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The Economic Side of Wrongful Death Actions in New Mexico

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THE ECONOMIC SIDE OF WRONGFUL DEATH ACTIONS IN NEW MEXICO

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Traditionally in wrongful death cases the individual held liable for the death indemnified the deceased's estate. The award covered expenses incurred, pain and suffering, and lost income. In the event the heirs of the deceased did not accept a settlement, the size of the award was decided by a jury. The *Varney* decisions[1] established procedures whereby the lost income could be estimated. Any specific expenses incurred, such as medical costs, would be known. Awards for pain and suffering were left to the jury. Economists were brought into these cases to estimate lost earnings.

The procedures established by the various *Varney* decisions caused considerable consternation among lawyers, but seemed reasonable and rational to the economist. The economist traditionally has used similar procedures to estimate the worth of a capital asset. In recent years he has extended the capital concept to "human capital."[2] The economic value of an individual's life is likened to that of a capital asset. The economic value of a capital asset is presumed to be equal to the present value of the sum of the series of annuities yielded by the asset.

The formula for the value of a capital asset is

$$V = \frac{R_1}{(1+i)} + \frac{R_2}{(1+i)} 2 \ldots\ldots\ldots \frac{R_n}{(1+i)} n$$

in which V represents the value, R_1, R_2, ... R_n are the series of

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1. The decisions are cited in the order they were rendered: Varney v. Taylor, 71 N.M. 444, 379 P.2d 84 (1963); Varney v. Taylor, 77 N.M. 28, 419 P.2d 234 (1966); Varney v. Taylor, 79 N.M. 652, 448 P.2d 164 (1968); Varney v. Taylor, 81 N.M. 87, 463 P.2d 511 (1969).

2. *See* T. Schultz, *Reflections on Investment in Man*, 73 J. Pol. Econ. 49 (Supp. 1962); R. Melton, *Schultz's Theory of "Human Capital,"* 46 Southwestern Social Sci. Q. 265 (1965).

annuities yielded in subsequent years, and "i" is the rate of interest on loanable funds.[3]

The same process of assessing value is called for by the *Varney* decisions. They assume the deceased is a capital asset, or human capital, and the loss to the estate is the stream of income which would have been available to the estate from the participation of the deceased individual in the work force. In order to restore the lost stream of income it is necessary to secure a capital fund which, if invested at some established rate of interest, would yield a stream of income to the estate equal to that lost by the wrongful death, and equal to zero at the end of the work-life expectancy of the deceased. It is assumed that the fund received will be invested at some rate of interest, will be increased each year by the interest earned, and will be diminished by the income withdrawn. This amount will be so calculated that in the last year the amount left in the fund plus the interest earned in that year will be exactly equal to the average annual income foregone by virtue of the death.

In arriving at income lost to the estate, taxes and maintenance of the deceased must be deducted to secure the net income foregone. Neither that which is paid in taxes nor that needed to sustain the life of the deceased can be considered available to the estate.

Actual calculations of foregone earnings are computed according to the general specifications of the third *Varney* decision.[4] The analysis begins by accumulating certain basic facts about the deceased.

Certain socio-economic data, such as age, sex, level of education and work experience, are necessary to arrive at estimates of foregone earnings. Work experience data should include as much information as possible. Years of experience in an occupation or profession, types of jobs held, duration of employment and monthly income are all important determinants of future income streams.

There are some cases where gaps in personal data must be filled by the use of generalized data, especially in cases related to children and young adults. For example, in the event of the death of a minor, complete profiles must be designed including probability of marriage, birth of children, level of education, and earning potential.

Another example is that of a dental student six months before graduation earning a part-time income of $200 per month, but with future beginning earnings of approximately $12,000 per year. Dental earnings should be assigned and increased in line with general professional increases experienced by practicing dentists, rather than assign-

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3. *See* A. Hansen, Business Cycles and National Income 125 (1964).
4. Varney v. Taylor, 79 N.M. 652, 448 P.2d 164 (1968).

ing a long run income based on the current earnings of $200 per month as a part-time student employee.

Care must always be taken in collecting and using personal, primary source data to insure the use of accurate statistics. Written or printed sources such as depositions, birth certificates, death certificates, W-2 forms, personal income tax returns, depositions and personal records are preferable.

An analysis of the personal data establishes a general framework for the income calculations. Basic assumptions are made based on the personal data: number of years remaining until retirement; family composition; number of children and their ages; presence of other dependents; and income immediately prior to death.

With the framework established, certain secondary assumptions are necessary to complete the analysis. Incomes increase over time for two reasons; increases in the level of prices and increases in personal productivity. If adequate time series of personal data are available, growth rates may be calculated to reflect the individual's actual income increases over his work-life. In the absence of such data, general national or occupational trends and growth rates may be used. For example, the U.S. Department of Labor prints calculations of output per man-hour (which has increased at about 4% annually over the past 20 years) and compensation per man-hour (which has increased at a 6% annual rate) for various groups within the economy. These calculations are given in current or constant (adjusted for increases in the price level) dollars and can often be used as a substitute for personal productivity increases.

Other possible data sources are federal, state and local government publications stating wages of various professions, occupations and industries over a period of time. Growth rates may be calculated on the basis of income trends in given occupations used as representative of wage and income increases that could be expected over a work-life.

In cases where the work experience and other socio-economic variables make it clear that income would not be expected to increase as a result of increased personal productivity (i.e., where wages have remained at a fairly constant level over a period of time), an increase reflecting an increase in the general price level is frequently used as the long run growth determinant for wages. Changes in the Bureau of Labor Statistics Consumer Price Index reflect year to year increases in the price level. Growth rates over the past 20 years show an average annual increase in prices of about 2 percent.

Facts surrounding the individual case determine the appropriate wage increase. For example, lacking more detailed data, a young

doctor who had practiced two years would experience a far greater increase annually than a sixty year-old doctor anticipating retirement.

Most national studies show that incomes tend to increase at a faster rate in the first years of employment and taper off or decrease as the age of the groups increase. The tapering off may be a result of decreasing absolute rates of productivity, decreasing rates vis-a-vis other age groups within the earning group, or a decrease in the rate of full-time employment.

Cases reflecting decreases in productivity should show the rate of increase decreasing over the work-life; for example, increases of 6% would be used for the first 15 years, 4 percent for the next 15 years, then 2 percent (the long run price increase) until retirement.

In cases where the rates of increase and the decreased productivity schedule are unknown or full-time employment may be a question, wages may be increased by some constant rate over the time period and then weighted by rates reflecting probabilities of employment. The U.S. Department of Labor collects data and makes projections on the rate of labor force participation.[5] These rates are given by sex and age, and are presently projected through the year 1985. The labor force participation rate shows the percent of the population (by sex and age group) who are in the labor force (either employed or actively seeking employment) at a given point in time. These participation rates may be used as a substitute for the probability of employment for an individual. While it is true that a 55 year-old with a record of constant employment will tend to remain employed full-time until retirement, it is also true that the full-time employment assumption may not be valid for a twenty-five year old with only a few years of work experience. Again, the choice of method depends on the merits of the individual case.

The description of the analysis above is of a general nature, outlining the types of data necessary for computations of foregone earnings. An actual case analysis is presented below to illustrate methods of computation and analysis.

The hypothetical case of an employed adult is presented in a simplified form. Analysis begins by assembling personal data and facts:

> Date of Death: Dec. 31, 1971
> Additional life expectancy at Date of Death: 19.2 years
> Age at Date of Death: 55 years
> State of residence: New Mexico

5. U.S. Bureau of the Census, Statistical Abstract of the United States: 1971, Table No. 350, 224 (92d ed. 1971).

Level of education: College Graduate
Employment: Teacher for 25 years
Level of income at date of death: $10,388 per year
Rate at which income increased over the past ten years: 5% per year
Family Composition: Wife and two children
Years in which children reach Age 21: 1971 and 1972

Based on this personal data the table below shows the worksheet form and projections of earnings to age 65, the assumed age of retirement.

Employed Man Work-life Earnings Foregone
Worksheet Form and Projected Earnings

Year	Commentary Notes	Age in Years	Annual Income ($)
1972	2nd child reaches age 21	56	10,388
1973		57	10,907
1974		58	11,453
1975		59	12,025
1976		60	12,627
1977		61	13,258
1978		62	13,921
1979		63	14,617
1980		64	15,348

The second child ceases to be a dependent in 1972 upon reaching age 21. The years of the analysis are specified and the base wage of $10,388 is increased by 5 percent per year through 1980.

After estimates of either gross earnings or adjusted gross earnings (weighted to reflect the probability of future employment) are completed, the following steps of the analysis are determined by the projected income level and the assumptions made from the personal profile.

The third *Varney* decision[6] specifies that income foregone in death cases should be calculated on a net basis.[7] In other words, deductions must be made for appropriate taxes and for "personal living expenses" before discounting the future earnings to present value. The net income foregone represents the actual amount of funds that would have been available to the estate had the person lived.

Taxes and tax rates vary in each case. They are usually dependent

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6. Varney v. Taylor, 79 N.M. 652, 448 P.2d 164 (1968).
7. Unlike compensation awards in a death case, compensation for personal injuries is calculated on a gross basis in New Mexico, *e.g.*, no deductions are necessary. The analysis proceeds by immediately discounting the income foregone to its present value.

on the state of residence, family composition and dependency, and level of income. For example, a resident of Colorado should pay taxes according to the Colorado rates rather than New Mexico rates. Another example would be computations of income taxes since taxable income is a function not only of income level but also of the number of exemptions and deductions. Some incomes are exempt from social security coverage and some incomes are totally tax free. Estimates are made of taxable income based on family composition and income level. Appropriate tax rates are applied from federal and state of residence income tax tables to estimate the tax payable. Admittedly, problems arise in determining taxes payable because of the lack of data and projections of future tax rates. Empirical studies show that income tax rates have not significantly increased over time, so an assumption that the latest published rates hold throughout the time period appears valid. Temporary measures such as either the currently imposed surcharge or a one year rebate are not usually taken into consideration on the assumption that the basic rates will tend to express taxes payable over the entire time period.

In the sample case the taxable income was calculated using the 1972 federal income tax regulations[8] which allow exemptions of $700 per person in 1972 and $750 per person in 1973. It was computed by deducting allowances for dependents and the standard 10 percent of gross earnings (not to exceed $1,000) from annual income.

Tax rates for a married individual filing a joint return for 1971 were applied to taxable income throughout the time period as illustrated below.

Employed Man Work-life Earnings Foregone
Taxable Income, Federal Income Tax,
State Income Tax

Year	Taxable Income ($)	Federal Income Tax ($)	State Income Tax ($)
1972	7,988	1,378	170
1973	8,407	1,470	184
1974	8,953	1,590	203
1975	9,525	1,716	223
1976	10,127	1,848	245
1977	10,758	1,987	270
1978	11,421	2,133	297
1979	12,117	2,290	325
1980	12,848	2,447	358

8. U.S. Dep't of the Treasury, Internal Revenue Service, *Your Federal Income Tax*, 1971 Edition (for Individuals), Pub. No. 17 (1971).

New Mexico income tax rates[9] for 1971 were applied to taxable income throughout the time period to represent state income taxes payable.

Current tax surcharges were assumed to be temporary (not indicative of long run taxes payable) and therefore were not applied to taxable income.

Another standard tax paid is the gross receipts tax passed on to the consumer as a sales tax. This deduction should be made only for that part of the sales tax allocable to the deceased. Therefore it is computed by reference to the estimates of "personal living expenses". The tax rate in the state of residence is applied to the estimate of total personal living expense for the deceased to calculate the sales tax payable over the time period.

The New Mexico gross receipts tax rate of 4 percent[10] was assumed to represent the appropriate sales tax rate and was applied to "personal living expenses" to determine the tax payable.

Employed Man Work-life Earnings Foregone
Sales Tax Payable

Year	Sales Tax ($)
1972	64
1973	65
1974	67
1975	68
1976	69
1977	71
1978	72
1979	74
1980	75

Social Security contributions must be deducted when applicable. The U.S. Social Security Administration publishes current and projected rates of employee contributions to the Social Security program. The appropriate rates are applied to either gross, or adjusted gross income, up to the maximum tax base (currently $9,000 per year).

Some incomes are not subject to Social Security, but are subject to other retirement programs with employee contributions. Other incomes may be subject both to Social Security and other employee contribution plans. For example, University of New Mexico em-

9. Individual New Mexico state income tax form, Bureau of Revenue, Santa Fe, New Mexico (1971).

10. *Supra* note 5, Table No. 629 at 412.

ployees contribute to both Social Security and the University retire-
ment plan. Applicable programs and rates must be determined for
each individual case.

Social Security rates[11] as projected by the Social Security Ad-
ministration were applied to annual income and were assumed to
represent the deceased's retirement contribution payable until age 65
on a maximum taxable base of $9,000.

Employed Man Work-life Earnings Foregone
Social Security Payable

Year	Social Security Rates (%)	Social Security Payable ($)
1972	5.20	415
1973	5.65	508
1974	5.65	508
1975	5.65	508
1976	5.85	526
1977	5.85	526
1978	5.85	526
1979	5.85	526
1980	5.95	536

Since the *Varney* decisions insisted that an individual be treated as
a capital asset, it logically followed that the cost of maintenance for
the deceased would have to be deducted from the lump sum award.
The future earnings of the deceased available to the other family
members would be equal to his earnings minus the cost of his main-
tenance and taxes. The maintenance deduction is similar to the
deduction of the cost of upkeep for a capital asset.

The cost must be treated as an incremental or a marginal one. The
problem is to estimate how much is added to total family main-
tenance cost by one additional family member. No empirical data
exists that can be used for this purpose, because it is almost impos-
sible to assign responsibility to individual family members for some
consumption items. Food, for example, is consumed socially rather
than individually. It is difficult to differentiate that part of family
food expenditure for which each family member is responsible.
Housing is another item for which individual costs cannot be
assessed. All members benefit from the heat in the house and from
the light in the livingroom. Families just do not engage in cost ac-
counting on an individual basis. The absence of such empirical data
means that maintenance cost must be derived by inference.

11. *Supra* note 5, Table No. 450 at 283.

The estimates may be made by use of standard budgets and by use of expenditure studies which have been made for over a century. In the first half of the nineteenth century a French mining engineer turned sociologist, Frederic le Play, made studies of expenditures by mining families. His student, Ernst Engel, drew up relationships between income size and the proportion spent for different categories of goods. His studies indicated that as income rose the proportion spent for necessities—food, clothing, and shelter—declined. In the United States, Carroll D. Wright made expenditure studies of working class families in the latter half of the nineteenth century.[12] These set the pattern for the expenditure studies made by the Bureau of Labor Statistics in this century which have been used to reconstruct the consumer price index. The Bureau of Labor Statistics compiles expenditure studies every ten years. A stratified sample of about 12,000 to 13,000 family and single person spending units are interviewed in detail to secure information on how they spend money for food, clothing, housing, tobacco, alcoholic beverages, personal care, medical care, recreation, reading, education, transportation and other items.[13]

These expenditure studies give the amount spent for each category by family size and income. The Bureau of Labor Statistics uses them to correct the shopping basket of items priced in the consumer price index and to secure new weights to be given the items in the shopping basket.

These expenditure studies are also used to construct what are known as standard budgets. These budgets consist of a shopping basket of items which, if secured, would provide some predetermined level of living. The expenditure study does not serve as the sole basis for the standard budget, but merely as a guide to the budget makers. The budget consists of a list of items such as bread, meat, shoes, shirts, gas, electricity, gasoline, automobiles, and movies which can be priced to ascertain the total cost in any one year. The Bureau of Labor Statistics has constructed several budgets beginning with one for the city worker and a retired couple. The city worker's budget has now been constructed for three different levels of living.[14]

It is possible to use these budgets and expenditure studies to

12. *See generally* U.S. Dep't of Labor, How American Buying Habits Change, ch. X (1959).

13. For a discussion of how these were done in 1960-61, *see* U.S. Bureau of Labor Statistics, Dep't of Labor, Bull. No. 1684 Consumer Expenditures and Income (1971).

14. U.S. Bureau of Labor Statistics, Dep't of Labor, Bull. No. 1570-5, Three Standards of Living For An Urban Family of Four Persons, Spring 1967 (1969). For the retired couple's budget, *see* U.S. Bureau of Labor Statistics, Dep't of Labor, Bull. No. 1570-4, *Retired Couple's Budget* for Moderate Living Standard, Autumn 1966 (1968).

estimate maintenance costs on an incremental basis for an individual. For an adult this is fairly simple. By use of the budget most appropriate to the income level of the deceased, it is possible to secure an incremental cost for one member. For example, the lower-level budget in metropolitan areas was $5,994 in 1970 prices. Total consumption costs in the budget were $5,626[15] for a family of four.

To get an incremental cost, the total cost of housing and the cost of transportation should be removed on the assumption that housing and transportation costs are unaffected by one additional person. When this is done total consumption costs for a family of four are $3,692. The Bureau of Labor Statistics has provided a set of equivalence scales to facilitate reducing these consumption costs to an amount equivalent to one individual.[16] This varies by age. For a person under 35 the equivalence scale is 35 per cent of total consumption cost. Hence, the incremental maintenance for an adult· person under 35 is 35 per cent of $3,692, or $1,238. The equivalence scale is 36 per cent for ages 35-54, 23 per cent for ages 55-64, and 28 per cent for ages 65 or over.

The maintenance must also be adjusted for changes in the price level. This is simple enough for the time period preceding decedent's death. The Bureau of Labor Statistics Consumer Price Index (CPI) is used to make adjustments for this period. The cost of total family consumption at the lower standard budget in 1967 was $4,862. When transportation and housing are taken out and the 35 per cent equivalence scale applied, the incremental consumption in 1967 prices is $1,090. The base year for the CPI is also 1967, so adjustment for any subsequent year to the present is quite easy. The figure $1,090 is multiplied by the all-items consumer price index for any year after 1967. The CPI was 104.2 in 1968 and 109.8 in 1969. By multiplying $1,090 by the index value for 1968 and 1969 respectively, the incremental consumption is adjusted for the price increase. It would be $1,136 in 1968 prices and $1,197 in 1969 prices.

This process does not solve the problem of price adjustement for future years. However, it is possible to adjust for such price changes by using a long-run projection of prices. The CPI in the period 1949-69 rose at a 2 per cent compound rate. This covers a period during which prices rose rather rapidly in some years and rather moderately in others. The 2 per cent rate is also in conformance with longer periods of American price experience. It is possible to adjust

15. *Supra* note 5, Table No. 536 at 341.
16. U.S. Bureau of Labor Statistics, Dep't of Labor, Bull. No. 1570-2, Revised Equivalence Scale for Estimating Equivalent Incomes or Budget Costs by Family Type, Table 1, 4 (1969).

into the future by increasing the maintenance cost at a compound rate of 2 per cent.

In the example, the maintenance cost was computed by using the budget approach. The income, $10,388, was at the moderate standard budget level. Total consumption costs of this budget in 1967 were $7,221. Transportation and housing costs amounted to $872 and $2,230 respectively. When these are subtracted from total consumption costs it leaves $4,110. The equivalence scale for a person 56 years of age is 32 per cent. Maintenance cost in this case would be $1,315 in 1967 prices or $1,604 in 1972 prices. Increasing it at a 2 per cent compound rate through 1980 yields total maintenance costs. In the table that follows we have the maintenance for each year.

Employed Man—Personal Maintenance
1972–1980

Year	Personal Maintenance ($)
1972	1604
1973	1636
1974	1669
1975	1702
1976	1736
1978	1806
1979	1843
1980	1879

The incremental budget approach is satisfactory for adults, but not for children. The expenditure studies mentioned earlier may be used to estimate the maintenance cost for children. In the expenditure study, clothing costs are reported for family members by age and sex. It is possible to assume that the clothing expenditure of a child is in the same ratio to his total costs of living that clothing bears to the total family budget. By subtracting a percentage for housing and transportation, an incremental estimate is secured. This figure must be adjusted for price changes and for age change. Price change is adjusted by using the 2 per cent rate; age change by using clothing costs as reported for different age levels in the expenditure study.

If the assumption is made that the deceased enters the work force upon completion of high school the calculation is relatively simple. When he enters the work force the budget method is adequate to estimate his maintenance. If the assumption is made that he will attend college, the calculation becomes more complicated.

The U.S. Office of Education publishes data on the average cost of tuition, room and board for two and four year public and non-public colleges. These may be used to estimate what college would have cost the deceased. Maintenance may then be estimated for the three summer months using the budget approach. These estimates must be adjusted for price changes. Using this method, maintenance can be computed for the college student during a twelve month period.

Computations and projections of annual earnings less appropriate deductions and taxes yields net income foregone.

Employed Man Work-life Earnings Foregone
Net Income

Year	Commentary Notes	Age In Years	Annual Income ($)	Taxable Income ($)	Federal Income Tax Payable ($)	State Income Tax Payable ($)	Social Security ($)	Sales Tax ($)	Personal Mainten- ance ($)	Net Income Foregone[1] ($)
1972	2nd child reaches age 21	56	10,388	7,988	1,378	170	468	64	1,604	6,704
1973		57	10,907	8,407	1,470	184	508	65	1,636	7,044
1974		58	11,453	8,953	1,590	203	508	67	1,669	7,416
1975		59	12,025	9,525	1,716	223	508	68	1,702	7,808
1976		60	12,627	10,127	1,848	245	526	69	1,736	8,203
1977		61	12,921	10,758	1,987	270	526	71	1,771	8,633
1978		62	12,921	11,421	2,133	297	526	72	1,806	9,087
1979		63	14,617	12,117	2,290	325	526	74	1,843	9,559
1980		64	15,348	12,848	2,447	358	536	75	1,879	10,053

1. Col. 1 less Cols., 3, 4, 5, 6, and 7

Other computations are necessary in preparing the summary statements and arriving at present values of earnings foregone. Net earnings foregone from the date of death to the date of judgment must be appreciated by appropriate rates of interest on the assumption that the net earnings would have been available to the estate over some past time period.[17] Since net income computations yield a non-taxable income stream, the most appropriate known interest rates would probably be yields on non-taxable municipal bonds over the pre-judgment time period. For example, income foregone in 1970 should be appreciated by the average rate of return in 1970 and income foregone in 1971 should be appreciated by the average rate of return in 1971.

Net earnings foregone from the date of judgment to the end of the projected time period must be discounted to present value.[18] Again, the most appropriate rate of discount would be the rate of return on

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17. The third *Varney* decision in damages requires this. Varney v. Taylor, 79 N.M. 652, 448 P.2d 164 (1968).

18. Discounted, present value calculations within the context of the income foregone analysis is the computation of some lump sum dollar value, which if invested at some given rate of interest will yield given annual returns over a stated time period. The sum would, then, be equal to zero at the end of the time period.

non-taxable municipal bonds at the time the investment is to be made. Since either the award or settlement must precede the investment the best known rate would probably be the last known monthly average return.

The interest add-on and discount are applied below to illustrate methods of summary computations. If the assumed judgment date is January 1, 1974, the following computations can be made:

<div align="center">

Employed Man
Net Earnings Foregone
Date of Death, Dec. 31, 1971
Date of Judgment, Jan. 1, 1974

</div>

Year	Net Income Foregone ($)	Rate of Return[1] on AAA Municipal Bonds (%)	Total Present Value[2] of Income Foregone ($)
1972	6,704	6	6,704[3]
1973	7,044	6	14,573

[1] Assumed rates based on 1971 average annual rate of 6.2%.

[2] Net Income Foregone in the given year and present value of income foregone in the previous year (if any) multiplied by the rate of return on municipal bonds in that year.

[3] Income for the year would have been received in increments, not lump sum amounts either at the beginning or ending of the year. In order to simplify computations no interest is added for the first year and the interest is added for the entire year for each year thereafter.

In out example, present value calculations from date of judgment, January 1, 1974, to the end of the time period, December 31, 1980, are calculated on the basis of foregone average annual income.[19] In other words, total net income foregone from the year 1974 through 1980 is $60,759, an average annual income foregone over seven years of $8,680. The present value of $8,680 per year discounted at the assumed rate of return of 6 per cent over seven years is presented on following page:

Present value calculations of interest add-on from the date of death to the date of judgment and discounting of the future income stream from the end of the time period to the date of judgment are the final steps in the analysis. In other words, the present value of earnings foregone from the date of death to the date of judgment plus the present value of earnings foregone from the date of judg-

19. Another method of present value computation would be to discount the net earnings foregone for each year, respectively.

Employed Man—Present Value of Net Earnings Foregone
from Date of Judgment January 1, 1974
through Dec. 31, 1980

Years	Total Net[1] Earnings Foregone ($)	Av. Annual[2] Earnings Foregone ($)	Assumed[3] Rate of Discount (%)	Discount[4] Multiplier	Present[5] Value of Earnings Foregone ($)
1974-1980	60,759	8,680	6	5.5823	48,454

[1] Sum of net earnings foregone for the years 1974-1980.

[2] Total Net Earnings Foregone divided by seven years (1974-1980).

[3] In real problems the latest available monthly average would be used. For purposes of simplification an assumed rate of 6% was used. The average yield on municipal AAA bonds in 1970 was 6.12%.

[4] From the Chemical Rubber Co., *Standard Math Tables* (15th ed. S. Selby ed. 1967). Solution of the equation for the Present Value of Annuity $[1 - (1 + i)^{-n}] \div i$ at 6% over 7 years.

[5] Average annual earnings foregone multiplied by 5.5823, the discount multiplier.

ment to the end of the time period equals the present value of earnings foregone.

A final summary statement for the example appears below:

Employed Man—Present Value of Net Earnings Foregone
Assumed Judgment Date January 1, 1974

Time Period	Present Value Of Net Earnings Foregone ($)
1972-73	14,573
1974-80	48,454
Total	$63,027

Thus, the total sum of $63,027 equals $14,573 (the appreciated value of earnings foregone as of the date of judgment) plus $48,454. The latter sum if invested on the date of judgment at 6% would yield $8,680 per year and would be depleted in 1980 when the last annual withdrawal of $8,680 was made.