

THE MASON AND DIXON LINE PRESERVATION PARTNERSHIP

By Robert Bechtol

Surveying Mason and Dixon's Line – What did it cost?

Questions often asked about the Mason-Dixon Line survey are, "how much did it cost in today's money?" and "what did Mason and Dixon earn in today's money as surveyors?"

To answer these questions we must first convert the currency of that time (pounds, shillings, and pence) to 2002 dollars. A study done for David Dutcher, Chief Historian, National Park Service, Philadelphia in 1990 showed a conversion of one Pound (1776) equals \$88.20 (1990). Another study done about the same time by a different agency using different criteria showed one pound (1776) equals \$89.94 (1990), in remarkably good agreement. For our purpose, we will use the average of these two, or one pound equals \$89.07(1990) to convert to 2002 dollars. We have allowed an average of 2.7% for the annual increase in the Consumer Price Index over the twelve-year span to get $\$89.07/\text{pound} \times (1.027)^{12} = \$122.62/\text{pound}$ in 2002 dollars.

- I Mason and Dixon were paid 1 pound, 1 shilling per day while in America 1 pound, 1 shilling -1.05 pounds in decimal form, so

$$1.05 \times \$122.62/\text{day} = \$128.75 \text{ per day as wages.}$$

Since they received this amount every day, their equivalent annual salary would be $\$128.75 \times 365 = \$46,994/\text{annum}$.

Their reported combined total earnings for five years in America were

$$3,516.45 \text{ pounds} \times \$122.62/\text{pound} = \$431,187$$

Each man was entitled to half of this, or \$215,593. After deductions for advances and allowances, each man had

$$1,226 \text{ pounds} \times \$122.62/\text{pound} = \$150,633.2 \text{ in take-home pay.}$$

Note that while in America the surveyors were fully supported by the Commissioners who had been appointed by the Proprietors.

- II Penn's expenses for running the line from 1760 to 1768 are documented to be

$$12,825.18 \text{ pounds} \times \$122.62/\text{pound} = \$1,572,623.$$

We can assume Lord Baltimore's expenses were at least the same, so

$\$1,572,623 \times 2 = \$3,145,247$, the estimated total expenses for the Proprietors. To this expense for running the line should be added the other large, but unknown expenses incurred by both proprietors during the 80-year long disagreement, e.g. running the line of 1750, the Temporary Line, the Commissioners' meeting and wages, and the many and large court costs and legal fees from 1692 to 1769. The sum would be considerable.

- III As a sidelight, Mason and Dixon were allowed by contract 84 pounds for their round trip to America, or 42 pounds per person.

$$42 \text{ pounds} \times \$122.62/\text{pound} = \$5,150 \text{ (2002)}$$

This is about the same price as a mid-grade passage on the QE2 today.

- IV Note: An article in National Geographic, August, 2002, pg. 52, shows a conversion factor of 1 pound = \$133 for the year 1700.

Reference :

1. Report of the Resurvey of the Maryland-Pennsylvania Boundary - part of the Mason and Dixon Line. Maryland Geological Survey, Baltimore, 1907, pgs. 353-355

Another way to compare the purchasing power of the colonial Pound with 2002 dollars is by comparing wages.

From the payroll Account of Moses McLean, Steward to the Mason and Dixon survey party, we learn that the axmen were paid 3S,6p per day and worked a 6-day week which we will call a "normal" workweek.

$$3S,6P = 3.5S$$

$3.5 \times 6 = 21 S/\text{week}$, or $1P,1S$, which, by coincidence is what Mason and Dixon were paid per day and for every day in America.

Minimum wage for 2002 is taken as \$5.25/hr. and for a normal workweek of 40 hours.

$$\$5.25 \times 40 = \$210/\text{week (2002)}$$

$$21S/\text{wk. (1765)} = \$210/\text{wk. (2002), or}$$

$$1 \text{ Shilling} = \$10.00 \text{ (2002), and}$$

$$1 \text{ Pound (1765)} = \$200.00 \text{ (2002)}$$

Mason and Dixon were paid 1.05 Pounds/day, or \$210.00/day (2002 for every day in America. Thus:

$$\$210 \times 365 = \$76,650 \text{ per annum (2002)}$$

From the previous method of calculating the comparative rate, Mason and Dixon were paid at the rate of \$46,994/annum. A better value probably lies between these two values.

Using the second method for comparison we find that the cost to the Penns of 12,826 Pounds calculates to be

$$12,826 \times 200 = \$2,565,200 \text{ (2002)}$$

and if doubled to include equivalent costs for the Calverts we have

$$\$5,130,400 \text{ for the proprietors cost for the survey.}$$

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A sampling of wages on the MDL survey

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1 Pound $P = 20$ Shillings $S = 240$ pence p

1 $S = 12 p$

1 $P = \$122.62$ (2002)

1 $S = \$6.13$

1 $p = \$0.51$

Mason and Dixon (each)	1 $P, 1S/day$ (7) X \$6.13 =	\$128.75/d	\$901.25/week
Amen Overseer	6 S/d (6) x \$6.13 =	\$36.78/d	\$220.68/week
Chain Carrier	} 5 S/d (6) x \$6.13 =	\$30.65/d	\$183.9/week
Instrument carrier			
Wagoneer			
Tent Keeper			
Cook	4 S/d (7) x \$6.13 =	\$24.52/d	\$171.5/week
Axman	3 $S, 6p/d$ (6) x \$6.13 =	\$21.46/d	\$128.7/week

Reference: The Weekly Account of Moses McLean, Steward to the MDL Survey, 1765