



“Make Whole” Damages in Employment Litigation: A Case Study of Mr. Black.

Presented to the National Association of Forensic Economics

January 4, 2014

By Thomas Roney

Following is an example of an employment expert report using my methodology. I greatly welcome any and all criticism of the methodology and data sources applied. I have attached some, but not all, the calculations referred to in the report. Some pages of calculations have been truncated to enhance visibility of the remaining figures. In particular, I did not include calculations of my 5-year future loss option.

A key variable in this report is the use of life-cycle data for the pre-termination and post-termination earnings calculations. Also, the methodology of the tax-adjustments should be of particular interest, since many competing methodologies exist, from simply ignoring the tax adjustments to incorporating even greater detail than utilized in this report.

The purpose of this case study is to generate productive comments about the problems of making a terminated employee “whole”, but not over or under compensated.



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Assessment of Economic Loss in the Matter of

Bill Black v. Smith & Co. L.P.

December 23, 2013

This report is intended for the use of counsel in the instant matter. Any other transmission, copy, or utilization of this report is prohibited without the written consent of Thomas Roney LLC.

I, Thomas Roney, am a consulting economist. I am president of Thomas Roney LLC. I have included a copy of my current resume and list of recent testimonies with this report. I was retained by attorney Jeffrey E. Livingston of Livingston Howe, LLP to determine the economic damages suffered by Bill Black relating to his employment and arising from his termination from Smith & Company LLC, on December 21, 2011.

I was asked to analyze certain documents, perform calculations, and undertake appropriate research, as I deemed necessary to form opinions in connection with this matter. The work I performed and the opinions I have formed are based on my training and experience as a forensic economist.

My firm will be compensated for my work on this report for a fee of \$XXX per hour. Payment for my services is not contingent upon my findings or the results of this matter. At this time, the total amount billed on this engagement is \$X,XXX.

I reserve the right to modify or supplement my opinions, as well as the basis for my opinions, based on the nature and content of the documentation, data, proof and other evidence or testimony that either party or its experts may present, or based on additional discovery or other information provided to me in this matter. I reserve the right to supplement and revise this report upon presentation of, but not limited to, additional, relevant depositions, expert witness reports, exhibits and information.

I have prepared this report summarizing my opinions at this time. A list of the documents that I have reviewed in forming my opinions is attached to this report or included by reference in the report.

Prepared and submitted by:

A handwritten signature in black ink that reads "Thomas Roney".

Thomas M. Roney
President
Thomas Roney, LLC

Back Pay and Front Pay Damages for Bill Black

Introduction and Background

This report assesses the economic losses to Bill Black relating to his employment and arising from his termination from Smith Company LLC (including statements contained in the Uniform Termination Notice for Securities Industry Registration filed by Smith Company). The economic loss calculation begins on March 19, 2012 (the date he would have began working with Jupiter, Inc.), considers the loss of past and future income, and is adjusted for Federal, State, Social Security and Medicare taxes. After-tax offset earnings and unemployment compensation reduce the economic loss. I have based my opinions on the information available at this time.

I have calculated losses on a year-by-year basis. As described below, economic damages resulting from a job dismissal often continue for a period of three to five years, but can also extend to ten years or more. I have calculated economic damages and tax adjustments for two periods: 1) the back pay period plus five years into the future; and 2) the back pay period plus the period to Mr. Black's work life expectancy, a total period of 14.6 years.

It is my opinion that the past loss of after-tax (back pay) damages is \$29,252 and the present value of future after-tax (front pay) damages (calculated to Mr. Black's work life expectancy) is \$332,010. The present value of the after-tax total back plus front pay damages is \$361,262. An award is taxed in the year it is received. Since my calculation of back pay and front pay are calculated on an after-tax basis, the damages award needs to be adjusted for the taxes that would be due on the award. The adjustment for Federal Income Taxes would bring the total of the award to \$496,894. In addition, State taxes, Social Security taxes, and Medicare taxes would also be due on the back and front pay in the award year. I have estimated the additional State, Social Security, and Medicare taxes on the back pay and front pay to be \$30,184. The total adjusted award to fund the present value of back pay and front pay, calculated to Mr. Black's work life expectancy, is **\$527,077**.

The total adjusted award to fund the present value of back pay and front pay calculated five years into the future is **\$120,206**.

Bill Black was born on July 14, 1962 and was 49.4 years of age at the date of his termination. He has a Bachelor's degree in History, and is married to Mary Black. Mr. Black was employed as a Financial Advisor by the Smith Company LLC. He began working at Smith Company in June 2008 and was terminated from this position on December 21, 2011. Mr. Black resides in Mayberry, NC.

Life Expectancy

Mr. Black’s statistical life expectancy, based on the life expectancy of a male and calculated from his age at the damages date, is to age 80.8 in May of 2043 per “Expectancy Data Healthy Life Expectancy: 2007 Tables. Shawnee Mission Kansas, 2011.”

Worklife Expectancy

Worklife expectancy (WLE) is determined by education level, activity status in the labor market, age and sex. Mr. Black was age 49.4 at the damages date; active in the labor market; and had a Bachelor’s degree. The WLE of a 49.4 year-old male with a Bachelor’s degree (initially active) is 14.6 years, with a standard deviation of 5.9 years. This information is derived from “The Markov Process Model of Labor Force Activity: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors” by Gary Skoog, James Ciecka, and Kurt Krueger, *Journal of Forensic Economics*, Vol. 22, No. 2, 2011, pp. 165-229 (published in 2011). Using these data and assuming continuous work, one would expect Mr. Black to work until July 2026. At that date he would be age 64.

Table 9: Worklife Expectancy: Males, Active, Bachelor's Degree

Age	Worklife expectancy	SD	Estimated
49.0	14.96	5.99	64.0
49.4	14.59	5.93	64.0
50.0	14.12	5.86	64.1

Date of Termination (from 'Basic info')	Worklife Expectancy Ends (at age 64 and WLE 14.6 years)
12/21/11	7/23/26

Growth of Earnings

Data and research (see for example, “Changes in the Distribution of Workers’ Hourly Wages between 1979 and 2009” by the CBO), for wage growth for less skilled workers (those without 4-year college degrees) and skilled workers (those with a 4-year degree or higher), show that over the long term male earnings for lower skilled/educated workers are increasing just below or just above inflation, or approximately the change in the Consumer Price Index (CPI). The CPI is forecast to increase at approximately 2% in the future. Over the long term male earnings for skilled workers (those with a 4-year degree or higher) are increasing at about 1% above inflation, or approximately the change in the Employment Cost Index. The ECI is forecast to increase at approximately 3.5% in the future.

The Employment Cost Index increased by 1.8% in 2012 and is projected to increase by 2.1% in 2013, 2.9% in 2014, and 3.9% in 2015, 4.0% in 2016, 4.2% in 2017, 4.0% in 2018, 3.8% in 2019, 3.7% in 2020, 3.6% in 2021, 3.6% in 2022, and 3.5% in 2023, per the Congressional Budget Office Budget and Economic Outlook: Fiscal Years 2013-2023, February 2013.

The Office of the Actuary of the Social Security Administration publishes a long-range forecast of expected wages in the economy, titled “2013 Annual Report of the Board of Trustees of the Federal Old Age and Survivors Insurance and Federal Disability Insurance (OASDI) Trust Funds”. The intermediate (most likely) forecast for annual wage increases for the period 2013 to 2025 ranges from a high of 5.6% in 2016 to a low of 2.67% in 2013, 3.92% from 2020-2025, and for the period 2025 to 2087 the forecast annual wage increase is 3.93%. These figures do not include benefits. The intermediate (most likely) forecast for the CPI for the period 2013 to 2087 ranges from 1.8% in 2013 to 1.8% from 2020 to 2087.

Based upon the above data, I have increased Mr. Black’s earnings based on the CBO projections for the ECI to year 2023. Thereafter, I used the OASDI Intermediate forecast change in wages.


Discount Rate

The future streams of payments to replace the loss of earnings are discounted to their present value in recognition that the award will be received in the present year and this principal will be invested in a relatively risk-free instrument and earn interest. The present value of each of these future payments is the amount it would take, if invested today with interest compounded, to equal the amount of the payment at the point it is to be made. These individual payment streams are then added to give the individual totals for the losses. The interest rate on this invested principal is the discount rate.

Any taxes on the interest earned on the investment of a potential award must be accounted for. For this reason, I have used National Municipal Bond Yields on tax-free, Triple A rated, Tax-Exempt Bonds to calculate the discount rate on future medical expenses. The current yield on 1-year to 30-year Municipal Bonds ranges from 0.23% to 4.40%. For example, the average yield of a laddered portfolio for 13 years into the future is 1.83%. The current bond yield was applied to the appropriate periods to calculate the present value, i.e. a “laddered portfolio”. Values are discounted on an annual basis at midyear. See chart below.

Laddered Approach

Year	Yield
1	0.23%
2	0.36%
3	0.54%
4	0.85%
5	1.23%
6	1.61%
7	1.99%
8	2.31%
9	2.54%
10	2.74%
11	2.96%
12	3.12%
13	3.28%
14	3.41%
15	3.56%
16	3.65%
17	3.78%
18	3.86%
19	3.94%
20	4.02%
21	4.10%
22	4.15%
23	4.22%
24	4.27%
25	4.30%
26	4.33%
27	4.35%
28	4.37%
29	4.39%
30	4.40%

Ave. Yield 13-years:  **1.83%**

Last Update 12/18/13

The yield curve used to discount future values to present values in this report is produced by Municipal Market Advisors (MMA), an independent financial research firm which provides U.S. Municipal Bond Market analytics for purposes of fixed income analysis, portfolio management, risk management, etc. MMA's Yield Curve Data for U.S. AAA Municipal Bonds is published on LearnBond.com's AAA Municipal Bond Yield Curve Reference. MMA's yield curve accounts for bond yield maturities from 1 – 30 years. As of the last update on December 18, 2013, Municipal Market Advisors' Yield Curve was published as above.

Taxes

As noted above, taxes on income are to be considered and the after-tax earnings losses are discounted. A household income below \$53,850 would place Mr. Black in the Second Quintile of Income, according to information from the Congressional Budget Office (CBO). The average Effective Tax Rate on individual income for pre-tax income in the Second Quintile is estimated to be 6.8% in 2009 (see table below). I have applied an effective federal individual income tax rate ranging from 6.8% to 19.2% to calculate Mr. Black's after-tax earning capacity. Social Security taxes of 6.2% (4.2% in 2011-2012) were applied to all earnings up to the earnings limit. Earnings were taxed at a total Federal rate (income tax and social security and Medicare tax) of **5.65% to 17.05%**.

**Congressional Budget Office
Average Federal Taxes By Income Group, December 2013**

Average Pre-Tax Income for All Households, by Household Income Category, 2010\$
Average Individual Income Tax Rate, by Income Quintile, 2010\$

Lowest Quintile	Midpoint	Second Quintile	Midpoint	Middle Quintile	Midpoint	Fourth Quintile	Midpoint	Highest Quintile
\$24,100	\$34,150	\$44,200	\$54,870	\$65,540	\$80,320	\$95,100	\$167,100	\$239,100
-9.2%	-5.8%	-2.3%	-0.4%	1.6%	3.3%	5.0%	9.4%	13.8%

[CBO: The Distribution of Household Income and Federal Taxes, 2010, December 2013](#)

State taxes are applied at a rate of 6.0% up to \$21,250, and 7.0% up to \$100,000 on both the “but-for” earnings and the offset earnings.

Since taxes must be paid on the taxable portion of a lump-sum award, and earnings losses and offsets are calculated on an after-tax basis, the damages amount for lost earnings should be adjusted to reflect the taxes that will be owed on the award.

The present value of the amount of damages calculated for back pay plus front pay for **five years** into the future totals **\$89,816**. Mr. Black's total income (offset earnings income plus award) is estimated to be \$111,349 in the award year (2013) and would result in an effective federal tax rate of 19.3% (per IRS Tax Schedule Married Filing Jointly, 2013). This sum represents the present value of an award to fund the economic damages and pay the estimated marginal Federal income tax rate of 19.3% on the award. **Additional** Social Security taxes and Medicare taxes of \$4,901, and

state taxes of \$3,955 will also be incurred during the year of the award. Adjusting for Federal, Social Security, Medicare, and state taxes, the net Back Pay plus Front Pay for five years award amount is calculated at **\$120,206** to fund damages of \$89,816.

The present value of the amount of damages for back pay plus front pay calculated to Mr. Black's **work life expectancy** into the future totals **\$361,262**. Mr. Black's total household income (his earned income plus award) is estimated to be \$415,262, in the award year and would result in an effective federal tax rate of 27.3% (per IRS Tax Schedule Married Filing Jointly, 2013). The damages amount, adjusted for lump sum taxes due, is **\$496,894**. This sum represents the present value of an award to fund the economic damages and pay the estimated marginal tax rate of 26.42% on the award. In addition, Social Security, Medicare, and state taxes would also be due on the back and front pay in the award year. I have estimated the **additional** Social Security and Medicare taxes on the back pay and front pay to be \$10,775 and **additional** State taxes in the amount of \$19,409. The total tax-adjusted award to fund the present value of back pay and front pay damages of \$361,262 is **\$527,077**.

Computed Economic Loss

Mr. Black was terminated from Smith Company LLC on December 21, 2011. On January 25, 2012, Mr. Black received an offer to work with Jupiter, Inc. as a High Net Worth Senior Client Specialist with an initial base salary of \$53,000. His start date to begin working at Jupiter, Inc. was March 19, 2012. I have calculated a loss of earnings to Mr. Black at \$53,000 (2012 dollars) per year beginning March 19, 2012. This amount is increased in the future according to the wage growth discussed above. Taxes (Federal, Social Security and Medicare) are deducted from the earnings loss as described above. Earnings are also increased by the age earnings adjustment for Personal Financial Advisors. I have applied the age earnings adjustment for an entry level worker based upon data from Expectancy Data, *Full-Time Earnings in the United States: 2011 Edition*, Shawnee Mission, Kansas, 2013, Year-Round, Full-time Wage & Salary Earnings in the United States (2011 Dollars), American Community Survey, 2009-2011.

My opinion regarding the future path of offset (mitigating) earnings for Mr. Black was guided by a study by Darryl R. Zengler and Marianne Inouye, "The Duration and Magnitude of Economic Losses Following a Job Dismissal", and my research paper "Factors to Consider When Estimating Economic Damages From Wrongful Termination", Thomas Roney and Nora Ostrofe. Key questions these studies attempt to address include the time frame in which losses are reasonably expected following a job termination and the wage differential between pre and post termination employment. The underlying data in these studies is derived from sample surveys by the Bureau of Labor Statistics' Displaced Worker Survey, the Panel Survey of Income Dynamics, and the National Longitudinal Survey and Administrative records from the Pennsylvania and Connecticut state unemployment insurance systems.

When hired, newly displaced workers generally experience a drop in earnings, which slowly rise with tenure and experience, but may not return to the same level of their pre-termination positions. Zengler finds “strong reasons to project the economic damages – the difference between pre-termination and post-termination income – over a period of no less than five years.” Zengler concludes that persistent economic damages tend to be smaller beyond the five-year benchmark, except in cases where the dismissed worker is a high-tenured, older worker. See also, “Estimating Duration of Economic Damages in Wrongful Termination Cases: Recent Literature on Duration and Magnitude of Earnings Losses from Job Loss”, by Thomas Roney. In that survey I noted that a recent working paper, “Long-Term Earnings Losses due to Mass Layoffs During the 1982 Recession: An Analysis Using U.S. Administrative Data from 1974 to 2004” by Wachter et al, “uses longitudinal data from Social Security records covering up to 30 years of earnings to present the first national estimates of the long-term cost of job displacements during the 1982 recession.” Compared to workers not displaced from their job, displaced workers were found to suffer immediate losses of 30%, and losses of 20% per year remaining even after 15 to 20 years. Their findings suggest that earnings losses “extend well beyond the five-year period typically studied (and argued in Zengler and Inouye) and last up to 15-20 years after a displacement.” This data suggests that an economic loss from a job dismissal can continue for a period of many years after the incident. For this reason I have calculated losses on a year-by-year basis with a summary of the losses continuing five years into the future and a summary continuing to the end of the plaintiff’s work life expectancy.

In the **5-year scenario**, the present value of after-tax back pay is calculated to be **\$81,451** and the present value of after-tax front pay is calculated to be **\$308,167**.

In the **WLE scenario**, the present value of after-tax back pay is calculated to be **\$81,451** and the present value of after-tax front pay is calculated to be **\$938,948**.

Offset Earnings

Mr. Black began working in software sales for Analysis Support LLC in 2013, with a salary of \$54,000. Therefore, I have calculated offset earnings for Mr. Black at \$54,000 annually. This amount is increased in the future according to the wage growth discussed above. Taxes (Federal, Social Security, Medicare, and State) are deducted from the earnings loss as described above. Earnings are also increased by the age earnings adjustment for males with a Bachelor’s degree. I have applied the age earnings adjustment for a worker at a comparable age to Mr. Black, based upon data from Expectancy Data, *Full-Time Earnings in the United States: 2011 Edition*, Shawnee Mission, Kansas, 2013, Year-Round, Full-time Wage & Salary Earnings in the United States (2011 Dollars), American Community Survey, 2009-2011. Mr. Black’s actual earnings of \$246 from Regional Services, Inc. and unemployment compensation in the amount of \$17,438 were deducted as offset earnings in 2012.

In the **5-year scenario**, the present value of after tax offset earnings is calculated to be **\$52,199** in the past, and **\$252,993** in the future.

In the **WLE scenario**, the present value of after tax offset earnings is calculated to be **\$52,199** in the past, and **\$606,938** in the future.

Summary

I have calculated losses on a year-by-year basis. As described above, economic damages resulting from a job dismissal often continue for a period of three to five years, but can also extend to ten years or more.

The total adjusted award to fund the present value of back pay and front pay calculated five years into the future is **\$120,206**.

The total tax-adjusted award to fund the present value of back pay and front pay, calculated to Mr. Black's work life expectancy, is **\$527,077**.

I reserve the right to update my report should additional information become available.

Please see attached spreadsheets.

DOCUMENTS REVIEWED

"The Markov Model of Labor Force Activity: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors," with Gary Skoog, James Ciecka, and Kurt Krueger. *Journal of Forensic Economics*, Vol. 22, No. 2, 2011, pp. 165-229 (published in 2011). Table: 9 for Initially Active Men with a Bachelor's degree.

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Source: Congressional Budget Office.

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Management, Wages and Salaries, All Civilian, Index Number, Series Id:
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States (2011 Dollars), American Community Survey, 2009-2011, Tables: 0850, & All Races, Male, Bachelors degree.

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<http://www.dor.state.nc.us/taxes/individual/rates.html>

North Carolina Department of Revenue: Tax Calculator.

<http://www.dor.state.nc.us/cgi-bin/calc.pl>

United States Department of Labor Bureau of Labor Statistics “Occupational Employment Statistics” Metropolitan Area Occupational Employment and Wage Estimates for Charlotte-Gastonia-Rock Hill, NC-SC MSA, 2003-2012, 13-2052: Personal Financial Advisors, found at www.bls.gov/oes.

Black 001-0027.

Affidavit: Black 028-048.

Analysis Support LLC pay records for Bill Black: Black 049-051

U.S. Individual Income Tax Returns and W-2 statements for Bill Black: 2010-2012; Black 052-075.

School Records, Job Applications, & Letters: Black 083-0208.

Amended Statement of Claim Case No. 12345.

Respondent’s Answer to Amended Statement of Claim.

Publication 957, Reporting Back Pay and Special Wage Payments to the Social Security Administration. <http://www.irs.gov/pub/irs-pdf/p957.pdf>

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Employment Economic Damages Report

Plaintiff: Bill Black

Case Information

Trial or Settlement Date: 11/19/2013

Date of Termination: 12/21/2011

After-Tax Discount Rate: Laddered

Range of Yields: .23% to 3.28%

Present Value of Future Damages Calculated Annually at Midyear
 Present Value Computed Using Compound Interest

Plaintiff

Sex: Male

Birth date: 07/14/1962

Age at Damages Date: 40.31

Work life Expectancy: 7/23/26

Retirement Age at WLE: 64.03

Life Expectancy: 5/19/43

Expected Age at LE: 80.85

Damages Summary

Calculated to WLE at Age 64 Type of Damage	Future Values		Present Values	
	Back Pay	Front Pay	Back Pay	Front Pay
After-Tax Income:	\$81,451	\$1,122,709	\$81,451	\$938,948
After-Tax Offset Income:	(\$52,199)	(\$706,960)	(\$52,199)	(\$606,938)
Total Damages:	\$29,252	\$415,749	\$29,252	\$332,010
Grand Total Damages:	\$445,001		\$361,262	

Past Loss of After-Tax Income	\$29,252
Present Value of Future Loss of After-Tax Income	<u>\$332,010</u>

Damages Amount Subject to Lump Sum Tax: **\$361,262**

Effective Federal Income Tax on lump sum: **27.3%**

Award to fund PV Damages (adjusted for lump sum tax): **\$496,894**

Adjustment for State Tax in Year of Award: **\$19,409** Amt. Owed, less actual

Adjustment for Social Security and Medicare Tax in Year of Award: **\$10,775** Amt. Owed, less actual

Total Tax Adjusted Award: \$527,077

Bill Black

Pre-Trial Lost Earnings-Back Pay

Date of Termination 12/21/11
 Plaintiff Pre-Incident Earning Capacity: \$53,000 2012\$ per Clinard 002
 Start Date of Offer from Vanguard: 3/19/12
 Trial Date: 11/19/13
 Trial-Year Fraction: 0.88
 Damages Year Fraction: 0.79
 Effective Federal Income Tax Rate: 0.0% Second Quintile Income up to \$65,400
 Medicare Tax Rate: 1.45% Income Below \$200,000
 Social Security Tax Rate: 6.20%
 2011-2012 Social Security Tax Rate: 4.20%
 2012 Offset Earnings: \$246
 2012 Unemployment Compensation: \$17,438
 Date of Return to Work: 2/1/13
 Date of Return to Work and Trial Year Fraction: 0.80
 2013 Offset Earning Capacity: \$54,000 2013\$
 State Taxes: 7.0% plus \$1,275 for income between \$21,250 \$100,000
 State Taxes: 5.0%

					Plaintiff Would Have Earned					
Date From	Date To	Earnings Growth*	Age/Earnings Adjustment	Age/Earnings Adjust.-Offset	Back Pay	State Taxes	Federal Income Tax	Medicare Tax < \$200,000	Social Security Tax	After-Tax Back Pay
03/19/2012	12/31/12		1.000		\$41,645	-\$2,082.27	\$0.00	-\$603.86	-\$1,749.11	\$37,210
01/01/2013	11/19/13	2.10%	1.062	1.000	\$50,647	-\$2,532.37	\$0.00	-\$734.39	-\$3,140.14	\$44,241
Totals:					\$92,293	-\$4,614.65	\$0.00	-\$1,338.25	-\$4,889.25	\$81,451

* Earnings Growth in 2013 per the CBO Forecast in the ECI.

Bill Black

Future Lost Earnings-Front Pay

Plaintiff Pre-Incident Earning Capacity: \$53,000	2012\$				
Offset Earning Capacity: \$54,000	2013\$				
Effective Federal Income Tax Rate: 0.0%	Second Quintile Income per CBO, up to	\$65,400			
Effective Federal Income Tax Rate: 1.6%	Middle Quintile Income per CBO, up to	\$80,450			
Effective Federal Income Tax Rate: 3.3%	Middle Quintile Income per CBO up to	\$95,500			
Effective Federal Income Tax Rate: 5.0%	Fourth Quintile Income per CBO, applied to earnings to \$167,100				
Effective Federal Income Tax Rate: 9.4%	Fifth Quintile above \$239,100				
Medicare Tax Rate: 1.45%	Income Below \$200,000				
Social Security Tax Rate: 6.20%			5.65%		17.05%
Work-Life Expectancy Date: 7/23/26					
Work-Life Expectancy Fraction: 0.676					
State Taxes: 7.0%	plus \$1,275	for income between	\$21,250	\$100,000	

						Plaintiff Would Have Earned						
	Year Ending	Earnings Growth*	Age/Earnings Adjustment	Age/Earnings Adjust.-Offset	Discount Rate	Front Pay	State Taxes	Federal Income Tax	Medicare Tax < \$200,000	Social Security Tax	After-Tax Front Pay	PV Lost Front Pay
1	11/19/2014	2.90%	1.123	0.996	0.23%	\$62,550	-\$4,166.03	\$0.00	-\$906.98	-\$3,878.12	\$53,599.24	\$53,537.71
2	11/19/2015	3.90%	1.185	0.992	0.36%	\$68,558	-\$4,586.55	-\$1,096.92	-\$994.09	-\$4,250.58	\$57,629.67	\$57,319.86
3	11/19/2016	4.00%	1.247	0.984	0.54%	\$75,011	-\$5,038.26	-\$1,200.17	-\$1,087.66	-\$4,650.67	\$63,034.06	\$62,191.08
4	11/19/2017	4.20%	1.308	0.973	0.85%	\$82,028	-\$5,529.45	-\$2,706.92	-\$1,189.40	-\$5,085.72	\$67,516.32	\$65,545.54
5	11/19/2018	4.00%	1.370	0.962	1.23%	\$89,330	-\$6,040.61	-\$2,947.89	-\$1,295.29	-\$5,538.47	\$73,507.87	\$69,573.25
6	11/19/2019	3.80%	1.432	0.951	1.61%	\$96,899	-\$6,570.41	-\$4,844.93	-\$1,405.03	-\$6,007.72	\$78,070.60	\$71,505.10
7	11/19/2020	3.70%	1.493	0.940	1.99%	\$104,812	-\$7,124.37	-\$5,240.62	-\$1,519.78	-\$6,498.37	\$84,429.26	\$74,279.44
8	11/19/2021	3.60%	1.555	0.930	2.31%	\$113,070	-\$7,702.39	-\$5,653.50	-\$1,639.51	-\$7,010.33	\$91,064.17	\$76,729.42
9	11/19/2022	3.60%	1.643	0.922	2.54%	\$123,777	-\$8,451.87	-\$6,188.83	-\$1,794.76	-\$7,674.16	\$99,667.08	\$80,530.16
10	11/19/2023	3.50%	1.758	0.913	2.74%	\$137,038	-\$9,380.14	-\$6,851.88	-\$1,987.05	-\$8,496.34	\$110,322.26	\$85,336.99
11	11/19/2024	3.90%	1.872	0.904	2.96%	\$151,659	-\$10,403.64	-\$7,582.96	-\$2,199.06	-\$9,402.87	\$122,070.61	\$89,865.19
12	11/19/2025	3.90%	1.987	0.896	3.12%	\$167,213	-\$11,492.38	-\$15,717.99	-\$2,424.58	-\$10,367.18	\$127,210.50	\$89,346.92
13	11/19/2026	3.90%	2.101	0.891	3.28%	\$124,259	-\$8,485.60	-\$11,680.31	-\$1,801.75	-\$7,704.03	\$94,586.92	\$63,187.07
Totals:						\$1,396,203	-\$94,971.69	-\$71,712.93	-\$20,244.94	-\$86,564.57	\$1,122,708.56	\$938,947.72

* Earnings growth 2014-2023 per ECI forecast by the CBO, February 2013 and thereafter by the OASDI estimated increase in wages.

Bill Black

Tax Adjustment for receiving award in a lump sum

WLE

A lump-sum award for compensation will be taxed by the Federal Government.

The 2013 Tax Rate Schedules (Married Filing Jointly)

\$223,050	\$398,350	\$49,920 plus 33% of the amount over \$223,050
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	PV of Past plus Future damages	\$361,262
Total		\$361,262

Estimated mitigating income in year award is received:	\$54,000
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Total income plus lump-sum award in 2013 =	\$415,262
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If taxable income is Over:	\$223,050	Then the tax is:	\$49,920
		Plus 33% of the amount Over:	\$223,050

Estimated Adjustment

\$ 415,262	less	\$223,050	=	\$ 192,212
\$192,212	X	33.0%	=	\$63,430
	Plus	\$49,920	=	\$49,920
	Total Federal Tax			\$113,350

\$113,350	is	27.30%	of	\$ 415,262
				The marginal Federal tax rate is:
				on the taxable portion of the award.
				27.30%

Let X be the amount of the Award for compensation that is adjusted for lump sum. "t" is the effective federal tax rate.

$$\begin{aligned}
 (X - tX) &= \$361,262 \\
 X(1 - t) &= \$361,262 \\
 X &= \$361,262 / (1 - t) \\
 X &= \$361,262 / (1 - 27.30\%) \\
 X &= \$361,262 / 72.70\% \\
 X &= \boxed{\$496,894} \quad \text{Amount of award to result in an after-tax damages amount of : } \$361,262
 \end{aligned}$$

Ex. \$496,894 minus (27.30% X \$496,894) = \$361,262

State Tax Adjustment: \$23,070 less actual (\$3,661) = **\$19,409**

Social Security Adjustment:

I have reduced both pre and post termination earnings by the Social Security and Medicare Taxes. However, there is a 0.9% of pay additional amount for medicare tax on income above \$200,000. An award for lost earnings will have earnings taxed for medicare at 1.45% for earnings above the annual post-termination earnings in the year of the award, and at 2.35% for earnings above \$200,000. There will be an additional adjustment for Social Security taxes and Medicare taxes on earnings above the projected SS tax and the actual owed.

Estimated Post-termination compensation: **\$415,262**
(Damages plus mitigating income)

Adjustment for Medicare

Medicare Tax at 1.45%: \$6,021
Medicare Tax at 0.9%: (on amt. > \$200K) \$1,937

Less projected Medicare payment estimated for post-termination earnings in trial year: (\$802)

Medicare Tax Adjustment **\$7,156**

Adjustment for Social Security

SS Tax on earnings limit (\$113,700 in 2013): \$7,049

Less projected Social Security payment estimated for post-termination earnings in trial year: (\$3,431)

Social Security Tax Adjustment **\$3,618**

Total Medicare Tax and Social Security Tax Adjustment:

\$7,156
\$3,618
Total **\$10,775**

North Carolina State Tax
Award Adjustment WLE Option

	Ann.	Mo.		
1 enter monthly wages	\$415,262	\$34,605	<u>\$34,605</u>	
2 monthly portion of Std. Deduction		\$625	<u>\$625</u>	
3 Multiply number of allowances (4) by		\$208	<u>\$833</u>	
4 Add lines 2 and 3			<u>\$1,458</u>	
5 Net Monthly Wages. Subtract line 4 from line 1			<u>\$33,147</u>	
6 Tax to be withheld. Multiply line 5 by 0.058			<table border="1"><tr><td>\$1,923</td></tr></table>	\$1,923
\$1,923				
Annual Estimated Tax			<table border="1"><tr><td>\$ 23,070.18</td></tr></table>	\$ 23,070.18
\$ 23,070.18				
Tax as a % of Gross Income			<table border="1"><tr><td>5.6%</td></tr></table>	5.6%
5.6%				