20	1.20	1.19	1.19	1.17	1.18	1.15	1.18
52	1.18	1.18	1.19	1.19	1.19	1.19	1.17	1.17	1.14	1.18
53	1.17	1.17	1.18	1.18	1.18	1.18	1.16	1.16	1.14	1.17
54	1.16	1.16	1.17	1.17	1.17	1.17	1.16	1.16	1.13	1.17
55	1.15	1.15	1.15	1.16	1.16	1.17	1.15	1.15	1.12	1.16
56	1.14	1.13	1.14	1.15	1.15	1.16	1.15	1.15	1.12	1.16
57	1.13	1.12	1.13	1.14	1.14	1.15	1.14	1.14	1.11	1.15
58	1.11	1.11	1.12	1.13	1.13	1.14	1.13	1.14	1.11	1.15
59	1.10	1.09	1.11	1.12	1.12	1.14	1.13	1.13	1.10	1.14
60	1.09	1.08	1.09	1.11	1.11	1.13	1.12	1.12	1.10	1.14
61	1.07	1.06	1.07	1.08	1.09	1.11	1.10	1.10	1.08	1.12
62	1.04	1.04	1.04	1.05	1.06	1.07	1.07	1.06	1.05	1.09
63	1.01	1.01	1.01	1.02	1.03	1.03	1.03	1.02	1.02	1.05
64	0.98	0.99	0.98	0.99	1.01	1.00	1.00	0.98	0.99	1.02
65	0.95	0.97	0.96	0.96	0.98	0.96	0.96	0.94	0.96	0.99
66	0.92	0.94	0.93	0.92	0.95	0.92	0.93	0.90	0.93	0.96
67	0.89	0.92	0.90	0.89	0.92	0.89	0.89	0.86	0.90	0.92

Adjustment to Earnings by Age of Decedent at Time of Death

Female

Age	Year of Death									
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
16	0.56	0.55	0.53	0.51	0.53	0.53	0.51	0.54	0.55	0.56
17	0.59	0.58	0.57	0.54	0.56	0.56	0.54	0.57	0.58	0.60
18	0.62	0.61	0.60	0.58	0.59	0.59	0.58	0.60	0.61	0.63
19	0.65	0.64	0.63	0.61	0.62	0.62	0.61	0.63	0.64	0.66
20	0.68	0.67	0.66	0.64	0.65	0.65	0.64	0.66	0.67	0.69
21	0.71	0.70	0.69	0.68	0.69	0.68	0.67	0.69	0.70	0.72
22	0.74	0.73	0.72	0.71	0.72	0.71	0.70	0.72	0.73	0.76
23	0.77	0.76	0.75	0.75	0.75	0.75	0.73	0.75	0.76	0.79
24	0.80	0.79	0.79	0.78	0.78	0.78	0.76	0.78	0.79	0.82
25	0.83	0.82	0.82	0.81	0.81	0.81	0.80	0.81	0.82	0.85
26	0.86	0.85	0.85	0.85	0.84	0.84	0.83	0.84	0.85	0.88
27	0.89	0.88	0.88	0.88	0.87	0.87	0.86	0.87	0.88	0.92
28	0.92	0.91	0.91	0.91	0.90	0.90	0.89	0.90	0.91	0.95
29	0.95	0.94	0.94	0.95	0.93	0.93	0.92	0.93	0.94	0.98
30	0.98	0.97	0.97	0.98	0.96	0.96	0.95	0.96	0.97	1.01
31	1.00	0.99	1.00	1.00	0.98	0.98	0.97	0.98	0.99	1.03
32	1.01	1.00	1.01	1.01	1.00	1.00	0.98	0.99	0.99	1.04
33	1.02	1.01	1.02	1.02	1.01	1.01	0.99	0.99	1.00	1.04
34	1.03	1.02	1.03	1.03	1.02	1.02	1.00	1.00	1.00	1.05
35	1.04	1.03	1.05	1.04	1.03	1.03	1.01	1.01	1.01	1.06
36	1.05	1.04	1.06	1.05	1.04	1.05	1.02	1.02	1.01	1.06
37	1.06	1.05	1.07	1.06	1.05	1.06	1.03	1.02	1.02	1.07
38	1.07	1.06	1.08	1.07	1.06	1.07	1.04	1.03	1.03	1.07
39	1.08	1.07	1.09	1.08	1.08	1.08	1.05	1.04	1.03	1.08

Age	Year of Death									
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
40	1.09	1.08	1.11	1.08	1.09	1.10	1.06	1.04	1.04	1.09
41	1.09	1.09	1.11	1.09	1.09	1.10	1.07	1.05	1.04	1.09
42	1.09	1.09	1.11	1.09	1.10	1.11	1.07	1.06	1.05	1.10
43	1.09	1.09	1.11	1.10	1.10	1.11	1.08	1.06	1.06	1.11
44	1.09	1.09	1.11	1.10	1.11	1.11	1.08	1.07	1.07	1.12
45	1.09	1.09	1.11	1.10	1.11	1.12	1.09	1.08	1.08	1.13
46	1.09	1.09	1.11	1.10	1.12	1.12	1.09	1.08	1.09	1.14
47	1.09	1.10	1.11	1.11	1.12	1.12	1.09	1.09	1.10	1.14
48	1.09	1.10	1.11	1.11	1.12	1.13	1.10	1.09	1.11	1.15
49	1.09	1.10	1.11	1.11	1.13	1.13	1.10	1.10	1.12	1.16
50	1.08	1.10	1.11	1.11	1.13	1.13	1.10	1.11	1.12	1.17
51	1.08	1.09	1.10	1.11	1.13	1.13	1.10	1.11	1.12	1.17
52	1.07	1.08	1.09	1.09	1.11	1.11	1.09	1.10	1.11	1.16
53	1.06	1.07	1.07	1.08	1.10	1.10	1.09	1.09	1.10	1.15
54	1.05	1.06	1.06	1.06	1.08	1.08	1.08	1.08	1.09	1.14
55	1.04	1.05	1.05	1.05	1.07	1.07	1.07	1.07	1.08	1.13
56	1.03	1.04	1.04	1.03	1.06	1.05	1.06	1.06	1.06	1.12
57	1.02	1.03	1.02	1.02	1.04	1.04	1.05	1.05	1.05	1.11
58	1.00	1.01	1.01	1.01	1.03	1.03	1.04	1.05	1.04	1.10
59	0.99	1.00	1.00	0.99	1.01	1.01	1.03	1.04	1.03	1.09
60	0.98	0.99	0.98	0.98	1.00	1.00	1.03	1.03	1.02	1.08
61	0.97	0.98	0.97	0.96	0.98	0.98	1.01	1.01	1.00	1.06
62	0.96	0.96	0.96	0.95	0.96	0.96	0.98	0.99	0.97	1.03
63	0.95	0.95	0.94	0.94	0.94	0.94	0.95	0.96	0.95	0.99
64	0.93	0.93	0.92	0.93	0.92	0.92	0.93	0.93	0.92	0.96
65	0.92	0.92	0.91	0.91	0.90	0.90	0.90	0.91	0.89	0.93
66	0.91	0.90	0.89	0.90	0.88	0.88	0.87	0.88	0.87	0.89
67	0.90	0.89	0.88	0.89	0.86	0.86	0.85	0.86	0.84	0.86

Appendix IX

Employee Benefits as a Percent of Payroll by Standard Classification System (SIC) Industry Group

Industry Title	SIC	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total industry	9900-9999	27.2	28.6	28.8	29.6	27.4	28.6	26.6	27.7	28.1	27.9
Construction	1500-1799	27.6	28.3	28.0	29.5	28.5	29.2	17.9	22.4	22.3	22.4
Food, beverages, tobacco	2000-2141	22.3	24.0	21.1	20.7	19.7	20.6	20.5	23.1	25.1	24.1
Textile and wearing apparel	2200-2399	25.2	25.2	25.0	25.1	23.9	25.9	26.2	32.8	25.1	29.0
Pulp, paper, lumber and furniture	2400-2679	26.7	24.7	25.6	24.5	27.8	24.8	28.2	24.9	24.7	24.8
Printing and publishing	2700-2796	28.1	31.7	29.0	26.0	26.8	27.4	28.0	-	-	-
	2752-2796	-	-	-	-	-	-	-	20.8	25.2	23.0
Chemicals and allied products	2800-2899	25.0	29.7	29.1	25.4	24.4	25.4	17.1	27.9	28.7	28.3
Petroleum	2900-2999	37.2	28.0	27.3	23.9	25.2	29.2	29.0	-	-	-
Rubber, leather, and plastic	3000-3199	26.8	26.1	30.2	23.8	23.5	26.1	25.9	21.8	24.8	23.3
Stone, clay, and glass	3200-3299	32.0	28.4	24.0	25.5	28.6	29.5	25.1	-	-	-
Primary metals	3300-3399	29.9	28.3	28.3	25.3	24.9	27.1	27.0	-	-	-
Fabricated metals	3400-3499	26.2	27.6	33.3	32.7	30.4	29.7	22.7	24.0	22.3	23.2
Machinery, except electric equip.	3500-3599	30.1	28.2	31.1	35.3	21.9	28.2	30.4	-	-	-
	3500-3569	-	-	-	-	-	-	-	36.7	24.5	30.6
Other machinery	3580-3599	-	-	-	-	-	-	-	36.7	24.5	30.6
Computer, electronic,etc .	3570-3579	-	-	-	-	-	-	-	23.8	20.9	22.4
Electric machinery	3600-3699	29.4	29.5	40.3	36.1	33.2	34.8	21.1	23.8	20.9	22.4
Transportation equipment	3700-3799	21.3	24.1	24.4	27.6	27.2	24.3	24.3	-	-	-
	3700-3728; 3732 -3799	-	-	-	-	-	-	-	23.1	30.6	26.9
Other manufacturing	3800-3999; 8072; 2900 - 2999; 3210 -3399	-	-	-	-	-	-	-	23.1	25.1	24.1
Instruments and misc. mfg.	3800-3999	26.9	28.9	28.6	29.4	27.0	28.8	21.1	-	-	-
Communications	4800-4899	27.6	28.3	28.0	29.5	28.5	29.2	12.6	-	-	-
Public utilities	4900-4971	29.0	32.6	33.6	35.1	32.9	33.7	28.8	-	-	-
	4900-4911; 4924 -4952;	-	-	-	-	-	-	-	36.3	32.1	34.2
	4961-4971	24.5	23.3	27.4	24.9	24.7	24.8	35.6	-	-	-
Department stores	4900-4971	29.0	32.6	33.6	35.1	32.9	33.7	28.8	-	-	-
	5310-5311	24.5	23.3	27.4	24.9	24.7	24.8	35.6	-	-	-

Industry Title	SIC	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Trade (wholesale)	5000-5271	26.2	27.9	25.2	24.1	22.3	26.5	21.0	-	-	-
	5000-5199	-	-	-	-	-	-	-	26.0	27.9	27.0
Trade (retail)	5300-5999	26.2	27.9	25.2	24.1	22.3	26.5	35.6	-	-	-
	5200-5271; 5310-5736; 5910-5999	-	-	-	-	-	-	-	16.2	28.1	22.2
Eating & drinking & hotels, etc	5200-5271; 5310-5736; 5910-5999	-	-	-	-	-	-	-	16.2	28.1	22.2
	5800-5813; 7010-7041	-	-	-	-	-	-	-	18.9	16.3	17.6
Banks, finance	6000-6289	20.5	22.1	22.0	23.4	22.4	20.2	24.1	-	-	-
	6000-6289; 6722-6726	-	-	-	-	-	-	-	23.9	25.3	24.6
Insurance	6300-6399	26.1	28.0	26.7	27.9	25.5	26.5	26.5	-	-	-
	6300-6411	-	-	-	-	-	-	-	23.9	25.3	24.6
Health care	8011-8059; 8060-8069, 8071; 8080-8099; 8361	-	-	-	-	-	-	-	21.0	25.1	23.1
Hospitals	8060-8069	20.2	23.1	22.3	20.9	22.3	22.8	22.9	-	-	-
Information services	2710-2741; 4810-4899; 7373-7379; 7383; 7810-7833; 8231	-	-	-	-	-	-	-	22.5	26.2	24.4
Professional services	0741-0742; 8111;7311-7338; 7371; 7384; 7389; 6541; 8711-8748	-	-	-	-	-	-	-	21.8		
Professional services	0741-0742; 8111;7311-7338; 7371; 7384; 7389; 6541; 8711-8734	-	-	-	-	-	-	-	-	21.7	21.7
Management services	8740-8748	-	-	-	-	-	-	-	-	18.9	18.9
Transportation dist/warehouse	3731; 4010-4492; 4499-4619; 4729-4789; 4922-4923	-	-	-	-	-	-	-	38.3	37.3	37.8
Social assistance	8320-8351	-	-	-	-	-	-	-	21.7	26.2	24.0

Industry Title	SIC	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Educational services	8210-8222; 8243-8299	-	-	-	-	-	-	-	23.7	24.2	24.0
Arts, entertainment, recreation	7900-7999; 8410-8422;	-	-	-	-	-	-	-	-	18.6	36.8
Misc. non-manufacturing	0100-1499; 4000-4789; 6400-8059; 8070-9721	27.6	28.3	28.0	29.5	28.5	29.2	32.8	-	-	-
Misc. non-manufacturing	0100-0724; 0751-1499; 4493; 4724-4725; 4953-4959; 6510-6553; 6710-6719; 6732-6799; 7210-7299; 7342-7363; 7372; 7381-7382; 7500-7699; 7840-7999; 8399 -8699; 8810-9721	-	-	-	-	-	-	-	20.9	-	-
Misc. non-manufacturing	0100-0724; 0751-1499; 4493; 4724-4725; 4953-4959; 6710-6719; 6732-6799; 7210-7299; 7342-7363; 7372; 7381-7382; 7500-7699; 7840-7841; 8399; 8610-8699; 8810-9721	-	-	-	-	-	-	-	-	36.8	36.8
Real estate	6510-6531	-	-	-	-	-	-	-	-	23.5	23.5

Appendix X

Inflation Adjustment Factors Based on Consumer Product Index-All Urban Consumers

Year of Death	Index	Dollar Year									
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
1992	140.30	1	0.97	0.95	0.92	0.89	0.87	0.86	0.84	0.81	0.79
1993	144.50	1.03	1	0.98	0.95	0.92	0.90	0.89	0.87	0.84	0.82
1994	148.20	1.06	1.03	1	0.97	0.94	0.92	0.91	0.89	0.86	0.84
1995	152.40	1.09	1.05	1.03	1	0.97	0.95	0.93	0.91	0.89	0.86
1996	156.90	1.12	1.09	1.06	1.03	1	0.98	0.96	0.94	0.91	0.89
1997	160.50	1.14	1.11	1.08	1.05	1.02	1	0.98	0.96	0.93	0.91
1998	163.00	1.16	1.13	1.10	1.07	1.04	1.02	1	0.98	0.95	0.92
1999	166.60	1.19	1.15	1.12	1.09	1.06	1.04	1.02	1	0.97	0.94
2000	172.20	1.23	1.19	1.16	1.13	1.10	1.07	1.06	1.03	1	0.97
2001	177.10	1.26	1.23	1.20	1.16	1.13	1.10	1.09	1.06	1.03	1

U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index (All Urban Consumers)

Appendix XI

Adjustment Factors for Increases Associated with Career Growth by Age, Sex, and Race

	Male				Female			
Age	Other	White	Black	Hispanic	Other	White	Black	Hispanic
16	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
17	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
18	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
19	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
20	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
21	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
22	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
23	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
24	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
25	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
26	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
27	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
28	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
29	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
30	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
31	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
32	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
33	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
34	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
35	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
36	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
37	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
38	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
39	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
40	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
41	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
42	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432

[1]Costs are expressed in 2001 US dollars and presented in thousands.

	Male				Female			
Age	Other	White	Black	Hispanic	Other	White	Black	Hispanic
42	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
43	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
44	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
45	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
46	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
47	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
48	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
49	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
50	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
51	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
52	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
53	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
54	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
55	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
56	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
57	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
58	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
59	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
60	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
61	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
62	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
63	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
64	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
65	0.977462	0.977422	0.97361	0.977061	0.992866	0.993195	0.983066	0.983614
66	0.977462	0.977422	0.97361	0.977061	0.992866	0.993195	0.983066	0.983614
67	0.977462	0.977422	0.97361	0.977061	0.992866	0.993195	0.983066	0.983614

Appendix XII

Annual Household Production Values by Age and Sex

Age	Male	Female	Age	Male	Female
16	$5,299.80	$5,799.85	42	10,278.40	15,665.80
17	5,299.80	5,799.85	43	10,278.40	15,665.80
18	6,088.20	11,081.40	44	10,278.40	15,665.80
19	6,088.20	11,081.40	45	10,716.40	15,366.50
20	6,088.20	11,081.40	46	10,716.40	15,366.50
21	6,088.20	11,081.40	47	10,716.40	15,366.50
22	6,088.20	11,081.40	48	10,716.40	15,366.50
23	6,088.20	11,081.40	49	10,716.40	15,366.50
24	6,088.20	11,081.40	50	10,716.40	15,366.50
25	8,792.85	13,873.65	51	10,716.40	15,366.50
26	8,792.85	13,873.65	52	10,716.40	15,366.50
27	8,792.85	13,873.65	53	10,716.40	15,366.50
28	8,792.85	13,873.65	54	10,716.40	15,366.50
29	8,792.85	13,873.65	55	12,647.25	16,939.65
30	8,792.85	13,873.65	56	12,647.25	16,939.65
31	8,792.85	13,873.65	57	12,647.25	16,939.65
32	8,792.85	13,873.65	58	12,647.25	16,939.65
33	8,792.85	13,873.65	59	12,647.25	16,939.65
34	8,792.85	13,873.65	60	12,647.25	16,939.65
35	10,278.40	15,665.80	61	12,647.25	16,939.65
36	10,278.40	15,665.80	62	12,647.25	16,939.65
37	10,278.40	15,665.80	63	12,647.25	16,939.65
38	10,278.40	15,665.80	64	12,647.25	16,939.65
39	10,278.40	15,665.80	65	13,870.00	16,571.00
40	10,278.40	15,665.80	66	13,870.00	16,571.00
41	10,278.40	15,665.80	67	13,870.00	16,571.00

Appendix XIII

Sensitivity of Total Lifetime Costs[1] Estimates to Selected Discount Rates

Year of Death	0% Discount Rate	3% Discount Rate	5% Discount Rate	10% Discount Rate
	Total Lifetime Costs			
1992	$6,300,922	$4,215,204	$3,401,347	$2,271,619
1993	6,733,822	4,510,441	3,640,907	2,431,810
1994	6,738,928	4,516,551	3,648,255	2,440,673
1995	6,627,657	4,476,975	3,629,741	2,441,999
1996	6,362,914	4,310,991	3,500,505	2,361,323
1997	6,376,870	4,320,215	3,509,032	2,368,982
1998	5,964,410	4,055,880	3,300,343	2,235,075
1999	6,053,262	4,127,732	3,362,778	2,280,356
2000	6,397,224	4,344,746	3,533,480	2,390,351
2001	6,209,576	4,219,665	3,432,608	2,323,551
Total	63,765,585	43,098,400	34,958,995	23,545,739

[1]Costs are expressed in 2001 U.S. dollars and presented in thousands.

Sensitivity of Mean and Median Costs[1] Estimates to Selected Discount Rates

Year of Death	0% Discount Rate		3% Discount Rate		5% Discount Rate		10% Discount Rate	
	Mean Costs	Median Costs	Mean Costs	Median Costs	Mean Costs	Median Costs	Mean Costs	Median Costs
1992	$1,253	$1,288	$838	$838	$676	$672	$452	$442
1993	1,275	1,330	854	869	689	696	460	451
1994	1,249	1,294	837	842	676	678	452	442
1995	1,196	1,312	844	853	684	688	460	455
1996	1,207	1,230	810	818	658	662	444	442
1997	1,118	1,247	818	825	664	665	449	443
1998	1,188	1,217	808	817	657	662	445	443
1999	1,263	1,230	810	832	660	673	448	455
2000	1,263	1,294	858	863	697	699	472	469
2001	1,270	1,300	863	856	702	706	475	480
Total	1,234	1,274	834	841	676	679	456	451

[1]Costs are expressed in 2001 US dollars and presented in thousands.

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