

July 7, 2001

Paul Murchison  
Smith Whooley, LLP  
1700 Somewhere Street, Suite 400  
Brentville, MO 63129-2550

Re: **Harris vs. Mitchell, et al.**

Dear Mr. Murchison:

You have asked me to calculate the value of both the actual and intended parental investment in Burt Harris, who was killed in an automobile accident on July 15, 1996. For this purpose, you have provided to me various tax records for the Harris family. You have also indicated that Burt's mother, Jennie Lynn Harris, is a full time mother and homemaker. My analysis conforms to the framework discussed in *Valuing Children in Litigation: Family and Individual Loss Assessment*, by John O. Ward and myself, and published by Lawyers & Judges Publishing in 1996.

A parental investment analysis is not a claim of damages, as such. It is an analysis of the present value of parental investments in Burt Harris as of the time of his death and the present value of investments Brian's parents were more likely than not to make in Brian in the future. This analysis is intended to provide a market based frame of reference that the trier of fact can consider, along with other factors, in selecting an amount of damages to be awarded to Charles N. Harris for the loss of his eldest son. No inference should be drawn that an award of this amount would make The Harris's as well off as if their son had not been killed on July 15, 1996. For most parents, no sum would be large enough to compensate for the death of a child.

The report is divided into the past actual investment, shown in Table 1, and the future intended investment, shown in Table 2.

### **Explanation of Tables 1 and 2**

In both Tables 1 and 2, parental expenditures are divided into direct and indirect expenditures. Measurements of direct expenditures through the year in which Burt would have reached the age of 18 are taken from *Expenditures on Children by Families: 1999 Annual Report*, a publication of the U.S. Department of Agriculture, Center for Nutrition Policy and Promotion, Miscellaneous Publication Number 1528-1999, page 23, Table 5, Estimated annual expenditures on a child by husband-wife families, urban Midwest, 1999, as modified by instructions on page 8. Indirect expenditures are based on the sacrificed labor market earnings of Burt's mother, Jennie Lynn

Harris, but not including time and energy investments of Charles Harris, his father. Before the births of Burt's brothers, Frank and Fred, in 1989, all of Jennie Harris's foregone earnings, measured at \$21,917 as of 1997 and \$24,109 as of the year 2000, is treated as an indirect investment in Burt. After 1989, only one third of this amount is treated as an indirect investment. Direct intended investments in Burt from the ages of 19 to 22 at \$15,000 per year is financial support in that amount toward a college education for Burt. This is a figure in the range for a residential state university, including all costs. No indirect expenditures on Burt are anticipated after the year in which he would have reached age 18. All figures in Tables 1 and 2 are expressed in either year 1999 or year 2000 dollars.

A real interest rate of 3.0 percent was used to bring past investments to present day dollar values and to reduce future intended expenditures to present day dollar values. In other words, 3 percent in real purchasing power interest was added to past actual and intended expenditures before the year 2000 and 3 percent real purchasing power interest was subtracted from future intended expenditures after the year 2000. No real interest adjustment was made to figures in the year 2000. Table 1 applies to the period before July 15, 1996 and Table 2 applies to the period after that date, with 1996 being split between 0.6 of a year before Burt's death and 0.4 of a year after his death.

In both tables, Burt's age is shown as his age on January 1 of the year indicated in the row. Direct Cost is determined as explained above from the USDA figures. Indirect cost is the cost of Jennie Harris's forgone labor market earnings before 1988 and one third of that amount after 1988. Those figures are derived from *Money Income in the United States: 1999*, series B60-209, a publication of the U.S. Bureau of the Census. Since Jennie Lynn Harris was a high school graduate, a 1999 figure of \$23,562 was used as a starting point. That was increased to \$24,109 to account for 2.27 percent wage increases for the 2000. A wage increase of that amount corresponds to a net discount rate of 3.0 percent when the gross discount rate equals 5.36 percent. This was the prevailing rate on Aaa rated municipal bonds at the time the report was written. This figure was calculated by the formula  $1.0535/1.03 = 1.02271$ .

The column labeled "Invest Value" shows the investment value of the direct and indirect expenditures on Burt in that year, adjusted to present value based on a 3.0 percent real discount rate, compounded annually. The column labeled "Cumulative" provides a running total of the investment values by year though the year in the row. Thus, in the year 1994 in Table 1, Burt Harris was 8 years old on January 1. Direct costs in 1999 dollars in that year were \$6,642 and Indirect Costs in 2000 dollars were \$8,036, for a total of \$14,676 (not shown). The investment value of \$14,676 from 1994 as of the year 2000 at a 3 percent annual rate of return is \$17,527 (as shown). As of the end of the year 1994, the cumulative value of the investment in Burt had a present value as of the year 2000 of \$267,880. Likewise, in the year 2003 in Table 2, Burt would have been 17 at start of the year. Direct costs from USDA figures would have been \$7,358 in 1999 dollars. Indirect costs in 2000 dollars would have been \$8,036, for a total of \$15,394 (not shown). The investment value of \$15,394 in the year 2003 as of the year 2000 would have been \$14,088 (as shown), when reduced for future real interest at a rate of 3.0 percent per year.

On this basis, the investment value of past actual expenditures on Burt is projected as **\$294,839**. The investment value of future intended expenditures is projected as **\$127,073** without including \$15,000 per year for his college education and **\$176,612** with \$15,000 per year being spent by Jennie Lyn and Charles N. Harris in support of a four year college education for Burt.

### **A Final Caveat**

An investment value is not a damages projection in the same way that a lost earnings analysis is a damages projection. It is a market based assessment that must be considered by the trier of fact along with other factors to determine damages. It is a projection of the dollar values Burt Harris's parents had financially sacrificed to have and raise Burt to the point of his death and the dollar values they were prepared to sacrifice to continuing raising Burt. The first 10.6 years of Burt's life may have provided some return on that investment, which is not considered here. To do so would go beyond the bounds of economic science.

Sincerely,

Thomas R. Ireland  
Tel: 314/516-5558  
Fax: 314/516-5352  
E-Mail: ireland@umsl.edu

Table 1  
Investment Value of Past Expenditures on Burt Harris

Year	Age	Direct Cost	Indirect Cost	Invest Value	Cumulative
1985	0	\$978	\$2,411	\$5,280	\$5,280
1986	0	\$9,784	\$24,109	\$51,265	\$56,545
1987	1	\$9,784	\$24,109	\$49,772	\$106,317
1988	2	\$9,784	\$24,109	\$48,322	\$154,640
1989	3	\$6,610	\$8,036	\$20,273	\$174,913
1990	4	\$6,610	\$8,036	\$19,683	\$194,596
1991	5	\$6,610	\$8,036	\$19,110	\$213,706
1992	6	\$6,642	\$8,036	\$18,594	\$232,300
1993	7	\$6,642	\$8,036	\$18,053	\$250,353
1994	8	\$6,642	\$8,036	\$17,527	\$267,880
1995	9	\$6,659	\$8,036	\$17,035	\$284,915
1996	10	\$3,995	\$4,822	\$9,923	\$294,839

Table 2  
Investment Value of Future Intended Expenditures on Burt Harris

Year	Age	Direct Cost	Indirect Cost	Invest Value	Cumulative
1996	10	\$2,663	\$3,214	\$6,616	\$6,616
1997	11	\$6,659	\$8,036	\$16,057	\$22,673
1998	12	\$7,228	\$8,036	\$16,193	\$38,866
1999	13	\$7,228	\$8,036	\$15,722	\$54,588
2000	14	\$7,228	\$8,036	\$15,264	\$69,852
2001	15	\$7,358	\$8,036	\$14,946	\$84,798
2002	16	\$7,358	\$8,036	\$14,510	\$99,308
2003	17	\$7,358	\$8,036	\$14,088	\$113,396
2004	18	\$7,358	\$8,036	\$13,677	\$127,073
2005	19	\$15,000	\$0	\$12,939	\$140,012
2006	20	\$15,000	\$0	\$12,562	\$152,574
2007	21	\$15,000	\$0	\$12,196	\$164,771
2008	22	\$15,000	\$0	\$11,841	\$176,612