

5 HOUSEHOLD SERVICES

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5.1 Introduction

Economic loss in household services is the value of services provided, not to an employer, but rather to a family unit which needs and benefits from these services. This household or family unit might consist of a spouse and children, a spouse only, parents, or brothers and sisters, for example. The value of these services which would have been provided by a deceased or injured person is now lost, in whole or part, just as were wages and fringe benefits discussed in previous chapters.

Historically, many courts have been reluctant to recognize this element of economic loss, perhaps because it was not as obvious as wage loss or directly supportable via income tax returns or W-2 statements. Yet, it seems logical that unpaid work in the home has value to both households and society, just as does work in the marketplace. Individuals often have a choice between these two types of work activity, and couples may consciously divide the two areas of work in a variety of combinations.

Another manner of viewing this issue may be instructive. For most of the range of household services, a family could either have a family member perform the service or contract the service to an outside party. This is true for lawn care, housecleaning, child care, and even cooking, dishwashing, and chauffeuring, for example. If a household contracts the mowing of their lawn, a wage dictated by the neighborhood "market" would be the value of this service. The service would not be performed for less. Yet, if someone in the household chooses to mow the lawn, this service should have the same value.

Thus, we logically go to the relevant market to value a service performed within the household (but now lost). A defendant should not benefit because a deceased adult in a household performed 15 hours per week of household services rather than contract out the services and work in the marketplace for all or part of these hours. If the services had not been needed by the household, they would not have

been performed. The deceased was unlikely to have performed the services just to have increased his or her economic value at death.

Not only does it seem logical and proper to evaluate this element of damages, at least from an economist's viewpoint; it may be a major, or *the* major, element of economic loss. This has most commonly been true for females, who may devote full-time service to their household.

5.2 General Issues and Approaches

An obvious first issue is whether this element of economic loss will be allowed in a particular jurisdiction. From our experience, it is now the norm that economists will be allowed to discuss their estimates of lost household services. This varies by jurisdiction, and Chapter 12 provides guidance in this regard.

One immediate difference between household services estimates and wage and fringe benefit estimates presents itself. In "loss to the estate" states, testimony on wage and fringe benefit loss covers the entire work-life of a deceased or injured person, independent of the existence of an immediate family who depended upon the income of this person. With lost household services, on the other hand, one needs to establish the person(s) who were benefitting from the services provided by a deceased party to make a claim that they are now lost. If family members likely to receive these services, such as a spouse, had a shorter life expectancy than the deceased, then loss in household services stops at the shorter life expectancy of the survivor. If the plaintiff is injured, however, then lost services by the plaintiff to the plaintiff continue through his or her life expectancy.

Another fundamental issue is whether the plaintiff's attorney and economic expert *should* include this as an element of economic loss. Here, a continuum exists from one extreme where it may not be worth discussing this element of loss to the other extreme where it may be the most important element of economic loss.

At or near the former extreme is the situation discussed above—the death or severe injury of a single person who has no immediate family and does not provide services to parents or other households. Also here would be an injured person who no longer works but can and does provide the same household services as before. It is also possible that such a person, not working, provides more services than before. Interestingly, logic might dictate that the defense compute the value of these additional services as a partial offset to wage and fringe benefit loss.

In a case of wrongful death of a male head of household, the decedent could have been such a "loafer" around the house that he provided no services. In the extreme, one could argue that the surviving spouse, who no longer has to wait on him "hand and foot," now has to provide many fewer services. Logically, these services, which no longer must be performed, have a value as an offset against other elements of loss.

In rare cases, a minor child may contribute significant household services, but this element of loss is generally not worth pursuing in such cases. Although many teenagers contribute some services, their parents generally contribute more services back to them.

Toward the other end of the continuum, lost household services are usually very important in the wrongful death of an adult female. The importance increases

as the number of minor children increases. Interestingly, there has been an irrational reluctance to compute the value of lost services by a male household head in a wrongful death case. As will be seen, the hours of weekly service by "average" males are not insignificant. Lost household services will also be important for either a female or male so seriously and permanently injured that most or all household services previously performed can no longer be performed.

Another general issue concerns the types of services which are properly included in these types of estimates. They are services previously performed by a deceased party not only for himself, but also for the benefit of others in the household. Although the deceased wife may have benefitted from her cooking and cleaning, for example, virtually the same number of hours must now be expended by whomever replaces these services for the survivors. Thus, services that benefitted either the whole of the household or others in the household are includable. Assume that the deceased wife also spent many hours in social, church, civic, and/or charitable activities. Such hours have normally not been included, although they may be the rough equivalent of "goodwill" to a business and may some day be included under proper circumstances.

To become more specific, there are two foundations for an estimate of lost household services—the number of lost hours of service per year and the value of each hour. In the next section, methods of estimating the number of hours are discussed, but at least two conceptual alternatives to valuing hours have been advanced.¹

One such alternative is the Opportunity Cost approach.² It is here assumed that all hours of a deceased person were worth the same on average and can be valued at his or her market wage. If he used a few hours per week mowing the yard but could have earned \$15/hour at work, the lawn mowing should be valued at \$15 per hour. Indeed, the concept of "opportunity costs" is important in economic theory and has several applications in commercial damage cases. It also seems, at first blush, that lawn mowing by a person who makes \$40 per hour should somehow be worth more than by a person who makes \$14 per hour. The problem, of course, is that if a teenager could have, and can now, mow the yard just as well for \$7/hour, the defendant should not be excessively charged because, before the injury, an unnecessarily skilled person was mowing the lawn.

The more commonly used approach for valuing lost hours of services is the Replacement approach. The issue is what the household must pay to replace the service that was lost. This value of loss is the same if another member of the household now performs the service or if the service is foregone. In the former case, the family members shouldn't suffer because they replaced the service internally, and only the "contracting out" price on the market can value this internal replacement. In the latter case, the family members are worse off than before, and, again,

¹ See, for example, B.F. Kiser, "Evaluating Household Services," *TRIAL* (February 1980), pp. 34-35; and Carmel U. Chiswick, "The Value of a Housewife's Time," *THE JOURNAL OF HUMAN RESOURCES*, 1982, Vol. XVII No. 3, pp. 413-425.

² Other theoretical approaches have been advanced. See, for example, an exploration of a net value approach based upon contingencies in Euston Quah, "Compensation for Loss of Household Services," *OSGOODE HALL LAW JOURNAL* (Fall 1986), pp. 467-483.

only the replacement cost can provide a dollar value of the extent to which they are worse off.

In this area of loss, the Replacement theory of loss essentially has a market theory as a fundamental component. The two theories do not compete, as with fringe benefit loss. Assuming use of the Replacement approach, it will be seen in the next section that either an aggregated or a disaggregated sub-approach may be employed.

5.3 Methods of Estimation

Carrying forward a theme which was applied to wage and fringe benefit losses, sound data on hours of household services previously provided by the deceased or injured person should be preferred, if available, to data on average persons from survey research. Similarly, information on replacement costs in the specific locale is usually preferable to state-wide or nation-wide survey data.

Given this fundamental guideline, the most logical and effective method of estimating the economic value of lost household services is the least used. Assume the death of a housewife. The surviving husband would be instructed, in the first month or two after death, to hire persons or firms to perform all the services which the wife performed before death. This measures replacement cost in a straightforward way, and it normally results in a higher loss estimate than is generated by alternative methods.

One problem, of course, is that attorneys and economic experts become involved many months after the death and cannot give this advice when it would be timely. The method can be employed later but is less powerful as it is separated from the death. Even when the method is employed in a timely fashion, the survivor may not have the time, money, presence of mind, and energy to pursue this course. It should be given close consideration, however, when the plaintiff's attorney and economist are brought in early.

A second method is to have the survivors estimate the total (aggregate) hours of household services previously performed per day or week by the deceased or injured person. Or, weekly hours of previous work can be estimated by the survivors for each of several disaggregated categories—cooking, housework, chauffeuring, etc.

When the hours of service are estimated in aggregate, a conservative approach has been to value each hour at the federal or state minimum wage. The federal minimum wage remained at \$3.35/hour from 1981 to 1989, and the wage required by labor market forces for domestic help, as an example, had exceeded the \$3.35 legal minimum in most labor markets. A more accurate and fair method, which we have also used, involves a survey of at least three employment agencies in the relevant locale to determine what currently must be paid for replacement household services. The local Office of Employment Security should be surveyed, plus two private employment agencies referring home service workers if such agencies operate in the relevant area. The replacement cost would be the average of the three quoted rates, and the jury would be provided with a valuation method that is fair, reasonable, and tailored to the specific case and location.

In the disaggregated version, the economic expert may have estimated weekly

hours of work in the principal categories of service (cooking, house cleaning, child care, dishwashing, chauffeuring, lawn care, care of clothing, etc.). He might typically find the local market wage in each category—for cooks, housekeepers, etc.—and value each category accordingly. A local Office of Employment Security can be a good source for this information, as can certain private agencies and practicing home economists.

The second method, whether in aggregated or disaggregated versions, has the advantage of being specific to the habits and situation of the deceased or injured party, assuming that the survivors are honest and accurate. A problem, however, is that hours of service are estimated with a given number of children of given ages in the household at that time. The best available study of household work shows that the hours of household service by adult household members decline as the children leave home.³ Therefore, significant error may be introduced by using a one-point-in-time estimate of service hours to represent service hours over time.

Of course, another issue is whether to use the aggregated or the disaggregated version of this second method. The former is performed with less time and cost and may be easier to explain. Whether the minimum wage or local survey data are used for valuing lost services, defense attorneys are hard pressed to attack the valuation method itself. The disaggregated version, on the other hand, is more elegant and probably more likely to show actual costs of replacing lost services. It involves more time and cost and is more difficult to explain.

A third method is to determine the likely number of hours of household services from a survey study of household units. The best is that by the New York State College of Human Ecology at Cornell University. In Table 1, a chart is reproduced from the Cornell studies originally performed in 1967-68, checked in 1977, and first published in 1980. It shows average daily hours of household service for each family member in varying circumstances.⁴

The Cornell studies have shown that at least three major variables affect the number of hours of household services provided by family members. These are:

1. The number of children in the family.
2. The age of the youngest child (or of the wife if no children).
3. Whether the wife is employed.⁵

Therefore, the data are displayed in a way that highlights the effects of each variable. Note that the wife is considered employed if she works 15 or more hours outside the home. The boldface type for each source shows the effect of this variable. The results of the 1977 update study did not vary significantly from the original 1967-68 results.

A primary advantage of using the Cornell study for hours of service is that it shows how average hours of service vary over a lifetime, according to three significant variables. Point-in-time “quirks” are avoided. The Cornell study provides data on all family members, and it is based upon sound research methods.

³ William H. Gauger and Kathryn E. Walker. *THE DOLLAR VALUE OF HOUSEHOLD WORK* (Ithaca, New York: College of Human Ecology Cornell University, 1980), Bulletin 60.

⁴ *Ibid.*,

⁵ *Ibid.*, p. 3.

TABLE 1
COMPARISON OF HOUSEHOLD WORK TIME
IN EMPLOYED VS. NON-EMPLOYED WIFE FAMILIES

Number of Children in Family	Age in Years	Average Hours Per Day Used by Family Members ¹												Number of Families			
		.5	1	1.5	2	3	4	5	6	7	8	9	10	11	12	Employed Wife	Non-employed Wife
0	Wife																
	under 25		H	H			W	W								29	16
	25-39		H	H			W		W							25	20
	40-54		H	H			W		W							13	32
	55 and over		H		H		W	W								11	39
1 Youngest Child	12-17		TT		HH			W		W						24	22
	6-11	CC	H	H				W	W	W						21	24
	2-5			HH				W		W						18	28
	1	H		H					W		W					6	39
	under 1			H							W					*	41
2	12-17		TT	HH				W		W						19	27
	6-11	CC	TT	HH				W		W						24	64
	2-5	CC	TT	HH					W		W					29	96
	1	C	C	H		H			W			W				10-t	53-t
	under 1	C		HH							W		W			7-t-c	66-t
3	12-17		HTT	H			W			W						17	26
	6-11	C	TC	HHT					W	W						27	61
	2-5	CC	T	HT	H					WW						15	72
	1	C		HT	H					W		W				4-t-c	51
	under 1	C		H	H						W		W			4-t-c	32-t
4	12-17		HHT	T					WW							9	7
	6-11	CC	HTT	H				W			W					18	52
	2-5	C	T	H								W				*	35
	1	C	T		H							W				*	23
	under 1		C		H	T								W		*	34
5-6	6-11	C		T	H							W				*	16
	2-5	C	T	H								W				*	17
	1	C	HT								W					*	6
	under 1		TC		H								W			*	11
7-9	2-5	C	T		H							W				*	10
	1															*	*
	under 1		TC		H									W		*	4

¹ Average time is not reported if there are fewer than 4 families in a specific category. Average time for children (C, T) are per child averages; these averages are not reported if the total number of children (C or T) in a specific category was smaller than 4.

KEY:

= **Employed-wife families**
 = **Non-employed-wife families**

H = Husband

W = Wife

T = Teen-age child (12-17 years)

C = Child (6-11 years)

* = Fewer than 4 families

t = Fewer than 4 teen-agers

c = Fewer than 4 children 6-11 years

NOTE: Wife's employment = 15 or more hours per week

SOURCE: Reproduced, with permission, from WILLIAM H. GAUGER & KATHRYN E. WALKER, THE DOLLAR VALUE OF HOUSEHOLD WORK (Ithaca, New York College of Human Ecology, Cornell University, 1980), pp. 4-5. Data from 1967-68 survey of 1,378 families

The defense may argue that a New York study is not valid elsewhere, but the study is based upon a reasonably large sample and it is doubtful if these "average" household statistics would greatly vary in other states. Further, the Cornell report of total hours implies an aggregate approach to be somehow valued with minimum wage or local data. Finally, the Cornell data are "average" statistics. The household at hand may not be average, and we want to project lost services from a specific individual. In the least, plaintiff and defense attorneys and economists should check survivors' estimates of hours of work against the Cornell study of average hours. If the survivors' estimate of lost hours is much greater than the relevant Cornell average, someone should be ready to explain this deviation.

Other studies about household services and their value have been performed, although many have not been designed for easy use by forensic economists in estimating damages. One alternative estimate is based upon surveys by the University of Michigan Survey Research Center.⁶ With a small sample, an application of this survey to wives is shown in Table 2. Comparisons with the Cornell study may be useful, even though the Cornell study provides more helpful disaggregations of the data. For an employed 33-year-old wife, with no children, the Cornell study would report 28 lost hours per week versus Leonesio's University of Michigan results of 20.9 lost hours. This is a significant difference. For an unemployed wife with two children, and the youngest age 12 or above, the Cornell study would report 49 lost hours per week versus Leonesio's University of Michigan results of 52.1 lost hours. This difference is much less.

Preliminary evidence from survey studies also suggests that average hours of household services by married women, as a class, may be decreasing and those by married men, as a class, may be slightly increasing. Possible reasons are labor-saving household machinery, the increasing labor force participation rate of females, and changing social values.⁷ These trends could become important for estimates of future losses in this category of damages, but current survey research, with proper disaggregations of data by household situation and sound sampling techniques, is needed.

A fourth method might be called the Combination method. Here, the economic expert might take the survivors' point-in-time estimate of hours of service prior to death and combine this with his knowledge of a survey study. From Table 1, for example, the economist can compute percentage changes in hours of service by "average" family members. Given the age and employment status of the deceased and his or her spouse, and the number and ages of their children, the economist can vary the point-in-time estimate for the specific deceased using the percentage changes over a lifetime derived from the best study of relevant variables. This combination may be superior to either method two or three, and the survey study percentage changes may also be worked into the actual replacement cost figures produced in method one. On the other hand, this last method is obviously complicated, time consuming, and relatively difficult to explain to a jury.

⁶ See Michael V. Leonesio, "Recent Trends in Women's Use of Time and Their Implications for Assessing the Replacement Cost of Household Services," *JOURNAL OF FORENSIC ECONOMICS* (May 1988), pp. 47-53.

⁷ *Ibid.*, pp. 48-49.

TABLE 2
 AVERAGE HOURS PER WEEK DEVOTED TO
 VARIOUS HOUSEWORK ACTIVITIES BY WIVES, 1981

Household Type	Number of Obs.	Food	House Care	Care of Clothing	Family Care	Marketing/Management	Total Housework
<u>No Children</u>							
Nonemployed Homemaker	74	12.5	9.8	3.3	2.1	7.6	35.3
Employed Homemaker	51	6.9	4.8	1.6	1.7	6.0	20.9
<u>1 Child</u>							
Nonemployed Homemaker	26	13.1	8.3	4.1	11.7	7.5	44.7
Employed Homemaker	29	7.8	5.0	2.6	5.7	6.8	27.9
<u>2 Children</u>							
Nonemployed Homemaker	31	14.8	11.8	5.5	11.4	8.6	52.1
Employed Homemaker	33	9.3	6.6	2.5	6.6	4.5	29.4
<u>3 Children</u>							
Nonemployed Homemaker	21	15.8	9.2	5.7	15.4	6.5	52.6
Employed Homemaker	23	7.7	6.0	3.0	5.1	6.1	27.8

SOURCE: Michael V. Leonesio, *Recent Trends in Women's Use of Time and Their Implications for Assessing the Replacement Cost of Household Services*, JOURNAL OF FORENSIC ECONOMICS (May 1988), p. 52.

Generally, the choice of one of the four methods should be made by the attorney and expert in concert. One "correct" method does not exist. Among the considerations in making the choice are time, cost, the degree to which one wishes to rely upon legal minimum wage valuations that do not reflect market realities, and the degree to which one is concerned about ease of explanation and understanding.

5.4 Other Refinements

In both the survey study and Combination methods, the two key foundation variables—the hours of lost services and the value per hour—change over time. In all four methods, the value per hour should change in the future. A trend of value change should be projected into the future, based upon some market wage

growth history. Future loss of household services must also be discounted to present value. Therefore, the same “teeter-totter” issue of wage growth rates versus discount rates exists for household services as it does for future wage and fringe benefit loss estimates.

The issue of work-life expectancy is not the same as with wages and fringe benefits. In the case of a deceased wife who works outside the household, for example, she would have continued providing household services regardless of her labor force participation or employment status. Here, life expectancy is relevant, not work life expectancy. One could reduce the estimate in each year by her probability of living through each year of loss. Or the estimate can simply be extended to the life expectancy of the deceased or the survivor with the longest life expectancy, whichever is less. The economist would only be concerned with her work patterns under the Cornell or other survey study method, as it would affect whether the data on “employed wife” or “nonemployed wife” families would be used.

Another difference concerns income tax effects, if these must be considered. The value of household services is not taxed, so economic loss for household services is not reduced for income taxes.⁸ On the other hand, the “upward” effect of income taxes, discussed in Chapter 3, is relevant and must be considered. Economic loss is only eliminated when the lump sum present value is invested and earns interest. Yet, these interest earnings are subject to income taxes. The lump sum must therefore be raised, so that the interest earnings can be taxed and the net interest plus principal will exactly restore economic loss. When income tax effects are properly considered, the present value of loss in household services can only rise.

Finally, personal consumption is generally not relevant to this area of loss. Virtually all of the services included in these estimates are only for other family members or “in common” for all members and must be replaced. Yet, the concept is relevant in that any hours of “service” by the deceased only for the benefit of himself or herself should not be included. At death, they have not been lost to the survivors and will not need replacing.

5.5 Sample Cases

Let us now return to the sample case of a deceased Jack Doe, who was married with two children. Assume that Jack Doe’s hours of services approximate the Cornell study averages and that lost hours are valued at the 1989 minimum wage of \$3.35/hour. However, 1989 values are increased by real wage growth rates for U.S. workers. The present value of lost household services, using real discount rates from Chapter 3, is \$72,463. This is shown in Table 3. Even under a conservative valuation method for lost hours, the loss estimate for an “average” male is significant.

Let us now assume that Jack Doe did not have an accident, but that his wife Maria was wrongfully killed on February 14, 1989 at age 33. Her survivors estimate that she was providing 55 hours per week in household services for her family

⁸ Assuming that future lost services amounts are discounted to present values, and that lump sum equivalents are tax-free, then household service estimates by year need not be adjusted for income tax effects.

at her death. This is greater than the 49 hours from the Cornell study for non-working wives in her family situation. The 55 hours are used, but they are adjusted downward by percentages equivalent to the reductions in the 49 hours from the Cornell study, as her children reach majority age and as she would have grown older. Further, an average from local employment agencies reveals a \$4.75 replacement wage for her lost services, and this is increased in future years by average real wage growth rates for U.S. workers. The present value of lost household services by Maria Doe to her family is shown as \$377,194 in Table 4. This amount is calculated through Jack Doe's life expectancy. Replacement services by Maria for Maria are not relevant, since Maria died. If this \$377,194 lump sum is provided, Maria's survivors will have just enough money from the lump sum principal and earned interest to pay for replacement services (ignoring taxes).

Finally, it should be noted that family payments for legally-required fringe benefits are ignored when quotes from employment agencies are used for valuing lost hours. When direct hiring by family members is considered, legally-required fringe benefits provided by employing families must be added to direct wage costs for replacement help.

5.6 Testimony

As stated, much of the decision-making by the plaintiff's attorney about the method of calculating household services loss involves tactical issues of testimony. Specifically, these are how logical the approach should appear and how easy it should be to explain and understand. As the analysis focuses more upon the household services of the specific person and a valuation from a specific labor market, the presentation becomes more effective.

Regardless of the method, we recommend that the economist spend some time explaining why this element of loss is legitimate and important. The expert should then very simply explain the method—how the number of hours of lost services were chosen and how these were valued. Conservative methods and techniques should be highlighted.

The most important point for the plaintiff's side is to be sure the bases of this estimate are sound. Particularly where survivors estimate the number of hours of service, they should be questioned closely before an estimate is made and this estimate should be checked against survey study "standards" for average households.

Defense counsel should closely study this estimate of loss and understand the methods employed. They have at least two areas of potential attack—the concept and the methods. In the first area, they will ask how this element of loss should and can be valued when the U.S. government either doesn't choose to, or cannot, value it. The value of household services is not included in the Gross National Product or in National Income, and it is not subject to any form of taxation.

The defense will also look at the method employed and be more likely to attack with vigor when statistical studies are used to replace information applicable to the specific individual. A knowledge of the pros and cons of each of the four methods is, itself, a source of ideas for inquiry. If the estimate is based on the point-in-time estimate of survivors, for example, is it overly high? Is it higher than the statistical study averages? Does it show hours sharply declining over a

TABLE 3
PRESENT VALUE OF HOUSEHOLD SERVICES
JACK DOE AGE 36-75
1989-2028

Year	Age	Household Services	Discount Factor	Present Value	Cumulative
1989	36	\$1,608	1.00000	\$1,608	\$ 1,608
1990	37	1,851	0.98435	1,822	3,430
1991	38	1,867	0.96894	1,809	5,239
1992	39	1,883	0.95378	1,796	7,035
1993	40	2,526	0.93885	2,372	9,407
1994	41	2,547	0.92416	2,354	11,761
1995	42	1,927	0.90969	1,753	13,514
1996	43	1,943	0.89545	1,740	15,254
1997	44	1,959	0.88144	1,727	16,981
1998	45	1,975	0.86764	1,714	18,695
1999	46	1,992	0.85406	1,701	20,396
2000	47	2,009	0.84070	1,689	22,085
2001	48	2,026	0.82754	1,677	23,762
2002	49	2,043	0.81459	1,664	25,426
2003	50	2,060	0.80184	1,652	27,078
2004	51	2,077	0.78929	1,639	28,717
2005	52	2,094	0.77693	1,627	30,344
2006	53	2,112	0.76477	1,615	31,959
2007	54	2,130	0.75281	1,603	33,562
2008	55	2,148	0.74102	1,592	35,154
2009	56	2,166	0.72943	1,580	36,734
2010	57	2,913	0.71801	2,092	38,826
2011	58	2,937	0.70677	2,076	40,902
2012	59	2,962	0.69571	2,061	42,963
2013	60	2,987	0.68482	2,046	45,009
2014	61	3,012	0.67410	2,030	47,039
2015	62	3,037	0.66355	2,015	49,054
2016	63	3,063	0.65317	2,001	51,055
2017	64	3,089	0.64294	1,986	53,041
2018	65	3,115	0.63288	1,971	55,012
2019	66	3,141	0.62298	1,957	56,969
2020	67	3,167	0.61323	1,942	58,911
2021	68	3,194	0.60363	1,928	60,839
2022	69	3,221	0.59418	1,914	62,753
2023	70	3,248	0.58488	1,900	64,653
2024	71	3,275	0.57573	1,886	66,539
2025	72	3,303	0.56672	1,872	68,411
2026	73	3,331	0.55785	1,858	70,269
2027	74	3,359	0.54912	1,844	72,113
2028	75	640	0.54747	350	\$72,463
J. DOE		\$72,463			

TABLE 4
PRESENT VALUE OF HOUSEHOLD SERVICES
MARIA DOE AGE 34-73
1989-2028

Year	Age	Household Services	Discount Factor	Present Value	Cumulative
1989	34	\$11,910	1.00000	\$11,910	\$ 11,910
1990	35	13,699	0.98435	13,485	25,395
1991	36	13,814	0.96894	13,385	38,780
1992	37	13,930	0.95378	13,286	52,066
1993	38	14,047	0.93885	13,188	65,254
1994	39	14,165	0.92416	13,091	78,345
1995	40	12,196	0.90969	11,095	89,440
1996	41	12,298	0.89545	11,012	100,452
1997	42	12,401	0.88144	10,931	111,383
1998	43	12,505	0.86764	10,850	122,233
1999	44	12,610	0.85406	10,770	133,003
2000	45	12,716	0.84070	10,690	143,693
2001	46	12,823	0.82754	10,612	154,305
2002	47	12,931	0.81459	10,533	164,838
2003	48	13,040	0.80184	10,456	175,294
2004	49	13,150	0.78929	10,379	185,673
2005	50	13,260	0.77693	10,302	195,975
2006	51	13,371	0.76477	10,226	206,201
2007	52	13,483	0.75281	10,150	216,351
2008	53	13,596	0.74102	10,075	226,426
2009	54	13,710	0.72943	10,000	236,426
2010	55	11,478	0.71801	8,241	244,667
2011	56	11,574	0.70677	8,180	252,847
2012	57	11,671	0.69571	8,120	260,967
2013	58	11,769	0.68482	8,060	269,027
2014	59	11,868	0.67410	8,000	277,027
2015	60	11,968	0.66355	7,941	284,968
2016	61	12,069	0.65317	7,883	292,851
2017	62	12,170	0.64294	7,825	300,676
2018	63	12,272	0.63288	7,767	308,443
2019	64	12,375	0.62298	7,709	316,152
2020	65	12,479	0.61323	7,652	323,804
2021	66	12,584	0.60363	7,596	331,400
2022	67	12,690	0.59418	7,540	338,940
2023	68	12,797	0.58488	7,485	346,425
2024	69	12,904	0.57573	7,429	353,854
2025	70	13,012	0.56672	7,374	361,228
2026	71	13,121	0.55785	7,320	368,548
2027	72	13,231	0.54912	7,265	375,813
2028	73	2,522	0.54747	1,381	\$377,194
M. DOE		\$377,194			

lifetime as children leave home? If it is a Cornell study estimate, on the other hand, why are New York families like Alabama families? Has the economist used non-employed wife statistics and, at the same time, estimated wage losses for the wife?

5.7 Summary

The loss of the value of household services is an increasingly well-accepted area of overall economic loss and may be the most important area of economic loss in a given case. Estimates are based upon the number of hours of lost service and a value assigned to each hour lost. Attorneys and economic experts may choose among four methods of estimating economic loss in household services, depending upon a number of considerations herein described.

