

HIGH-BOUNTY MEN IN THE ARMY OF THE POTOMAC:

RECLAIMING THEIR HONOR

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METHODOLOGY

This paper discusses aspects of the methodology followed in *High-Bounty Men in the Army of the Potomac* which would not be of sufficient interest to the general reader to warrant inclusion in the print book, but which may be of interest to the scholar or researcher. The following subjects are discussed in more depth than in the print book:

1. Comparison of military and civilian compensation	page 1
2. Comparison of military and civilian compensation--Western States	15
3. Farmers, Laborers and Farm Laborers	16
4. HIBO Database	17
5. Desertion--HIBO Database	18
6. Desertion--"Not Taken Up Factor" and "No Further Record"	19
7. Desertion--Late War New Regiments	22
8. Desertion--Benchmark	23
9. Prior Service	24
10. Second Reams' Station Present for Duty	25
11. Old Pennsylvania Regiments	26

1. Comparison of Military and Civilian Compensation

(Chapter 3 and Tables 3.2 and 3.4)

The various components for the comparison of military and civilian compensation were developed as follows.

Timing.

Timing is a critical--and sensitive--element of the analysis in several ways. First is the

assumption as to the actual duration of service for purposes of comparing military to civilian compensation. Men enlisted under the July 2, 1862 call for three years "or the war" should it end sooner. Although the soldier could be obligated to serve for the full three years, the view that the war would only last another year or less --inaccurate though it proved to be-- was widely-expressed in the summer of 1862. The financial analyses in the newspapers were generally based on that expectation. (1) I therefore have used a one year period of actual service for comparing military compensation to civilian compensation for the July 1862 Call.

For the period from October 1863 call through the March 1864 call I have also assumed a one year term of actual service because that was also the common expectation at the time of how much longer the war would last. That was also the expectation at the time of the July 1864 call. Expectations at the time of these calls proved much closer to the mark.

For the July 1862 call and the October 1863 through March 1864 calls, I have used a three year term of enlistment because that was the standard term at those times. That means that even though the volunteer was assumed to actually serve only one year he would still receive the balance of the three year federal bounty even though he didn't serve three years.

For the July 1864 all, volunteers could elect to serve a one, two or three year term. The proportions of those enlisting for one or three years varied significantly by state. For example, eighty percent of the Pennsylvania volunteers enlisted for only one year, while ninety-five percent of the Connecticut volunteers enlisted for three years. For the six states where the one year enlistment predominated, I have used the one year federal, state and local bounties. For the four states where the three year term predominated I have used the three year bounties. In both cases, I have assumed a one year actual term of service for calculating civilian compensation. (2)

Timing is important in a second sense. Men did not all volunteer on one day and the bounties offered changed over relatively short periods of time. Early volunteers under the July 1862 call may not have received any state or local bounty in addition to the federal bounty. The initial local bounties for the July 1862 call were often funded by private subscription, which would be exceedingly difficult to track on a comprehensive basis. Local governments in the

Eastern States adopted public funded bounties at different times. In Massachusetts, "scarcely a town" didn't offer \$100 by mid-July. Local governments in the other New England States moved somewhat more slowly later in July and early in August. Local governments in New York, Pennsylvania and New Jersey adopted bounties in August more often than July. Union Bounties (Eastern States), latewarunionsoldiers.org.

The earliest regiments raised in the Eastern States under the July 1862 call were organized in August 1862, Fox, *Regimental Losses*, 467-488, but even some recruits for these regiments missed out on local bounties. For example, many of the men recruited for the 111th New York Volunteers, which was authorized on July 19, 1862 and mustered in on August 20, 1862, were credited to towns in Cayuga County. They would have received the \$50 New York State bounty (and possibly privately subscribed and/or town bounties) but would not have received the \$50 Cayuga County bounty authorized on August 22, 1862 or the \$100 bounty authorized on September 3, 1862. However, the men recruited for the 160th New York Volunteers, which was authorized on September 6, 1862, who were credited to towns in Cayuga County, received the \$100 county bounty. Phisterer, *New York in the War of the Rebellion*, IV, 3305, 3868; Bounty #1 and Bounty #2, <https://www.cayugacounty.us/270/Civil-War-Bounties>; Union Bounties (Eastern States).

As in Cayuga County, local governments sometimes increased their bounties as the date for the conditional draft approached. The same was true with the July 1864 call. For both calls, the state and local bounties that I have used were the later bounties offered in those cases. These were the bounties applicable to many volunteers, but definitely not all volunteers.

A third point to be noted on timing is that the data in the *History of Wages* is for a particular year without specifying a particular month within that year. The July 1864 call came two years after the July 1862 call, which justifies using the 1862 and 1864 data without adjustment. The October 1863 through March 1864 calls were a year and a half after the July 1862 call, but quarterly data is not available. Using the 1864 data for these calls may overstate civilian wages somewhat and therefore understate the military to civilian compensation ratio.

Similarly, because recruiting under the December 1864 call occurred primarily in early 1865, I have used 1865 wage data, but that may overstate civilian wages and therefore understate the ratios in comparison to July 1864.

Military Compensation.

The value of the military compensation package was calculated by adding up monthly pay, the federal bounty, the state bounty, the local (county and/or town) bounty and the imputed value of rations. The amounts of the federal bounty and monthly pay were easily found, the state bounties were gleaned from Richard Miller's *States at War* series and the imputed value of board was taken from the 1860 Census. However, there is no comprehensive compilation of local bounties --a critical element for the calculation. (Table 14 to Fry's end of the war report does contain some local bounty data, but it presents the data as averages by district rather than by county and town and has many omissions and qualifications. OR III:5, 740 et seq.) As a result, I used contemporary newspaper accounts to compile the local bounties for over five hundred towns in Eastern States other than New York. For New York State, a report by the New York Bureau of Military Statistics provided data for another seven hundred towns. Insofar as I am aware, the Union Bounties (Eastern States) compilation on this website provides the only broad-based compilation of local bounties by town and county.

Tables presenting the individual components of the military compensation package over a one year time frame for each of the Eastern States for a man enlisting in the late summer of 1862, the spring of 1864, July 1864 and December 1864 are provided in the Economic Database on this website.

Cash compensation is divided into "advance payment" -- the federal, state and local bounties as applicable-- and "monthly pay" -- the salary provided by the federal government as supplemented by the states as applicable--and end of service bounty. (3) (The bounty data is taken from the Union Bounties (Eastern States) compilation that may be accessed at LateWarUnionSoldiers.com.)

An important caveat is that the local bounty number only includes government provided

bounties. It does not include bounties provided by private subscription, which could be significant. For Massachusetts, private funding of bounties and recruiting represented roughly twenty percent of the total expense. (4) However, only limited data is available at best for assigning these private contributions by specific local communities and I therefore have not included them in the analysis.

The imputed value of the "board" provided by the army is included as an element to provide an apples to apples comparison with civilian status. With the notable exception of farm laborers, civilian compensation generally did not include board. A fair question is whether Civil War-era men would have included non-cash compensation in their thinking or whether they would have only compared the cash amounts. The vast majority of comparisons of military compensation to civilian compensation did not include a dollar value for rations. (5) However, rations usually were expressly referred to as being "in addition" to the cash. (6) Richard Miller used the imputed value of board in his comparisons in *States at War*. Following Miller's lead, I have used the implicit state board numbers from the 1860 Census. (7)

Clothing was also often referred to as part of the compensation. However, I have not included a value for clothing because I think that potential volunteers would assign little if any economic value to the uniform--certainly not as much as the army did.

Many of the states and or local governments also provided additional financial support for volunteers with families. A specified monthly amount was typically authorized for the wife and each child up to a maximum amount, typically \$12 a month. The actual implementation varied quite a bit among the states and local communities and family support often came from private sources for which there is no readily available data, so these numbers should be viewed as soft. For that reason, as well as the fact that only about one-quarter of Union soldiers were married, I have not included family support in calculating military compensation, although I have shown it in the military compensation tables.

Today's analysis of a compensation package would also include the pension and life insurance components. I did not include the pension here because during the Civil War the

military pension was only for death and disability. The Union veterans' pension did not become an "old-age" pension until 1907 and that certainly was not foreseeable during the Civil War. The availability of a benefit for dependents in the event of death or disability may have given men some additional comfort about volunteering, but I cannot quantify that. Moreover, while there was newspaper coverage of the 1862 Pension Act amendments reflecting some public interest, it was not as widespread as coverage of the available bounties and pay. E.g. *New York Times*, August 12, 1862, 3; *Elmira Daily Press*, August 14, 1862; *Elmira Daily Advertiser*, August 15, 1862. See also Jordan, *Marching Home: Union Veterans and Their Unending Civil War*, 154.

Civilian Compensation.

In 1934, the Bureau of Labor Statistics published the *History of Wages in the United States from Colonial Times to 1928*, which brought together data from a number of late nineteenth century studies. (8) While the *History of Wages* contains a substantial amount of wage data for specific occupations by state, the data for 1862, 1864 and 1865 is quite limited. For example, the 1860 census included employment numbers for roughly four hundred different occupations in New York State, but the *History of Wages* includes 1862 New York wage data for only thirty-some occupations. Moreover, roughly one-third of the occupation titles in the *History of Wages* were not utilized in the 1860 census, which precludes determining the percentage of the workforce represented by that occupation. Overall, a total of fifty-some occupations is included for 1862 in the *History of Wages*, but usually only for two or three states. New York, Massachusetts and Pennsylvania each have roughly forty different occupations covered in the *History of Wages*. However, there are no data points in the *History of Wages* for Maine and Vermont and only one for Delaware for the years 1862, 1864 and 1865. Overall, the data in the *History of Wages* covers only about twenty to fifty percent of the workforce, depending on the state. The detailed data which has been extracted from the *History of Wages* is presented in the Economic Database

on this website.

Another limitation is that the *History of Wages* presents wages for employees, but does not provide "income" data for proprietors, such as yeoman farmers and merchants. This limitation is particularly significant for "farmers" because they were generally the leading occupation in the Eastern States, averaging over twenty percent of the workforce.

The *History of Wages* presented three data points for each occupation by state--"lowest," "highest" and "average" wage. (The same wage was often assigned to all three.) This reflects the fact that wages for a particular occupation were not necessarily uniform throughout a state (or even throughout a community). The wages were presented on a "per day" basis and are identified by state and gender. The daily rates in the *History of Wages* were converted to an annual rate by multiplying the daily rate by 312 on the assumption that during the Civil War era men typically worked six days a week (10 hours per day). (9)

In order to augment the number of occupations covered, particularly for the states with little if any coverage in the *History of Wages*, two additional sources were utilized. First, 1860 Census data for Farm Laborers, Laborers and Carpenters was used for the states not covered in the *History of Wages*. Second, Stanley Lebergott frequently compared wages in one occupation with wages in another in *Manpower in Economic Growth*. For example, he estimated that factory hands' wages were the same as laborers' wages and that molders' wages were 98 percent of machinists wages. (10) I have used those comparisons to provide additional occupational coverage.

Because wages on a daily basis tended to be higher than wages on a monthly or longer basis due to the "uncertainty of employment" factor, converting the daily wage to an annual number overstates actual annual civilian income, which in turn would understate the military to civilian compensation ratio. Stanley Lebergott estimated that the daily rate was roughly fifty percent higher than the monthly rate for thirty days in 1860. (11) To keep the financial analysis on the conservative side, I have not adjusted for this consideration, although the adjustment for seasonality discussed below may offset the impact somewhat.

For farm laborers--one of the largest occupation groups--an alternative calculation was provided because the data in History of Wages--available only for New York and New Jersey--was not consistent with another data set including New York and New Jersey and because the other data set included the other Eastern States. The alternative data source is the 1860 Census.

(12)

The detailed wage data and the adjustments are presented in individual state tables by occupation for each of the periods studied. See Economic Database, LateWarUnionSoldiers.com The Comparisons.

The ratio of military compensation to civilian compensation was calculated for each civilian occupation by state for which wage data is available for the four time periods to be analyzed: summer 1862; calls of October 1863, February 1864 and March 1864; call of July 1864; and call of December 1864. For each of the four time periods, a table has been prepared for each state showing the ratios, starting with the fifteen leading occupations for that state (data is not available for all of them), followed by any other occupations for which data is available. (The annual wage for that occupation is shown in parenthesis below the ratio.) A ratio greater than 1.0 means that military compensation was greater than civilian compensation for that occupation.

The top fifteen occupations in a state generally account for two-thirds of total employment with the fifteenth occupation representing only 1% or less. The percentage of the workforce covered by each succeeding occupation drops quickly to the lower tenths of a percent and beyond.

Seasonality.

The State Tables on the [LateWarUnionSoldiers](http://LateWarUnionSoldiers.com) website initially presented the ratios assuming that the man worked full time during the year in the civilian occupation. However, that was generally not the case in Civil War-era America. As stated by Stanley Engerman and Claudia Goldin, more than half (perhaps two-thirds) of "the working population of mid-nineteenth century America was employed in one of three seasonally-sensitive sectors--agriculture,

construction and fishing. [They were] seasonally and involuntarily idle for about four months each year." Similarly, Daniel Sutherland noted that: "most unskilled and semi-skilled workers ...were lucky to have a full working year. Seasonal slowdowns and layoffs plagued nearly every industry."

Accordingly, the right hand side of the State Tables reduces the annual wage number by twenty-five percent to account for seasonality. This adjustment is important because it presents a more accurate basis for comparison than annualized civilian data. (13) Indeed, some newspapers emphasized the certainty of year-round pay in their analysis of military compensation. (14) Because the economy was very strong in 1864 due to the demands of the war, the twenty-five percent adjustment for seasonality based on market cycles rather than weather (e.g. machinists) may not be entirely appropriate for 1864. If the twenty-five percent adjustment were removed for particular indoor occupations, that would increase civilian compensation in relation to military compensation, thereby reducing the ratio.

Assessing Motivation.

It is important to note that because of the complexity of individual decision-making, as well as limitations on the wage data, it is not possible to draw conclusions along the lines that x% of men enlisting in the Union army in the summer of 1862 were motivated primarily by the economic benefits compared to their civilian situation rather than by patriotism. Only directional conclusions are possible. For example, it would be possible to conclude that the military compensation package likely would have been economically attractive to a man in a particular occupation in a particular state, but not to a man in a different occupation or to a man in the same occupation in a different state.

The critical question is how economically attractive does the military compensation package have to be to motivate a man to enlist primarily for economic reasons? For a man motivated to enlist by patriotism but concerned that doing so would have an adverse financial impact on his family, a 1.0 ratio of military to civilian compensation could be attractive because his family's financial needs could be covered. (A 1.0 ratio would reflect the bounties as a

"patriotic subsidy.") However, the debate is not about that hypothetical man. The debate is about whether men enlisted primarily for economic reasons.

What ratio would indicate that the military compensation package was attractive enough that a man would enlist primarily for economic reasons, despite the hardship of separation from family and friends and the risk of death or injury from war? Drawing on popular culture--which admittedly is not evidence-based social science, I have seen that the prospect of "doubling your money" in a short period of time is viewed as an opportunity not to be passed up. I am assuming that Civil War-era men would have felt the same way about an opportunity to "double their money." (15) Accordingly, I have chosen the ratio of 2.0 to represent a military compensation package that would be "economically compelling"--attractive enough to motivate a man to enlist primarily for economic reasons.

A ratio of 2.0 is an arbitrary benchmark. A ratio greater than 1.0, but less than 2.0 could still have been of some economic interest to a potential volunteer, just not to the degree that I have assumed to be "compelling."

Estimating the Extent of Economic Attractiveness

Calculating the ratios of military compensation to civilian compensation by occupation and state is a critical step, but it is still necessary to estimate the percentage of men in the civilian workforce for whom military compensation would have been "economically compelling."

As noted, "income" data is not available for farmers. For the remaining three-quarters or so of the workforce, wage data for each of the states was generally available for roughly forty percent. Within that forty percent, it is possible to calculate the percentage for whom the ratio would have been "economically compelling," but that represents only part of the picture. To provide a more complete picture, I have extrapolated for wage earners for whom there is no wage data in the *History of Wages*. I began by subtracting the percentage of farmers in the workforce from one hundred percent to get a rough percentage for the wage earners in each state's workforce. I then calculated the percentage of wage-earners for whom the ratio was 2.0 or more. That percentage was multiplied by the percentage of wage-earners to calculate the extrapolated percentage of the

workforce for whom the ratio was 2.0 or more. (The same was done for the "economically interesting" ratio of 1.5. (As a caveat, this approach to extrapolation overstates the percentage of wage-earners for whom military compensation was economically attractive because the percentages for two of the occupations utilized are extraordinarily high compared to other wage-earning occupations--laborer and farm laborer.)

Endnotes

1. E.g. "When we enlisted we supposed the war would be ended, and what was left be at home in less than a year..." (Letter from "B." of the 148th New York Volunteers, which was organized in September 1862, to the Editor, dated September 12, 1864, *The Geneva Daily Gazette*, September 23, 1864; *[Montpelier, Vermont] Daily Green Mountain Freeman*, July 14, 1862, 3; *The [Cooperstown, New York] Freeman's Journal*, July 25, 1862, 3; *Portsmouth [New Hampshire] Journal of Literature and Politics*, August 16, 1862, 3; *Daily Pittsburgh Gazette*, July 21, 1862, 1; *Poughkeepsie Eagle*, August 2, 1862, 2; *[Falls Village, Connecticut] Housatonic Republican*, July 26, 1862, 2; Peck, *Revised Roster of Vermont Volunteers*, 478. ("Not a few had left college and the learned professions, to serve, during what most of them believed would be the last year of the war ...; " *Pittsburgh Gazette*, July 21, 1862, 1 ("[I]t does not seem within the range of probability that this accursed rebellion can last for another year."); *Daily Green Mountain Freeman (Montpelier, VT)*, July 14, 1862, 3 ("[T]he calculation is that the rebellion will be crushed in less than one year."); *Housatonic Republican (Falls Village, CT)*, July 26, 1862, 2 ("[I]t is almost certain that the war will terminate" within one year."); *Poughkeepsie Eagle*, August 2, 1862, 2 "[T]here is hardly a shadow of probability that the war will last over one year ..."); *Portsmouth (NH) Journal of Literature and Politics*, August 16, 1862, 3 ("This war can not last a year longer."); *Freeman's Journal (Cooperstown, NY)*, July 25, 1862, 3 ("In all human probability, the Rebellion will be crushed out, and the war concluded within a year.").

2. Late 1863/early 1864: *Portsmouth Journal of Literature and Politics*, November 14, 1863, 2 (advertisement); *(Manchester, NH) Daily Mirror*, December 9, 1863, 2 (advertisement);

Burlington Weekly Free Press, October 23, 1863, 2, December 4, 1863, 2; (*Montpelier*) *Watchman*, February 5, 1864, 2; (*Montpelier*) *Daily Green Mountain Freeman*, December 28, 1863, 2; (*Concord, NH*) *Independent Democrat*, November 12, 1863, 2; (*Georgetown, DE*) *Union*, February 19, 1864, 3; *Rutland County (VT) Herald*, November 26, 1863, 1; *Hartford Courant*, March 5, 1864, 2; *Boston Morning Journal*, November 20, 1863, 4; *Ithaca Journal and Advertiser*, December 9, 1863, 2; *Portsmouth Journal of Literature and Politics*, November 14, 1863, 2; *Lancaster Daily Inquirer*, January 21, 1864, 2; (*Butler, PA*) *American Citizen*, January 6, 1864, 4; (*Ebensburg, PA*) *Alleghanian*, January 7, 1864, 2. Skeptical: [*Concord*] *New Hampshire Patriot and State Gazette*, February 10, 1864, 2, February 17, 1864, 2.

Late summer/fall 1864: *Albany Evening Journal*, July 20, 1864, 2; *Hornellsville (NY) Tribune*, September 8, 1864, 3 (New Hampshire Governor Gilmore speech); *Fall River Daily Evening News*, September 10, 1864, 2 (Gilmore speech). Skeptical: Livermore, *Eighteenth New Hampshire*, 8.

3. The federal government paid the first month's pay in advance, but this amount has been kept in monthly pay because the advance was only 30 days. The \$2 federal recruiting premium was paid at the time of volunteering, but this item has not been included because a volunteer enlisting through an agent would not receive it.

4. Miller, *States at War*, Vol. 1, 324.

5. Exceptions were the *Paterson (NJ) Daily Register*, July 25, 1862, 2, which valued rations at \$108 (and clothing at \$20) for one year; *The Rutland County (VT) Herald*, August 28, 1862, 5, which valued rations at \$20 per month; and the *Waltham (MA) Sentinel*, December 4, 1863, 2, which valued rations for three years at \$324.

6. E.g., New York: *Albany Evening Journal*, July 20, 1864, 2; *The [Cooperstown] Freeman's Journal*, July 25, 1862, 3; *Ithaca Journal and Advertiser*, August 31, 1864, 2; *Yates County Chronicle*, July 24, 1862, 3; Massachusetts: [*Boston*] *New England Farmer*, August 6, 1864, 2; *Springfield Republican*, July 30, 1864, 2; *Newburyport Morning Herald*, August 1, 1864, 3; *Boston Morning Journal*, November 20, 1863, 4. New Jersey: *Monmouth Democrat*,

July 24, 1862, 2; *Trenton State Gazette*, August 29, 1864, 3; Connecticut: [Hartford] *Connecticut Courant*, July 19, 1862, 2.

7. E.g., Miller, *States at War*, Vol. 1, 48; *Statistics of the United States (Including Mortality, Property, & C.) in 1860*, 512. The imputed board number for New York from the 1860 Census is \$116 a year. In an 1864 analysis of military compensation, the (*Port Jervis, NY Tri-States Union*, August 26, 1864, 2, used \$150 a year, which suggests the impact of inflation. However, I have not attempted to adjust the imputed board number for 1864 because the difference is small in dollar terms and I do not have equivalent data for the other Eastern States.

8. Stanley Lebergott notes that there are two sets of wage data available for the Civil War-era--Department of Labor data collected in the 1890's (often referred to as the "Aldrich Report") and Census Bureau collected as part of the 1880 Census (often referred to as the "Weeks Report"). He states that: "both provide a haphazard collection of wage data that need analysis, allowance for bias, and careful weighting before they can be utilized." *Manpower in Economic Growth*, 289. Lebergott prefers the Census data to the Department of Labor data, but the Census data is not presented in a convenient state by state format for each occupation, which is necessary for my approach. Clarence Long discussed the limitations and advantages of the available data sets in *Wages and Earnings in the United States 1860-1890*, Princeton University Press: Princeton (1960), 10-12. He observed that: "It will be appreciated that the statistics of this period are far short of ideal." Notwithstanding my calculation of ratios down to the nearest tenth, I have used the *History of Wages* data with the recognition that it permits only directional conclusions.

9. Sutherland, *The Expansion of Evreryday Life, 1860-1876*, 78,161; Lebergott, *Manpower in Economic Growth*, 143 (26 days per month). The *History of Wages* also reported the hours worked per week for the occupation, which was typically reported as 60. When the *History of Wages* reported a higher number of hours per week, I did not make an adjustment to the number of days worked in the year, assuming that the employee just worked a longer day rather than all or part of Sunday. (See Weeks, *Report on the Statistics of Wages in the*

Manufacturing Industries with Supplementary Statements, xxviii-xxix. In his *States at War* reference work, Miller converted the daily wage for laborers reported in the 1860 Census to an annual wage by multiplying by 365. See, e.g., Miller, *States at War*, Vol. 1, 48) Thus Miller's numbers probably overstate the amount of civilian compensation for day laborers (and carpenters).

10. Lebergott, *Manpower in Economic Growth*, 302, 301.

11. *Ibid.*, 143, 242-44.

12. *Statistics of the United States (Including Mortality, Property, & C.) in 1860*,

512. The data for New York farm laborers in the *History of Wages* was also higher than the local wage numbers reported in the 1865 New York Census for 1860 for the localities that I investigated for my first book.

The *History of Wages* reports lower annual wages than the 1860 Census for laborers but higher annual wages for farmhands. which results in the opposite conclusion that military cash compensation (\$358 over one year) would have been attractive to laborers, but not necessarily farmhands. Lebergott used the 1860 Census data for farm laborers rather than the *History of Wages* data.

13. Stanley Engerman and Claudia Goldin, "Seasonality in Nineteenth Century Labor Markets," Working Paper No. 20, National Bureau of Economic Research Working Paper Series on Historical Factors in Long Term Growth (January 1991, 1, 3; Sutherland, *The Expansion of Everyday Life 1860-1876*, 162; Lebergott, *Manpower in Economic Growth*, 169.

See generally Weeks, *Report on the Statistics of Wages in the Manufacturing Industries with Supplementary Statements*, xxxiv. In an 1860 article on "Labor and Wages," the *New York Tribune* reported that: "In many cases workmen lose three and four months in the whole year, while in the Wintry weather, when they are employed, their receipts are reduced by reason of short hours." The *Tribune* specifically noted that brick layers "are out of employment, upon an average, about three months of the year"; that stone cutters, "in some years, lose about four months, from frequent frosts, and other causes"; and that painters "are unemployed at least

three months of the year." *New York Tribune*, March 31, 1860, 5.

It is possible that a seasonally affected worker might have been able to find employment in another sector. For example, a farm laborer might work in a factory during the winter. However, Engerman and Goldin concluded that "dovetailing of agricultural and industrial employment in the nineteenth century was slight," *Ibid.*, 1, so I have not considered that. (But see Marvel, *Lincoln's Mercenaries*, 90) There was also unemployment independent of seasonal factors, but because of the lack of any data, I have not attempted to reflect that here.

The impact of seasonality on recruiting was noted at the time. For example, the *Pittsburgh Daily Post* noted in September 1864 that: "... harvesting operations being in a great measure over in agricultural regions, the labor that is relieved from this work is offering itself to the army as the most profitable employment to which it can return." September 3, 1864, 3. Similarly, the *Brooklyn Daily Eagle* wrote in October 1864 that: "The season is coming on when there will be plenty of men out of employment and ready to accept the bounties..." and again in December 1864 that: "At this season of the year when work is scarce plenty of men will be found ready to enlist if liberal bounties are offered." October 26, 1864, 2; December 20, 1864, 3.

14. *Hartford Daily Courant*, August 4, 1862, 2; *Rutland Weekly Herald*, August 28, 1862, 4.

15. Advertisements in Civil War-era newspapers demonstrate that Civil War-era men were familiar with the concept of doubling your money in a short time. *New York Daily Herald*, January 11, 1860, 7 ("Make Money. Splendid investment. ... Can double your money next winter."); *Vermont Journal (Windsor)*, February 9, 1861, 8 ("In that way, you double your money the first year."); *New York Observer*, September 14, 1865, 5 ("Splendid chance for business; double your money in three months."); *Buffalo Commercial*, June 23, 1865 ("Here is a chance to double your money."); and *Public Ledger (Philadelphia)*, March 22, 1860, 3 ("BE YOUR own master, conduct your own business and double your own money at every sale.")

2. Comparison of Military and Civilian Compensation--Western States

(Chapter 3, Note 63)

The conclusion that the military compensation package offered in the Eastern States in the summer of 1862 could have been viewed as "economically compelling" for at least a quarter and perhaps as many as half of the men in the civilian workforce probably does not hold true for three reasons.

First, state and local bounties may have been lower in the Western States than the Eastern States in 1862. I did not research 1862, but they were generally lower in the Western States in 1863 and 1864. See OR III:5, 740 et seq.

Second, civilian wages in the Western States (excluding California and Oregon) may have been pretty much the same as in the Eastern States. In 1860, wages for laborers and farm laborers were the same, while wages for carpenters were slightly higher in the Western States. Secretary of the Interior, *Statistics of the United States in 1860*, 512. The combination of the first and second factors would likely drive the ratios for most occupations below 2.0, although for unskilled occupations, they may still have been somewhat above 2.0.

Third, the composition of the state workforces was somewhat different. As with the Eastern States, "farmer" was the leading occupation in the Western States. However, the percentage of farmers in the Western States was much higher. For example, nearly half of the workers in Indiana in 1860 were farmers and more than a third of the workers in Ohio, Michigan and Illinois were farmers. The percentages of laborers and farm laborers were not significantly different, but factory hands were less than a tenth of a percent in Indiana, Illinois, Michigan and Ohio, while it was as high as seven percent in Massachusetts and eight percent in Rhode Island. Calculated from Kennedy, *Population of the United States in 1860*, passim.

There is also a practical problem. Data on civilian wages in the "Western States" during the Civil War is extremely limited. A quick review of the *History of Wages* shows data for Ohio for a number of occupations (e.g. laborer, blacksmith, carpenter, and machinist) and for Michigan for laborers, but not for any of the other Western States. It might be possible to locate data for individual states for 1862 from other sources, but I would not be optimistic.

I have not researched how the individual Western States met their quotas in terms of the

mix among volunteers, substitutes and draftees, but at least for the July 1864 call, it appears that the Western States relied more heavily on draftees than the Eastern States did. OR III:5, 735.

3. Farmers, Laborers and Farm Laborers

(Chapter 3, Note 68)

Analysis of Union soldiers based on their occupation is complicated by the fact that the Union army used two classifications--farmer and laborer, while the U. S. Census used three for the same group of men--farmer, laborer and farm laborer. (The conclusion that the Union army used only two classifications is based on examination of countless enlistment forms rather than an explicit written instruction.)

The instructions for the census-takers directed that: "The proprietor of a farm ... is to be recorded as a farmer; the men who are employed for wages by him are to be termed farm laborers." Census Office, U.S. Department of the Interior, *Eighth Census, United States-1860: Instructions to U.S. Marshals*, (Washington, D.C.: Geo. W. Bowman, Public Printer, 1860), para. 10, 15. I have not located instructions on whether the military classified a farm laborer as a farmer or as a laborer. The difference is important because it impacts economic status.

In order to gain further insight, I cross checked the men reported as "farmers" in the unit rosters for the 122nd New York Volunteers and the 187th New York Volunteers against the 1860 Census. While the results are rather different, both regiments indicate that it cannot be assumed that the men reported as "farmers" in a unit roster were all farm owners or their sons.

For the men from the 122nd New York who were identified in the muster roll as farmers and who could be identified with reasonable certainty in the 1860 census, only about one-third were farm owners or their sons. Of the men reported as "farmers" at muster, sixty percent were recorded as farm laborers or laborers in the 1860 census with only slightly more than ten percent being the sons of farm owners. (James McPherson has written that farm laborers "in most cases were the sons of farmers working on their family farm." *For Cause and*

Comrades, 182.

122nd New York Volunteers--Men identified as "Farmers" at enlistment versus occupation stated in 1860 Census

1860 Census	Occupation	Status	Percent
	Farmer	Owner	4.60%
	Farmer	Renter	3.40%
	Farmer	Son	6.90%
	Farm Laborer	Living on family farm	6.10%
	None stated	Living on family farm	13.40%
	Laborer	Living on family farm	0.80%
	Subtotal		35.20%
	Farm Laborer	No family farm	27.90%
	Laborer	No family farm	23.70%
	None stated	No family farm	13.40%
	Subtotal		65.00%

Source: Calculated from muster roll abstract, 122nd New York Volunteers and 1860 Census, both Ancestry.com. Of the 344 men identified as "farmers" at muster approximately three-quarters were identified with reasonable certainty in the 1860 Census.

For the 187th New York, two-thirds of the "farmers" were either farmers or the sons of farmers according to the Census, while a third were likely farm laborers. Compiled from Muster Roll Abstracts, 122nd and 187th New York Volunteers, and 1860 U.S. Census, Ancestry.com.

4. HIBO Database

(Introduction, Note 25)

The HIBO Database is populated with soldiers from late-war new infantry regiments in the Army of the Potomac, old Pennsylvania and New Jersey infantry regiments in the Army of the Potomac at the beginning of the Overland Campaign (but with data going back to 1861), and the New York infantry regiments discussed in the book, plus an additional half dozen Pennsylvania and New Jersey regiments not in the Army of the Potomac or not in the Army of the Potomac at the beginning of the Overland Campaign--a total of eighty-six regiments.

The Pennsylvania Reserve infantry regiments in the Army of the Potomac are included,

although they mustered out at the end of the Overland Campaign, except the 9th Pennsylvania Reserve (38th Pennsylvania Volunteers), which was pulled from the Battle of the Wilderness and mustered out on May 12, 1864. The 126th, 127th, 129th and 130th Pennsylvania, nine-month regiments from 1862 which mustered out in May 1863, are included in the HIBO Database, but were excluded from the Army of the Potomac searches.

The HIBO database includes the 13th, 33rd, 34th, 35th and 38th New Jersey, which were not in the Army of the Potomac at the beginning of the Overland Campaign, but they were excluded from the calculations for Table 5.1 and Table 5.2.

A wide variety of soldier data may be accessed on an individual regiment basis on the latewarunionsoldiers.org website. However, with the current configuration of the website, data for groups of regiments, such as the Army of the Potomac, cannot be accessed on the website. For questions about searches involving multiple regiments, such as the searches supporting Table 5.1, Table 5.2 and Table 6.1, contact the author.

5. Desertion--HIBO Database

(Introduction, Note 25 and Chapter 5, Note 12)

In 1866, the federal Provost-Marshal-General's Bureau published a "Descriptive List of Deserters from Pennsylvania Military Units During the Civil War." The list was compiled at the request of the Republican-dominated Pennsylvania Legislature which adopted legislation denying deserters--presumed to be mostly Democrats--the right to vote. Pennsylvania State University recently made the Descriptive List of Deserters available on line. Penn State University Libraries, "The People's Contest: A Civil War Era Digital Archiving Project," <https://peoplescontest.psu.edu/descriptive-list-deserters-pennsylvania-military-units-during--civil-war>; Costa & Kahn, "Deserters, Social Norms, and Migration," 327.

Shortly after the end of the war, Samuel P. Bates, the State Historian, was appointed by Governor Curtin to prepare the "Military History of the organization of Pennsylvania Volunteers and Militia" authorized by the Legislature. Working without any cooperation from the Provost-Marshal-General's Bureau, Bates relied on veterans to provide the records for their units. Bates'

five volume *History of Pennsylvania Volunteers, 1861-5* was published in 1868.

Many deserters returned to their regiments at some point, either voluntarily or after being caught by the military authorities. Because of the difficulty in determining which returns were voluntary and in weighing the impact of the duration of a desertion followed by a voluntary return, I have not considered returns in my calculations. The Deserters' Branch reported that of the deserters "regained" "about 42 per cent. have been arrested by special officers, 33 per cent. by citizens, and 25 per cent. have voluntarily surrendered themselves, including under the President's proclamations." Seventy-seven thousand were reported as arrested. OR III:5, 755, 757. I also only considered soldiers for whom both the enlistment date and the desertion date were available. Without the enlistment date, it cannot be determined whether a man deserting from an old regiment in 1864 or 1865 was a later-enlisting volunteer or a veteran from 1861 or 1862. For individual regiments, the number of such men is generally small.

6. Desertion--"Not Taken Up" Factor and "No Further Record"

(Chapter 5, Note 13)

I have calculated desertion percentages based on regimental records such as unit rosters and registers of deserters in descriptive books. These records are generally limited to soldiers who reported to the regiment and were officially recorded in the regimental books. These regimental records generally do not record men who were assigned to the regiment upon enlisting, but did not actually report to the regiment.

The men who did not report can be identified for a particular regiment by searching the CMSRs (NARA) for the men in the regiment. A man who was assigned to the regiment upon enlistment, but did not report usually has a notation along the lines of "Not Taken Up on the Rolls of the Regiment" in his CMSR. These men typically were bounty jumpers, but I have in rare instances seen other reasons for not reporting to the regiment, such as dying of illness in the depot hospital.

The "Not Taken Up Factor" undoubtedly figured in Grant's statement about receiving in the field only one soldier for every five men reported "North" as having been mustered. See Chapter 1, notes (43) and (44) and related text.

In October 1864, the Adjutant General's Office estimated that ten percent of the men were lost between enlistment and reporting to a regiment. OR III : 4:2, 813, note a. Beyond that, absent a worksheet that Grant or his staff may have prepared, the "Not Taken Up Factor" can be tested only on an individual regimental basis insofar as I am aware.

I tested three regiments against the Adjutant General's ten percent estimate. I do *not* claim that they are typical. The experience of the 200th Pennsylvania, which was recruited in the fall of 1864, supports that number. The experience of the 179th New York, which was initially recruited in the spring of 1864, indicates a twenty-five percent number, as does the experience of the 52nd New York.

The 200th Pennsylvania was raised in the late summer and early fall of 1864. Around 10.5% of the men assigned to the 200th Pennsylvania were "not taken up"--close to the ten percent estimate by the Adjutant General. Eleven percent of the men joining the regiment deserted before reaching the field. Thus somewhat in excess of twenty percent of the men assigned to the 200th Pennsylvania "reported North" in Grant's words as having enlisted were lost to desertion before arriving in the field. While an eighty percent yield certainly would have been disappointing, it is a far cry from Grant's estimate of only a twenty percent yield.

The 179th New York presents a more significant loss to desertion. The first five companies of the 179th New York Volunteers raised about 450 men in the spring of 1864. Adding the approximately 200 men assigned to the 179th New York who were "not taken up" would yield 650 as the "number reported North as having enlisted." Approximately one hundred men from these five companies deserted en route to the front. In this case, Grant would have received 350 of the 650 men "reported North"-- a yield for the field of somewhat more

than half. While a fifty percent yield certainly represented significant loss due to desertion, it was still better than the twenty percent yield that Grant complained of. (Of the roughly 45% loss for the 179th New York, 30% was between enlistment and departure from the central depot and 15% was en route to the regiment.)

For the 52nd New York, 45.6% of the recruits assigned in 1864 "never joined the regiment" which presumably was the equivalent of "not taken up". (The percentage for the 1863 recruits was substantially lower--only 10.8%.

William Stryker included as a category "Unassigned Substitutes"--men forwarded from a draft rendezvous in New Jersey to a regiment in the field who "never reported, and are not accounted for on the Company rolls of the Regiment." This number was as high as 153 substitutes for a single regiment (6th New Jersey). Stryker, *Record of Officers and Men of New Jersey in the Civil War, 1861-1865*, Vol. 1, 297-99.

Because deserters who had enlisted in 1861 and 1862 apparently generally did so after reporting to their regiment, the Not Taken Up Factor may not apply to the old regiments to any significant degree. For example, in the 52nd New York, only four volunteers from 1861 were reported as having "Never Joined Regiment." Unit Roster, NYSMM website. Of the 112 men in the 160th New York who were credited to towns from Cayuga County in 1862, only five (4.5%) were not listed in either the unit roster or the muster roll abstract. However, of the 38 men credited to Cayuga County towns who were assigned assigned to the 75th New York in 1862, there is no record that ten of them (26.3%) ever joined the regiment. Compiled from Bounty #1 and Bounty #2, <https://www.cayugacounty.us/270/Civil-War-Bounties>; Muster Roll Abstract, Fold3.com; Unit Roster, NYSMM. Under the 1862 call for nine months' men, the 11th and 12th Rhode Island were organized with a total of 2069 men. One hundred fifty-five men deserted from camp before being assigned to a company, but were still counted in the quota. Miller, *States at War*, Vol. 1, 487. That would be a loss of 7.5% that could be equivalent to the Not Taken Up Factor. Further research is necessary to clarify the not taken up factor for old regiments..

An additional challenge to calculating accurate desertion percentages is the notation “No Further Record” in a unit roster or a CMSR. If the phrase follows immediately after the muster date, it might seem likely that the man deserted. However, records were kept of desertion. Because of the frequency of misspellings and incorrect regimental identifications in field records (the carded medical records are an excellent example), it may simply mean that the relevant records were not located. I have therefore not included instances of “No Further Record” in my desertion calculations. That could understate the actual desertion rates.

I did not research the frequency of the "No Further Record" entry as a general matter, but did review the unit rosters of the late war 184th New York and the 186th New York, which are discussed in Chapter Four. In the 184th New York, there were only two such entries, one after the soldier was sent to hospital and the other after the soldier was injured in a railroad collision. Neither situation suggests desertion as opposed to losing track of the soldier after he was away from the regiment. In the 186th New York, there were thirty-four "No Further Record" entries after the man had enlisted. This could represent an additional three percentage points for desertion. However, all but one of the entries related to men who were described as "unassigned" and had no company reference. Thus these men may well have been equivalent to the "Not Taken Up Factor" and therefore already covered by the general ten percent desertion factor for men "Not Taken Up."

7. Desertion in Late-War New Regiments

(Chapter 5, Table 5.7)

Additional source information is the following:

31st Maine. The Register of Deserters in the 31st Maine's Descriptive Book lists 129 deserters. (Whitman and True, *Maine in the War for the Union*, 634, report 118.) The 31st Maine received two additional companies, "L" and "M," in October 1864. Company M had a

disproportionately high desertion rate. Therefore I have calculated two percentages--the desertion rate for the original complement (7%) and the rate for the regiment overall, including Companies L and M (11%). 32nd Maine. Calculated from the "Complete Roster" in Houston, 459 *et seq.*, which identifies 35 desertions. Whitman and True, *Maine in the War of the Rebellion*, 634, reports only 22. 57th Massachusetts. Wilkinson, Appendix 5, 631. HIBO Database 10.9%. 18th New Hampshire. Livermore, 19-20, 119-120. 186th New York. Compiled from Company Registers of Deserters, 186th New York Descriptive Book, NARA. 187th New York. Compiled from Unit Roster, Muster Roll Abstract and Register of Deserters 187th New York Volunteers.

8. Desertion--Benchmark.

(Chapter 5, Note 26)

Determining a normal or benchmark desertion rate for the Union army is problematic. The thirty percent desertion rate for the peacetime regular army prior to the Civil War would not be acceptable for an army at war. Overall, roughly ten percent of Union soldiers deserted during the Civil War. Gallagher, *The Enduring Civil War*, 40; Halleck, "The Role of the Community in Civil War Desertion," 128; Lonn, *Desertion*, 226 ("one in seven"/12.8%); Costa and Kahn, "Deserters, Social Norms, and Migration," 323 (9%). The percentage is necessarily an approximation given the uncertainties in the numerator. See OR III:5, 677. In his final report, Fry stated that the ratio of deserters to "credits" was 62.51 per thousand for the "Loyal States" as a group, which would be a 6.25% desertion rate. OR III:5, 668. But See Chapter Five, Note 10, *supra*. Considering all the complications involved with "credits," this may not be a good indicator and it does seem low. The Regular Army suffered a desertion rate of roughly twenty-five percent during the war. Lonn, *Desertion*, 219. Contemporary desertion rates for foreign armies apparently are not readily available. Costa and Kahn noted that the desertion rate for the French army in the first half of the eighteenth century was around twenty percent. "Cowards and Heroes: Group Loyalty in the American Civil War," 521, n. 1.

In any event, because the ten percent number includes the substantial number of late war replacements themselves, it is not an appropriate benchmark. A more practical benchmark for assessing the late war replacements would be the desertion rates for the original complement of regiments organized in 1861. Costa and Kahn state that "a soldier who enlisted in 1861 had a probability of deserting half that of a soldier who enlisted in 1863" and that "a volunteer's odds of desertion were three-quarters lower than a draftee's or substitute's." *Heroes & Cowards*, 108.

9. Prior Service

(Chapter 7, Note 47)

Because a soldier's prior service in another regiment is generally not included in unit rosters or similar regimental records, I have generally calculated the percentage of soldiers in a regiment who had previously served in another unit using the Civil War Pension Index which is available on fold3.com.

The Civil War Pension Index was compiled many years after the war for purposes of administering the pension system. As presented on line, the index cards for individual soldiers may be accessed by regiment and the companies within the regiment. See NARA Reference Information Paper 109, "Military Service Records at the National Archives," 2007, 35-40. The index card form called for a variety of information about the individual soldier, including enlistment and discharge date and "Additional Services," which included prior service in another regiment if applicable. The number of pension applicants with prior service is divided by the total number of pension applicants for the regiment.

A threshold question is how accurate the "Additional Services" reporting was. If the "Additional Services" space is blank, that could mean that the soldier had not served in another unit or that the scribe filling out the card simply hadn't recorded the information. (Certain categories of information on the index card--notably enlistment date and discharge date--often were not filled in.) I believe that "Additional Services" information was generally accurately retrieved based on a variety of cross checks.

My methodology may overstate somewhat the percentage of men with prior service, probably because men with prior service were more likely to have incurred a service-related condition that qualified them for a pension.

A probably more precise number could be calculated by reviewing the enlistment forms in the individual soldier's CMSR. CMSRs are organized by regiment. (See NARA Reference Information Paper 109, 9) The standard enlistment form included a space on the second page for identifying a prior enlistment. Because a man with prior service generally was entitled to a higher bounty, it would be in his interest to declare that prior service (unless he had left the prior unit under questionable circumstances.) However, using the CMSR's would have entailed significantly more research time and for my purposes, the approximation of prior service that could be obtained from the Civil War Pension Index was sufficient.

10. Second Reams's Station Present for Duty

(Chapter 9, Note 16)

There are significant holes in the regimental books of the 7th, 39th and 52nd New York so that their numbers of men "present for duty" on August 25, 1864 are not available. (Field returns in a different file at NARA might provide that information, but I did not search for them.) Instead, I have estimated the troop numbers for the 39th and 52nd New York using the unit rosters on the NYSMM website. These estimates are very rough.

The 39th New York's order book shows 453 enlisted men "present" as of August 31, 1864, but that would include new recruits arriving after Second Reams' Station and men sick but not sick enough to be in hospital. Regimental Books, vol. 2, 281, RG 94, NARA. The 27 casualties suffered at Reams' Station would not be included. Phisterer, *New York in the Civil War*, Vol. 3, 2189.

The 52nd New York had a total of 618 men as of August 4, 1864, but it is not apparent whether this number is present for duty. Regimental Books, vol. 4, RG 94, NARA.

An inspection of the 7th New York right after their arrival in the Second Corps reported that they had nineteen sergeants, twenty-eight corporals and 203 privates for a total of 250

"muskets." Regimental Books, RG 94, NARA.

11. Old Pennsylvania Regiments

(Chapter 7, Table 7.1 and Note 8)

Additional source information is the following:

11th Pennsylvania (Fox, *Regimental Losses*, 262, Bates, *History of Pennsylvania Volunteers*, Vol. 1, 262, 1066; 45th Pennsylvania (*Harrisburg*) *Evening Telegraph*, February 8, 1864, 3; 48th Pennsylvania (*Philadelphia Inquirer*, January 20, 1864, 8); 49th Pennsylvania (Bates, *History of Pennsylvania Volunteers*, Vol. 1, 1241); 50th Pennsylvania (*Daily Evening Bulletin (Philadelphia)*, February 2, 1864, 4); 53rd Pennsylvania (Letter from Capt. Jones dated December 25, 1863, Regimental Letter Book, 53rd Pennsylvania Volunteers Regimental Books, RG 94, NARA; Myers, 53rd Pennsylvania, 151; *North Branch Democrat (Tunkhannock, PA)*, January 13, 1864, 3); 57th Pennsylvania *North Branch Democrat, (Tunkhannock, PA)*, January 13, 1864, 3; Bates, *History of Pennsylvania Volunteers*, Vol. 2, 252); 63rd Pennsylvania (Bates, *History of Pennsylvania Volunteers*, Vol. 2:497; Fox, *Regimental Losses*, 276); 82nd Pennsylvania (Bates, *History of Pennsylvania Volunteers*, Vol. 2, :1207; 83rd Pennsylvania (Bates, *History of Pennsylvania Volunteers*, Col. 2, 1256); 93rd Pennsylvania (Bates, *History of Pennsylvania Volunteers*, Vol. 3, 284; *Lebanon (PA) Advertiser*, February 17, 1864, 3); 95th Pennsylvania (Bates, *History of Pennsylvania Volunteers*, Vol. 3, 338; Fox, *Regimental Losses*, 285); 100th Pennsylvania (Bates, *History of Pennsylvania Volunteers*, Vol. 3, 554; *Presbyterian Banner (Pittsburgh)* February 10, 1864, 3; (*Philadelphia*) *Age*, January 26, 1864, 2); 116th Pennsylvania (Dyer, *Compendium of the Civil War*, Vol. 3, 1612; Fox, *Regimental Losses*, 292; 143rd Pennsylvania (Dyer, *Compendium of the Civil War*, Vol. 3, 1617); 145th Pennsylvania (OR 40:1, 361-62; Dyer, *Compendium of the Civil War*, Vol. 3, 1617); 148th Pennsylvania (Fox, *Regimental Losses*, 302; Bates, *Pennsylvania in the Civil War*, Vol. IV, 579; Dyer, *Compendium of the Civil War*, Vol. 3, 1618).