

# Calculating the Prevailing Wage in West Virginia



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**Executive Summary**

# 1 Introduction and Overview

In this report we design a new methodology for calculating Prevailing Wages in West Virginia for state-funded construction projects that exceed a threshold of \$500,000 in size. This work follows directly from Senate Bill 361, which was signed into law by Governor Earl Ray Tomblin in the March 2015.

For states where prevailing wages have been legislated, these laws require that firms awarded projects for new construction and renovation of public buildings or infrastructure compensate workers to at least the wages and fringe benefits that prevail for other similar projects in the local area. As a formal policy, prevailing wage was first enacted at the state level by Kansas in 1891, followed by New York, Oklahoma, Idaho, Massachusetts and New Jersey over the course of the next three decades. West Virginia joined several other states during the early 1930s by passing its own prevailing wage rate policy.

As a national policy, however, prevailing wage rules were not adopted at the federal level until the passage of the Davis-Bacon Act (DBA) in 1931. After several amendments to the DBA in subsequent years, the legislation stipulated that workers participating in federally-financed construction, alteration or repair activities valued at \$2,000 or more would be paid wages and fringe benefits that prevailed in a local area. Since the early 1980s, the prevailing wage for a specific occupation is the hourly rate paid to at least 50 percent of workers in that occupation for the local area. However, if a singular rate does not exist for at least 50 percent of an occupation, the prevailing wage is set to the average rate paid for that occupation in the area.

Proponents of prevailing wage laws use several arguments to support the policy's existence, some of which are related to assumptions underlying efficiency wage theory. First of all, supporters of the law argue that the absence or repeal of prevailing wage laws would erode pay rates within the construction industry and as a result of workers' reduced earnings potential, this would reverberate throughout the entire local economy via weaker consumer spending activity and other secondary effects. In addition, this would also lead to lower income tax revenue collected by the government.

Worker safety is also expected to be bolstered by prevailing wage laws. According to proponents, since in the absence of these laws construction firms would attempt to cut labor costs by hiring inexperienced or lesser-skilled employees, the lower-cost labor would then be more likely to experience falls or other worksite injuries at a higher rate. In a related scenario to safety, advocates of prevailing wage laws contend the policy enhances the overall quality of work due to the fact that firms operating paying higher rates will have more experienced and skilled workers that maximize the quality of work via best practices in project performance.

Supporters of prevailing wage maintain the policy also promotes robust workforce stability and enhances opportunities for workers to develop their skills over time. Given the relatively short time frame workers spend on a given worksite, along with the general seasonality of construction activity in most areas, workers have limited incentive to stay with the same firms and these companies would have limited incentive to invest in worker skill development since they would be doing so for the benefit of the worker's next employer. Paying an above-market wage would then purportedly reduce the quit rate. Without the persistent need to hire and re-train new workers, companies could then divert resources to training apprenticeships to become journeymen and eventually master craftsmen.

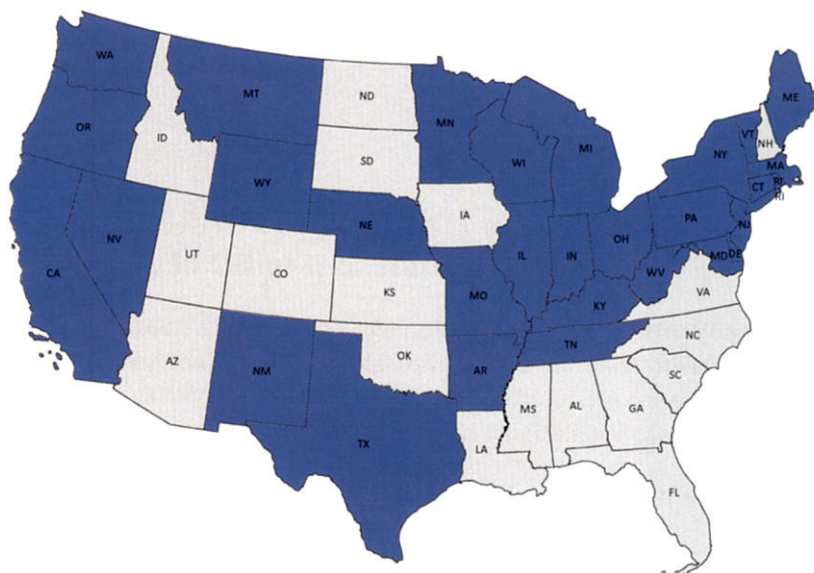
Opponents of prevailing wage laws typically argue against the policy on the grounds that the government should be free to pursue the most cost efficient method of providing a public good, such as a road, bridge, or school, for any given level of quality. Opponents also argue that requiring government to define a certain wage structure for purchases from a particular industry, and not to do so for purchases from other industries, is unfair and is a misuse of government power, and unduly distorts market outcomes.

The prevailing was established in West Virginia in 1933. From the inception of this policy in the state through the enactment of Senate Bill 361, the prevailing wage was calculated by the West Virginia Department of Labor (DOL). In particular, the DOL administered a survey to estimate the prevailing wage schedule for West Virginia. To illustrate, to estimate the 2015 prevailing wage schedule, the DOL sent approximately 5,000 surveys to contractors who operate in the construction industry in West Virginia in 2014. Approximately 400 of these surveys were returned, representing a response rate of around eight percent.

## 2 Prevailing Wage Policy in Other U.S. States

While there are 32 states that utilize a prevailing wage policy for public construction projects (see Figure 1), notable differences exist between the methodological designs and administrative procedures that individual states follow in order to set prevailing wage rates. Based on an exhaustive review of state policies, states generally use one of three procedures to develop a published schedule for occupational wage rates.

**Figure 1: States with Prevailing Wage Laws**



In Table 1, we provide several details on prevailing wage policy in the various states, including how it is applied, years of enactment and other key characteristics. A total of 6 states use rates explicitly determined by collective bargaining agreements made between contracting companies and labor unions. Secondly, 21 states have statutory language written in the code requiring a survey and/or administrative hearings to calculate the prevailing wage. Of these states, Texas and Vermont use Occupational Employment Statistics data from the Bureau of Labor Statistics, although state law in Texas allows counties/cities to use Davis-Bacon rates. Finally, three states (Connecticut, Nebraska and Rhode Island) use the federal Davis-Bacon wage rates, but do appear to provide for some leeway if administrative appeals for changes have been made.

Kentucky does not fit as cleanly into one specific category. For example, 41 counties have adopted the federal Davis-Bacon Act prevailing wage rate schedule; however, the state's remaining counties 79 must utilize hearings conducted by the labor commissioner, wherein interested parties present wage data by occupation in the locality where work is to be performed and wage/fringe rates will be determined based upon a majority of evidence.

**Table 1: Summary Information for State Prevailing Wage Policies**

	Currently Has Law?	Year Enacted	Year Repealed	Approach to PW Determination	PW Threshold	Published Geography
<b>Alabama</b>	N	1941	1980			
<b>Alaska</b>	Y	1931		Survey	\$25,000	2 Regions
<b>Arizona</b>	N	1912	1984			
<b>Arkansas</b>	Y	1955		Survey	\$75,000	17 Regions
<b>California</b>	Y	1931		Survey	\$1,000	County
<b>Colorado</b>	N	1933	1985			
<b>Connecticut</b>	Y	1935		DBA Rates	\$400,000*	DBA Regions
<b>Delaware</b>	Y	1962		Survey	\$100,000*	Statewide
<b>Florida</b>	N	1933	1979			
<b>Hawaii</b>	Y	1955		Survey	\$2,000	Statewide
<b>Idaho</b>	N	1911	1985			
<b>Illinois</b>	Y	1931		Administrative	N	County
<b>Indiana</b>	Y	1935		Administrative	\$350,000	County/City
<b>Kansas</b>	N	1891	1987			
<b>Kentucky</b>	Y	1940		DBA/Administrative	\$250,000	35 Regions
<b>Louisiana</b>	N	1968	1988			
<b>Maine</b>	Y	1933		Survey	\$50,000	County
<b>Maryland</b>	Y	1945		Survey	\$500,000	County
<b>Massachusetts</b>	Y	1914		CBA	N	Locality
<b>Michigan</b>	Y	1965		CBA	N	Locality
<b>Minnesota</b>	Y	1973		Survey	\$25,000	10 Regions
<b>Missouri</b>	Y	1957		Survey	N	County
<b>Montana</b>	Y	1931		Survey	\$25,000	4 Regions
<b>Nebraska</b>	Y	1923		DBA Rates	N	DBA Regions
<b>Nevada</b>	Y	1937		Survey	\$100,000	County
<b>New</b>	N	1941	1985			
<b>New Jersey</b>	Y	1913		CBA	\$2,000*	County
<b>New Mexico</b>	Y	1937		Survey	\$60,000	Statewide
<b>New York</b>	Y	1894		CBA	N	City/County
<b>Ohio</b>	Y	1931		CBA	\$250,000*	County
<b>Oklahoma</b>	N	1909	1995			
<b>Oregon</b>	Y	1959		Survey	\$50,000	14 Regions
<b>Pennsylvania</b>	Y	1961		CBA	\$25,000	County
<b>Rhode Island</b>	Y	1935		DBA	\$1,000	DBA Region
<b>Tennessee</b>	Y	1953		Survey	\$50,000	Statewide
<b>Texas</b>	Y	1933		DBA/BLS data	N	28 Regions
<b>Utah</b>	N	1933	1981			
<b>Vermont</b>	Y	1973		BLS data	\$100,000	3 Regions
<b>Washington</b>	Y	1945		Survey	N*	County
<b>Wisconsin</b>	Y	1931		Survey	\$100,000*	County
<b>Wyoming</b>	Y	1967		Survey	\$100,000	3/Statewide**

\*Note: States marked with an asterisk vary the threshold mark required to pay prevailing wage rates based upon the type of project (building, highway, etc) being performed or if it is new construction.

\*\*Wyoming uses three regions for heavy and highway and statewide for building construction.

States vary significantly in the thresholds they apply to determine whether public construction projects fall under state or local prevailing wage requirements. These dollar award thresholds can also vary based on the

type of construction project being performed. Seven states currently do not subject publicly-funded construction activity to any type of threshold, while Washington only applies a \$25,000 minimum expenditure on any construction at a state college or university. Eight states require at least \$100,000 be spent on a project, though some provide for lower threshold amounts on building remodeling or roadway repair. Maryland and West Virginia have the highest minimum spending requirements (\$500,000) before a prevailing wage rate must be paid.

Notable differences were found across states with respect to the level of geography used to publish prevailing wage rates. The three states that use Davis-Bacon rates revert to the locality reported by the US Department of Labor where the work is performed. Among the 6 states that incorporate collective bargaining agreements into the process, prevailing wages are published on a city or county-by-county basis. For states using a survey and/or administrative process as the basis for publication, 13 publish the data using multi-county regions (such as Workforce Development Areas) or the state as a whole and the remaining 10 states require wage rates by occupation be published for each individual county in the state.

The statistical estimate used to calculate prevailing wages can be a controversial topic and states incorporate different estimation methods to arrive at their published wage rates for individual occupations. Five states do not incorporate any statistical method and simply use rates set forth by collectively bargaining agreements to arrive at published wage and fringe benefit rate schedules for public construction. The majority of states use a variation of a modal-based measure. Five states use the simple mode<sup>1</sup> to calculate prevailing wages and when occasions arise when there are multiple modes reported, the higher value is used. Illinois statute indicates the state's department of labor uses the mode for the basis of its prevailing wage estimate, but it appears collective bargaining agreements are used in many instances.

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<sup>1</sup> The mode is a term that refers to the most frequently reported number within a dataset. For example, in the following list of numbers, 1, 2, 3, 3, 3, 4, 4, 5, the number 3 represents the mode. For a brief discussion of the mode and other measures of central tendency that will be mentioned in this section, see <https://statistics.laerd.com/statistical-guides/measures-central-tendency-mean-mode-median.php>.

**Table 2: Statistical Method for Calculating Prevailing Wages by State\***

	Collective Bargaining	Modal-Based Method				Average	Other
		Simple Mode	Minimum % / Average	Majority/ Average	Median		
Alaska				✓			
Arkansas				✓			
California		✓					
Connecticut				✓			
Delaware				✓			
Hawaii		✓					
Illinois							✓
Indiana		✓					
Kentucky				✓			
Maine					✓		
Maryland			✓				
Massachusetts	✓						
Michigan	✓						
Minnesota		✓					
Missouri		✓					
Montana			✓				
Nebraska				✓			
Nevada			✓				
New Jersey	✓						
New Mexico			✓				
New York	✓						
Ohio	✓						
Oregon				✓			
Pennsylvania	✓						
Rhode Island				✓			
Tennessee						✓	
Texas							✓
Vermont						✓	
Washington				✓			
Wisconsin				✓			
Wyoming			✓				
<b>Total</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>10</b>	<b>1</b>	<b>2</b>	<b>2</b>

\*Note: These classifications are based upon interpretations of each state's published statutes.

Five states incorporate a minimum percentage averaging technique, which use the mode to set the prevailing wage rate if it represents a minimum percentage of reported rates. If this threshold is not met, an average or weighted average is used instead. New Mexico and Wyoming (in most cases) require at least 30 percent, while Maryland and Nevada follow a 40 percent rule. Montana uses the mode when it accounts for at least 50 percent of reported wages and more than five workers are reported. Also, the prevailing wage cannot exceed collectively bargained rates in a region and if fewer than five workers are counted and no CBA exists in the region, a weighted average of rates in neighboring regions is used.

The most commonly used modal method is the majority/average, in which 10 states use the mode as the prevailing wage so long as the mode represents a majority of reported wages and an average if it does not. Most states use an average, but Alaska uses a trimmed mean by excluding the top and bottom 5 percent of reported wages. Wisconsin calculates an average wage based on the highest-paid 51 percent of responses for an occupation. Only one state, Maine, uses the median from its survey of all construction companies that do business in the state if the mode does not represent a majority.

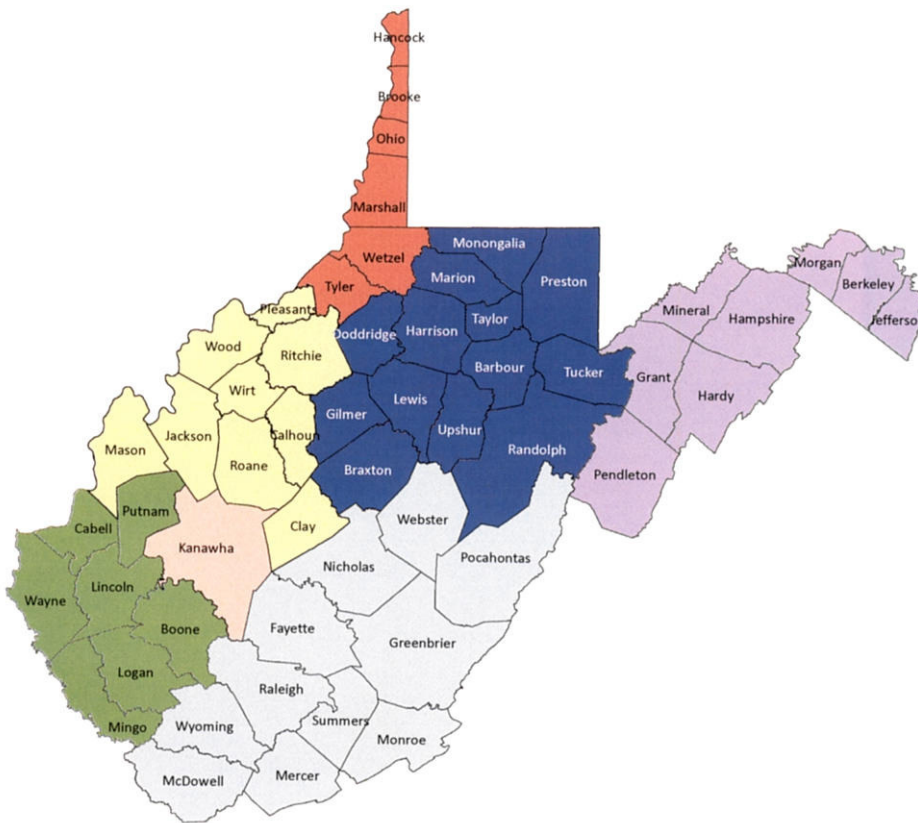
Four states make no consideration of the mode in the prevailing wage rate calculation. Tennessee calculates a simple average of reported wages for highway construction workers only while Vermont uses the average wage rates published by the Bureau of Labor Statistics Occupational Employment Statistics (OES) Program. Texas also uses the OES as the basis for its prevailing wage rate, but is based around the 25<sup>th</sup> percentile of an occupation's wage rate in a Workforce Development Area.

### 3 Defining Prevailing Wage Regions

Our first task is to define the regions of West Virginia to which we apply prevailing wage schedules. The unit of analysis under the prior prevailing wage methodology was the county. However, using the county as the level of geography for setting prevailing wage rates in West Virginia has several disadvantages. First, projects will likely generate competition for bids over a larger geographic region in West Virginia than a single county and it is unlikely that labor costs are substantively different in many of the state's counties that border one another. On a more fundamental basis, many counties have limited numbers of workers in occupations that work on nonresidential and nonbuilding projects, public or private. As a result, many counties will have limited data on wages that would make it difficult to produce statistically sound and reliable estimates that reflect a region's true market wage rate.

With the expectation that construction markets are defined over geographic areas larger than a county, and the potentially significant concerns over statistically reliable data, we chose a broader regional definition. Specifically, research participants have agreed to adopt the regional definitions set forth by the Workforce Investment Act of 1998. For the purposes of this act, West Virginia was divided into seven regions, nearly all of which use multi-county regions that fall along county borders. These seven regions are illustrated in Figure 2.

**Figure 2: Workforce Investment Regions in West Virginia**



## 4 The Choice of Whether to Use Existing Data or to Administer a Survey

In this section we describe the choice of whether to use using publicly-available data to calculate the prevailing wage in West Virginia or whether to administer a survey. We begin with a discussion of the most likely potential source of publicly-available data, describing both the positives and negatives associated with this approach. Afterward, a similar discussion will be presented for an alternative approach that is centered on a newly-redesigned survey method that will be administered by Workforce West Virginia.

### 4.1 Bureau of Labor Statistics – Occupational Employment Statistics

The Occupational Employment Statistics (OES) program from the U.S. Bureau of Labor Statistics (BLS) publishes employment and wage data for over 800 occupations annually across 50 states, the District of Columbia, U.S. territories, and Metropolitan Statistical Areas (MSAs).

In coordination with individual states, BLS administers the OES survey to approximately 1.2 million establishments nationally over a rolling 3-year (6-panel, semi-annual) cycle<sup>2</sup>. These estimates are published annually at the national, state, and MSA levels of geography. BLS identifies the primary users of OES data as entities engaged in vocational education planning, higher education, and numerous employment and training programs. The data are largely used for career counseling, job placement activities, personnel planning, and market research.

Because any given set of published OES estimates includes data from the 3-year cycle, data collected prior to the current reference period are aged forward using data from the BLS Employment Cost Index (ECI), which is a product of the National Compensation Survey that measures quarterly labor cost changes. The ECI provides change factors for each of the eleven major occupational groups outlined in the Standard Occupational Classification (SOC) system used by the OES program. OES survey responses in West Virginia for the most recent set of estimates (3 years) are depicted as follows:

**Table 3: West Virginia Response Rates**

Industry	Year	Units Sampled	Units Received	Response Rate
All Industries	2014	3,512	2,553	72.69%
	2013	3,481	2,527	72.59%
	2012	3,471	2,523	72.69%
Construction	2014	300	217	72.33%
	2013	308	211	68.51%
	2012	264	186	70.45%

The OES program provides highly regarded and reliable occupational employment statistics for numerous uses, from economic analysis to career counseling. However, utilizing OES data for purposes of establishing the prevailing wage rates for publicly funded construction projects presents some challenges and creates limitations that could prove difficult to overcome. What follows is a discussion on the strengths and limitations of utilizing the OES Survey to establish prevailing wages.

<sup>2</sup> BLS Handbook of Methods, Chapter 3, Occupational Employment Statistics (<http://www.bls.gov/opub/hom/homch3.htm>)

#### **4.1.1 OES Survey is Cost Effective**

A substantial benefit of the OES survey is its cost-effectiveness. Staff and resources are already in place with primary funding and support from the Bureau of Labor Statistics. Only minimal additional resources are necessary to prepare OES data for use in establishing a prevailing wage rate for construction-related occupations.

#### **4.1.2 OES Data Undergo Multiple Levels of Review**

Another advantage of the OES Survey is that the data are reviewed and analyzed at several levels. Substantial quality assurance and review are conducted by state analysts on a weekly basis, by BLS regional analysts monthly, and BLS national economists at the interim and final stages of the process. This process provides a high level of redundancy to ensure the accuracy of the data and resulting estimates.

#### **4.1.3 Lack of Alignment with Appropriate Job Classifications**

A challenge of using the OES data is the increase in the number of job classifications related to the construction industry within the SOC structure. The past prevailing wage surveys, administered by the West Virginia Division of Labor, collected and published wage data for 58 different job classifications. As discussed in section 5 of this report, only 37 of the 58 classifications appear in all 55 counties. Only a minority of these occupations, 19, have a one-to-one match with the SOC. Adopting the OES / SOC wage data would increase the number of job classifications to 64. The concern with this expansion is that occupations become more narrowly defined, and given the sample size limitations of OES, provide insufficient data to publish estimates for many of the Workforce Investment Areas. In such cases it is necessary to substitute the missing data with state or national level wages for the occupations in question.

It is possible that several of the detailed SOC codes could be mapped to the existing classifications in order to reduce the potential for insufficient data. However, the difficulty with relying on a cross-walk is the artificial nature of such a process. Many of the SOC occupations could reasonably be cross-walked to more than one of the job classifications used by the previous prevailing wage survey or by the current Davis-Bacon prevailing wage survey. The decision-making process for establishing a crosswalk therefore becomes a somewhat arbitrary process.

For example, the previous structure in West Virginia included three separate classes of “Laborer”, I, II and III, for which all 55 counties had a recorded a wage (See table 4, page 16); however these categories does not exist within the SOC occupations. As the occupations appear relevant statewide, identifying appropriate analogs within the OES is necessary for calculating a wage. The table below illustrates the potential SOC analogs that might be associated with these “Laborer” categories.

**Table 4: Construction Laborer Crosswalk Example**

Occupational Category	SOC	Title
Laborer Class I	47-1011	First-Line Supervisors of Construction Trades and Extraction Workers
	47-4041	Hazardous Materials Removal Workers
Laborer Class II	47-2151	Pipelayers
	47-2061	Construction Laborers
Laborers Class III	47-2061	Construction Laborers
	47-3012	Helpers-Carpenters
	33-9091	Crossing Guards

Determining the analogs would rely on attempting to match the SOC job titles with presumed duties and skills of the “Laborer” categories. In addition to the arbitrary nature of the assignments, which would be based on a subjective evaluation of how “close” the job titles are, the number of potentially relevant categories at least doubles.

#### 4.1.4 Lack of Alignment with Geographic Requirements

The final challenge is most difficult to overcome. The OES survey is establishment-based. That is, surveys are sent to the headquarters or physical location of the business. For the larger economy this entirely appropriate and, given the intended uses of OES estimates, very applicable. However, in regards to establishing a prevailing rate of wages for publicly-funded construction projects it presents a geographical problem. The OES data provide no indication of where the construction work was actually performed. Rather, respondents are merely asked to provide the employment and wages by job title for the pay period of the week of May 12 for the first panel each year and the pay period of the week of Nov 12 for the second panel of each year. It is inherent that construction companies will be performing work at a location other than the physical premises of their business office. In many cases this work will take place in another WIA and, particularly for companies located in border counties, quite possibly another state. By using OES data as the basis for establishing prevailing wage rates, we would essentially assume that contractors perform all of their work within the WIA or county in which they are located. Consequently it will not accurately reflect the actual market rate of wages for the region in which the work is being performed.

To illustrate the importance of geographically relevant data, the table below contains OES wage estimates for three potentially relevant occupations, as well as estimates for border states and the nation. As the table indicates, there is no data available for “Tile and Marble Setters” in West Virginia, yet prevailing wage data for “Marble Setter” and “Terrazzo – Tile Setter” occupational categories have been collected in the past. Thus were this type of occupation required for a construction project, the BLS data indicate that this skill may need to come from another state. In this instance without knowing from what state the relevant skill came, the national data would have to be substituted in lieu of the missing state-level data. Were a West Virginia-based firm to subcontract a worker, the firm would be able to report the wage paid for the job, yielding a more accurate estimate of the labor cost.

**Table 5: Geographic Wage Comparisons**

Occupation	Average Wages					
	WV	KY	MD	OH	PA	US
Electrician	\$25.57	\$23.59	\$26.73	\$24.70	\$27.46	\$26.21
Drywall and Ceiling Tile Installers	\$16.58	\$16.42	\$18.74	\$19.16	\$22.44	\$21.07

Tile and Marble Setters	N/A	\$17.72	\$22.95	\$24.65	\$20.73	\$21.23
<b>Median Wages</b>						
	<b>WV</b>	<b>KY</b>	<b>MD</b>	<b>OH</b>	<b>PA</b>	<b>US</b>
Electrician	\$25.31	\$22.37	\$24.96	\$24.13	\$25.53	\$24.57
Drywall and Ceiling Tile Installers	\$15.75	\$15.61	\$18.10	\$17.58	\$19.52	\$18.32
Tile and Marble Setters	N/A	\$14.75	\$21.81	\$24.40	\$19.10	\$18.74

Source: US BLS OES 2014

## 4.2 Survey Approach

As noted previously, the Occupational Employment Statistics (OES) from the U.S BLS lacks sufficient detail necessary for calculating prevailing wages and fringes. To address these weaknesses, Workforce West Virginia has designed a contractor survey modeled on that deployed in Oregon.<sup>3</sup> The construction and implementation of the survey design is intended to capture wage information that will allow for creating estimates reflective of the construction industry in West Virginia, supplemented with OES information where data are available and appropriate. However, as under any given alternative approach, surveys also possess their own strengths and weaknesses. The following subsections provide a discussion of the major advantages and disadvantages inherent to an administered survey.

### 4.2.1 Relevant Occupations

Occupational categories included in the survey accord to those believed to be relevant to West Virginia, based on the previous WV Department of Labor survey. While the original survey implementation suffered from too many categories, the current implementation has refined and collapsed categories into higher levels of aggregation, for example asking firms to report wages for Laborers broadly, as opposed to different individual classes of laborers.

### 4.2.2 Appropriate Geographic Representation

As the geographic component of the BLS data uses the headquarters or location of the firm, estimates from OES are reflective of wages paid based on place of employer not on location of job. As construction workers are highly mobile and a single firm may have multiple jobs in different locations, OES data are insufficient to reflect geographic variation in project costs. The survey will capture information about the project cost based on the job site, not on firm address. Thus the survey will better reflect relevant regional differences in construction costs.

### 4.2.3 Fringe Benefit Estimation

OES contains no information about fringe benefits, only base wages. As mentioned previously, publicly available data are highly aggregated, only available at the national or federal region level and generally combine multiple industries. National Compensation Survey data indicate that the benefit combinations relevant to construction workers and related occupations may vary widely, and each state has its own definitions of appropriate fringe benefits for inclusion. The survey will allow for asking information specifically tailored to firms in West Virginia consistent with the definition of fringe benefits as outlined in State Code.

<sup>3</sup> See appendix.

## 4.3 Concerns

While the survey approach allows for collecting information otherwise not readily available, there are some concerns. Specific limitations of potential concern include sample size, response bias, and discrepancies between publicly and privately funded projects. Each of these concerns and potential limitations has been considered, and the survey questionnaire and implementation have been designed to minimize the instance and impact.

### 4.3.1 Sample Size

A first concern with any survey is collecting a sufficient amount of data, or number of observations, to generate wage estimates. In the previous implementation for West Virginia the survey obtained less than a 10-percent response rate.<sup>4</sup> This low response rate, coupled with using the county as the geography and the granular occupational classification structure, often resulted in lack of sufficient data.

Enlarging the scope of the survey from the original implementation is one feature to address this concern. In particular using the Workforce Investment Areas (WIAs), which are generally collections of multiple counties<sup>5</sup>, increases the potential number of job sites captured within a region and thus the number of observations for a particular occupation as well as the variety of occupations that may be captured. Further, examination of state funded construction projects potentially subject to the prevailing wage law indicated additional types of firms that should be included in the survey base, for example environmental engineering and architecture firms which employ individuals in relevant occupations crucial for the construction activities.<sup>6</sup> Further, as noted previously, reducing the number of the occupational categories for which wages are reported increases the potential number of observations in any given category.

### 4.3.2 Response Bias

In addition to sample size considerations, simply being able to collect enough data, another common limitation of surveys is the potential for response bias. Response bias may arise if firms do not respond to the survey, or if their responses contain some kind of reporting error. According to the West Virginia Division of Labor, the survey was distributed to nearly 5,000 licensed contractors and all known collective bargaining units with jurisdiction in West Virginia. If licensed contractors and collective bargaining units differ considerably, but only one of these groups substantially comprised the less than 10-percent sample noted previously, then the sample and resulting wage calculations would not be representative of the industry in West Virginia but rather the segment predominantly responding to the survey.

Response bias may lead to wage estimates that are systematically too high or too low. Enlarging the base of the survey, as mentioned above, is one approach designed to minimize the instance and impact of response bias. By soliciting responses from the universe of firms in West Virginia potentially involved in applicable projects, as opposed to just a selected sample of firms, it is more likely that the returned responses will be more representative of the industry as a whole.

The streamlined survey design, with fewer occupations and regions, is also intended to minimize response bias through reducing the burden of reporting on firms in an effort to improve response rates. By making the survey less burdensome to firms, the number of accuracy of responses is potentially greater. Further, the survey will be available in two formats – paper and electronic – to facilitate receiving responses from firms. Workforce West

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<sup>4</sup> According to conversations with the West Virginia Division of Labor

<sup>5</sup> The exception is WIA 3, comprised of only Kanawha County.

<sup>6</sup> West Virginia Code §21-21-5A defines the applicable construction activities and the relevant industry which includes “employees and employers engaged in construction of buildings, roads, highways, bridges, streets, alleys, sewers, ditches, sewage disposal plants, waterworks, airports, and all other structures or works”

<http://www.legis.state.wv.us/WVCODE/Code.cfm?chap=21&art=5A#05A>

Virginia has also created companion materials and a tutorial for respondents to minimize any potential confusion regarding the desired information.

Additionally, the survey will collect information on firm size and type in addition to occupation and wages. These data may be compared with other existing data on the industry, such as publicly available BLS data. Comparison with BLS data will facilitate assessing the extent to which survey responses constitute a representative sample. Further, where available and appropriate, BLS data may be used to correct for response bias from the survey, adjusting wage estimates that may be too high or too low.

#### **4.3.3 Publicly- versus Privately-Funded Construction Projects**

One potential concern is that there may be a discrepancy between wages for publicly versus privately funded projects driven not by actual project cost, but as a result of past practices that may have resulted in an inaccurate prevailing wage. Such a discrepancy may arise if:

- A firm assigns a given worker ONLY to one type of project or another, or
- A firm pays a given worker a different wage depending on job type and funding source.

While it may be the case that some firms only perform one type of work (e.g. only participate on publicly funded projects), it is more likely that a firm's portfolio of projects includes both public and privately funded work. Additionally, it is likely that a given worker participates at multiple job sites; however, it is less likely that the firm pays that worker a different wage depending on the job type. Thus, the most accurate wage estimate for a given worker is likely one that captures work on both publicly and privately projects.

As such, the survey is designed to collect information on non-residential construction work broadly, including both privately and publicly funded projects. If there is an artificial discrepancy between total project costs for the two funding sources, inclusion of both types of projects will smooth the cost discrepancy for the estimated prevailing wage.

#### **4.4 Comparison of OES versus Independent Survey**

Table 3 depicts a summary matrix comparing the strengths and limitations of the OES survey and the proposed independent survey.

**Table 6: Statistical Method for Calculating Prevailing Wages by State\***

<b>Considerations</b>	<b>Using OES Survey Data</b>	<b>Conducting a new survey</b>	<b>Which method has the edge?</b>
<b>Cost</b>	Survey is already conducted.	Additional staff and time needed for designing survey and systems to collect and analyze data.	Conducting an independent survey is more costly and time-consuming than using OES data.
<b>Who is Surveyed</b>	All industries in the state.	Construction industries in the state.	Independent survey is focused on relevant industries.
<b>What information is collected</b>	Number of Employees. Wage Range of Employees. SOC Occupation	Number of Employees Location of work Occupation Skill Level Basic Hourly Rates	Independent survey would collect information that is historically considered more relevant to determination process.
<b>Scope of Geography</b>	Designed as a national survey, producing estimates at the statewide and MSA level	Designed to collect estimates at the Workforce Investment Area level.	Independent survey collects data at a more relevant geography. OES sample may not be sufficient to produce sub-state estimates.
<b>Geographical description</b>	Estimates are based on where the company is located	Estimates are based on where the work takes place	Contractors typically stay close to home. But location of the work is historically considered more relevant to prevailing wage determinations.
<b>Voluntary?</b>	The survey is voluntary for most states. Efforts to gain response are not industry-focused.	Survey response is voluntary.	<b>Neither.</b> Statutory changes to make either survey mandatory are recommended.
<b>Timeline</b>	Surveys mailed in May and November. Estimates are usually released after May the following year. It takes three years of data collection to produce an estimate.	Surveys would be mailed out based on how long it would take to get an appropriate response rate.	OES timeline can work. But data may not be as timely.

## 5 Defining Specific Occupations within the Construction Industry

In this section we examine the occupational classification system used by the WV Department of Labor and consider significant changes and refinements to these categories. We begin with a discussion of the existing classification structure in West Virginia. We then move on to describe the classification system in Oregon, which serves as a model for much of our approach. Finally, we describe our proposal system.

### 5.1 Contractor Occupations and Categories

#### 5.1.1 West Virginia

West Virginia's current practice to date allows contractors to identify wages for up to 58 different occupational categories. Consultation with the Bureau of Labor and Industries in Oregon (BOLI) highlighted some considerations for occupational classifications in West Virginia such as:

- Identifying relevant geographies and occupations for West Virginia
- Alignment with Federal Davis-Bacon categories, for projects that receive both state and federal funds
- Ensuring that contractors and administrators can recognize and appropriately report wages

Examination of the wages reported most recently indicates that not all occupations are represented in all counties. According to the wage data, only 37 of the 58 occupations categories appear in all 55 counties. Another 10 occupations appear in only 52 to 54 counties, and 10 occupations are relevant to fewer than half of West Virginia's counties.

Further, analysis of the wages reported for each category illustrate that some occupational distinctions may not be meaningful. For example, the current survey allows for reporting wages for five separate types of ironworkers; however, for four types the statistics reflect identical wage distributions. The table below contains the current 58 categories, wage distributions and number of counties reporting.

**Table 7: Summary Wage Statistics by Occupational Category (2014) \***

Occupational Category	Average	Mode	Min	Max	Std. Deviation	Counties
OPERATING ENGINEER 1	35.5	35.5	35.5	35.51	0.00	55
OPERATING ENGINEER 2	35.2	35.2	35.2	35.16	0.00	55
SPRINKLER FITTER	31.4	31.4	31.4	31.39	0.00	55
OPERATING ENGINEER 3	34.2	34.2	34	34.16	0.02	55
ELEVATOR HELPER	29.3	29.3	28.3	30.25	0.37	55
ELEVATOR MECHANIC	41.8	41.8	40.5	43.22	0.53	55
ROOFER/WATER DAMP PROOFER	26.9	26.2	26.2	27.75	0.73	55
PAINTER	25.5	26.3	24.3	26.32	0.76	55
BRICKLAYER	28.7	29.1	26.7	29.35	0.89	55
BRICKLAYER-POINTER/CAULKER/CLEANER	28.7	29.1	26.7	29.35	0.89	55
STONE MASON	28.7	29.1	26.7	29.35	0.89	55
MARBLE SETTER	28.6	29.3	25.4	29.35	1.06	55
BOILERMAKER	37.4	37.4	31.1	40.9	1.09	55
ROOFER/HEATED COAL TAR PRODUCTS	27.7	26.7	26.7	29.08	1.11	55
GLAZIER	29.4	30	26.6	30	1.15	55
PILEDRIIVER	29.4	30.2	27	31.74	1.28	55
LABORER CLASS III	22	21	20.9	25.02	1.40	55



### 5.1.2 Oregon

An examination of Oregon's occupational classifications for its contractor survey indicate instances of combined or collapsed occupation categories. In total, the Oregon survey allows contractors to identify wages for 41 categories of workers. The table below contains the classifications.

**Table 8: Oregon Bureau of Labor and Industries Prevailing Wage Occupations**

<b>Occupational Category</b>
Asbestos Worker/Insulator
Boilermaker
Bricklayer/Stonemason
Bridge and Highway Carpenter
Carpenters Group 1 & 2
Cement Mason
Diver
Divers' Tender
Dredger
Drywall, Lather, Acoustical Carpenter and Ceiling Installer
Drywall Taper
Electrician
Elevator constructor, installer, mechanic
Fence Constructor (non-metal)
Fence Erector (Metal)
Flagger
Glazier
Hazardous materials handler/mechanic
Highway and Parking Striper
Ironworker
Laborers All
Landscape Laborer/Technician
Limited Energy Electrician
Line Constructor
Marble Setter
Millwright
Painter
Piledriver
Plasterer and Stucco Mason
Plumber/Pipefitter/Steamfitter
Power Equipment Operators, All
Roofer
Sheet Metal Worker
Soft Floor Layer
Sprinkler Fitter
Tender to Mason Trades (Brick and stonemason, mortar mixer, hod

Occupational Category
carrier)
Tender to Plasterer and Stucco Mason
Testing, Adjusting and Balancing (TAB) Technician
Tile Setter/Terrazzo Worker: Hard Tile Setter
Tile, Terrazzo and Marble Finisher
Truck Driver, All

Source: Oregon Bureau of Labor and Industries

<https://www.qualityinfo.org/bolisurvey/regionreportingtable.pdf>

## 5.2 Recommendations

Examination of the reporting and wage distributions for West Virginia's current practice suggest that redundant or less widely relevant occupational categories could be combined to reduce the number of occupations to 39. The occupational categories recommended for collapsing are:

**Table 9: Proposed Revisions for Occupational Categories – First Stage**

Original Category	Proposed Revision
BRICKLAYER	BRICKLAYER, POINTER/CAULKER/CLEANER, STONEMASON
BRICKLAYER- POINTER/CAULKER/CLEANER	
STONE MASON	
LABORER CLASS I	LABORER, ALL CLASSES
LABORER CLASS II	
LABORER CLASS III	
CARPENTER	CARPENTER, CARPET LAYER, LATHER, SOFT FLOOR LAYER
CARPET LAYER	
LATHER	
SOFT FLOOR LAYER	
IRON WORKER REINFORCING	IRON WORKER - REINFORCING/FENCE ERECTOR/STRUCTURAL/JOURNEYMAN
IRON WORKER FENCE ERECTOR	
IRON WORKER JOURNEYMAN	
IRON WORKER STRUCTURAL	
TEAMSTER A/CLASS 1	TEAMSTER, A/CLASS 1 - E/CLASS 5
TEAMSTER B/CLASS 2	
TEAMSTER C/CLASS 3	
TEAMSTER F/CLASS 6	
TEAMSTER D/CLASS 4	
TEAMSTER E/CLASS 5	

Original Category	Proposed Revision
IRON WORKER BUCKER-UP	IRON WORKER - BUCKER-UP/SHEETER
IRON WORKER SHEETER	
TEAMSTER J	TEAMSTER - J, K, L, M
TEAMSTER K	
TEAMSTER L	
TEAMSTER M	

Secondary occupational categories that also appear statistically “close” with their wage distributions may also be considered for collapsing or combining. The table below displays these secondary occupations.

**Table 10: Potential Refinements for Occupational Categories – Second Stage**

Original Category	Proposed Revision
OPERATING ENGINEER 1	OPERATING ENGINEER 1 and 2
OPERATING ENGINEER 2	
MARBLE SETTER	Include with BRICKLAYER, POINTER/CAULKER/CLEANER, STONEMASON
CEMENT MASON	CEMENT MASON/PLASTERER
PLASTERER	
TEAMSTER G/CLASS 7	Include with TEAMSTER, A/CLASS 1 - E/CLASS 5
TEAMSTER H	TEAMSTER – H and I
TEAMSTER I	

Collapsing these secondary suggestions would yield a total of 34 occupational categories for contractors to report wages. Collapsing occupational categories would improve statistical validity of results by increasing the sample sizes of wages reported, and also allow for the creation of new occupational categories that may not be reflected in the current practice without necessarily increasing the reporting burden on contractors. Examples of potentially relevant classifications reflected in Oregon’s list include: Bridge and Highway Carpenter; Hazardous materials handler/mechanic; Highway and Parking Striper; Limited Energy Electrician; Power Equipment Operators (All); Testing, Adjusting, and Balancing (TAB) Technician.

### 5.3 Recommend Classification Table

Our final refinement of job classification resulted in a further reduction to 28 total occupations. Again this allows for the expansion and creation of new classifications as discussed above. Further, job titles were modified using language that more accurately depicts the work being performed. A classification manual with full descriptions has been crafted as a reference for researchers and survey respondents. The final classification list is as follows:

**Table 11: Final Proposed Occupational Categories for Prevailing Wage Survey**

<b>Job Title</b>	<b>Code</b>
Asbestos & Lead Abatement Worker	47-4041
Asbestos Fire Stop Technician	47-2132
Boilermaker	47-2011
Bricklayer & Stone Setter	47-2021
Carpenter	47-2031
Cement Mason, Plasterer & Stucco Mason	47-2051
Diver	49-9092
Dredger	53-7031
Lather, Ceiling Installer, Drywall Installer & Taper	47-2081
Electrician	47-2111
Elevator Constructor & Mechanic	47-4021
Glazier	47-2121
Heavy Equipment Operator - Group 1	47-2073
Heavy Equipment Operator - Group 2	53-7091
Insulation Worker	47-2131
Ironworker	47-2221
Laborer/Helper	47-2061
Mechanic	49-3042
Painter	47-2141
Power-Line Constructor	49-9051
Plumber/Pipefitter	47-2152
Roofer	47-2181
Sheet Metal Worker	47-2211
Soft Floor Layer	47-2041
Striper Operator-Highway & Parking Lot	47-4051
Telecommunication Installer	49-2022
Truck Driver-Heavy & Tractor-Trailer	53-3032
Truck Driver-Light Truck & Forklift Operator	53-3033

## 6 Choice of Statistical Method to Interpret Raw Survey Result

The construction industry occupational wage survey is designed to collect a census, or a complete list, of all non-residential construction work occurring during the pre-determined reference weeks. Wage data from skilled employees are then combined with total employment reported for that occupation to create a trimmed average weighted by employment for that classification-region combination.

Prevailing wages are generally based around a method that uses the mode. However, since the mode is more appropriate for identifying the most common occurrence of an event with categorical data, applying it to determine prevailing wage rates can be problematic. First of all, data such as wages that are likely drawn from a continuous distribution typically have multiple values that would qualify as the mode. Should that be the case, the researcher must then decide which mode best reflects the center of the data. The researcher could choose

one of the modes, say the larger number, but doing so would require imposing a great deal of subjectivity into the process, particularly if it is done without regard to the distribution of reported wages.

Another problem that arises when using the mode for continuous data is when the most common value occurs at a level much higher or lower relative to how other reported values are distributed. In that instance, the mode would clearly not be suitable for representing the center of the data. Most states typically require some percentage of reported wages equal the same number before the mode can be used and use an average or weighted average in its place; however, given the problems listed above, this report suggests avoiding the mode altogether and instead opt for the trimmed mean as an alternative statistic to determine prevailing wage rates.

The trimmed average wage, weighted by employment, for a particular classification-region combination  $W_{cr}$  is a function of the wage ( $W_i$ ) and employment ( $E_i$ ) information reported for each firm. The trimmed weighted average can be expressed as,

$$W_{cr} = \frac{\sum_{i=kstrt}^{kstop} W_i E_i}{\sum_{i=kstrt}^{kstop} E_i}$$

The first step in the process is to trim the total number of observations for a given classification-region. This is accomplished by identifying the 5<sup>th</sup> and 95<sup>th</sup> percentile points of the data distribution. More basically, the highest 5 percent and lowest 5 percent of the total observations for a classification region are removed prior to calculation. The purpose of employing a 10 percent trim to the data is to remove outliers from the calculation that may skew the estimate in one direction or another. This is a very robust method to prevent extremes and outliers from exerting undue influence on the final calculation.

Once the data have been trimmed, an average weighted by employment is then calculated. Weighting by employment ensures that the wages most frequently paid have greatest impact on the final estimate.

## 6.1 Example

Five contractors report they employed carpenters on non-residential projects in region 2. The contractors provide the following information:

**Table 12: Example of Reported Data**

Contractor	Classification	Basic Hourly Wage	Employment
Contractor 1	Carpenter	\$12.35	1
Contractor 2	Carpenter	\$22.00	4
Contractor 3	Carpenter	\$25.00	4
Contractor 4	Carpenter	\$39.30	1
Contractor 5	Carpenter	\$27.10	2

In this example we have a total of 12 observations. They are then ordered and all observations below the 5<sup>th</sup> percentile and above the 95<sup>th</sup> percentile are removed. Using the above example, it will look like this:

12.35 22.00 22.00 22.00 22.00 25.00 25.00 25.00 25.00 27.10 27.10 39.30

Once the observations have been trimmed, a weighted average can be calculated as follows:

$$\frac{(22.00)(4) + (25.00)(4) + (27.10)(2)}{4 + 4 + 2}$$

$$\frac{242.20}{10}$$

The estimated prevailing wage for Carpenters in Region 2 would be \$24.22.

This example also provides an illustration as to why using the mode for the prevailing wage rate can be problematic. In Table 8, both \$22 and \$25 would represent the mode, so the decision for the researcher would then be to subjectively choose which wage rate is more reflective of the center of the data set. Although the values are close in this instance, many likely scenarios exist in which the differences between the most

commonly reported hourly wages could be much larger and lead to a significantly higher wage being incorporated as the prevailing rate.

In the event that responses from the survey are insufficient to generate a statistically valid estimate, statewide OES estimates may be substituted, provided that there is a clear one-to-one match between the survey classification in question and the Standard Occupational Classification used by OES.

## 7 Fringe Benefit Overview

The federal prevailing wage law, the Davis-Bacon Act, outlines the types of compensation that may be counted as fringe benefits. Fringe benefits are defined as:

- “Contributions irrevocably made to a trustee or third party pursuant to a bona fide fringe benefit fund plan or program.
- The rate of costs incurred in providing bona fide fringe benefits pursuant to an enforceable commitment to carry out a financially responsible plan or program, which was communicated to the employees in writing.”<sup>7</sup>

In other words, fringe benefits may be in the form either of an employer contribution, for example to a health insurance provider, or in the form of direct wages to help cover the cost of the employee purchasing health insurance.<sup>8</sup> The relevant types of benefits counted under Davis-Bacon include health and life insurance, retirement and various leave. Required payments such as unemployment compensation and Social Security are not included.

### 7.1 State Examples

While Davis-Bacon outlines the fringe benefits included for the federal law, variations exist among individual states with prevailing wage laws. Each state outlines different considerations, including what is to be counted and in some cases how it is to be counted. As noted in the Code of Federal Rules, the fringe benefits outlined within the Davis-Bacon Act were not intended to “to impose specific standards relating to administration of fringe benefits” but rather illustrate benefits paid by the industry as whole.<sup>9</sup> The table below provides examples of fringe benefit definitions.

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<sup>7</sup> <http://www.dol.gov/whd/programs/dbra/faqs/fringes.htm>

<sup>8</sup> [http://www.wsdot.wa.gov/NR/rdonlyres/F1B1D653-EAC7-4075-84AD-](http://www.wsdot.wa.gov/NR/rdonlyres/F1B1D653-EAC7-4075-84AD-870F178386EF/78346/ProvidingFringeBenefitsinthePrevailingWageWorld.pdf)

[870F178386EF/78346/ProvidingFringeBenefitsinthePrevailingWageWorld.pdf](http://www.wsdot.wa.gov/NR/rdonlyres/F1B1D653-EAC7-4075-84AD-870F178386EF/78346/ProvidingFringeBenefitsinthePrevailingWageWorld.pdf)

<sup>9</sup> 29 CFR Subtitle A (7–1–11 Edition) Subpart B—Interpretation of the Fringe Benefits Provisions of the Davis-Bacon Act

**Table 13: Fringe Benefit Definitions Examples**

State	Fringe Definitions
<b>West Virginia<sup>10</sup></b>	Health insurance, retirement, accident coverage, Regular vacation, graduated vacation, floating vacation, holidays, sick leave, personal leave, production incentive bonuses
<b>Kentucky<sup>11</sup></b>	Health insurance, Retirement, life insurance, unemployment, holidays and vacation, apprenticeship programs, other bona fide benefits, excepting benefits required by law
<b>Maryland<sup>12</sup></b>	Medical and dental insurance, retirement, paid leave or life insurance
<b>Ohio<sup>13</sup></b>	Health insurance, retirement, life insurance, disability, supplemental unemployment, accident insurance, holidays and vacations, apprenticeship programs, other bona fide benefits, excepting benefits required by law
<b>Pennsylvania<sup>14</sup></b>	Health insurance, retirement, life insurance, paid leave
<b>Michigan<sup>15</sup></b>	Health insurance, dental, vision, life insurance, tuition, retirement

## 7.2 Publicly Available Data on Fringe Benefits

The available data on fringe benefits for construction workers is highly aggregated, available at a national level only. State and regional variations cannot be observed. As noted in the table below, the Bureau of Labor Statistics publishes information on total benefits for workers in Construction, extraction, farming, fishing, and forestry occupations. Thus, workers across multiple types of industries are grouped together. Since 2011, the hourly cost of total benefits provided has increased slightly, to just over \$11 in 2014. These total benefits constitute roughly one-third of total compensation paid by employers nationally, and have risen slightly faster than total compensation, at a rate of 3.5 percent annually compared to 2.5 percent for total compensation.

<sup>10</sup> <http://www.legis.state.wv.us/wvcode/ChapterEntire.cfm?chap=21&art=5&section=1#05>

<sup>11</sup> KRS 337.505 Definition of "prevailing wage"

<sup>12</sup> <http://www.dlrr.state.md.us/labor/prev/prevwagefaqs.shtml#23>

<sup>13</sup> Ohio Administrative Code, Chapter 4101:9-4-02

<sup>14</sup> [https://www.portal.state.pa.us/portal/server.pt/community/employee\\_withholding/14677/fringe\\_benefits/599561](https://www.portal.state.pa.us/portal/server.pt/community/employee_withholding/14677/fringe_benefits/599561)

<sup>15</sup> [https://www.michigan.gov/documents/cis/WHD9917\\_Infosheet\\_PW\\_Fringe\\_benefits\\_207072\\_7.pdf](https://www.michigan.gov/documents/cis/WHD9917_Infosheet_PW_Fringe_benefits_207072_7.pdf)

**Table 14: Total Compensation and Fringe Benefit Share, 2011-2014**

<b>Year</b>	<b>Total Compensation per Hour</b>	<b>Benefit Cost per Hour</b>	<b>Percent of Compensation</b>
2011	\$31.40	\$10.20	32.4
2012	\$32.10	\$10.50	32.7
2013	\$33.10	\$11.00	33.2
2014	\$33.80	\$11.30	33.4
<b>Total Percent Change</b>	7.5%	10.5%	
<b>CAGR*</b>	2.5%	3.5%	

Source: BLS Employer Costs for Employee Compensation

\*Compound annual growth rate

National Compensation Survey data further illustrates the challenges in determining an appropriate fringe benefit rate. As with the employer costs, data are only available at a national level. Further, data only reflect the shares of workers with access to certain categories and combinations of benefits, which vary widely. As indicated in the table below, the combination of benefits to which private construction workers had access in 2014 varied substantially.

**Table 15: Insurance and Retirement Available to Construction Workers**

<b>Medical and Insurance Benefit Combinations</b>	<b>Share of Workers with Access</b>
Medical care and retirement benefits	53
Medical care and no retirement benefits	17
No medical care and no retirement benefits	26
Medical care and life insurance benefits	44
No medical care and no life insurance benefits	29
Medical care benefits and no defined benefit retirement	51
No medical care benefits and no defined benefit retirement	30
Medical care benefits and defined contrib. retirement	45
Medical care benefits and no defined contrib. retirement	25
No medical care benefits and no defined contrib. retirement	26

Source: BLS National Compensation Survey

Similarly, access to different combinations of leave balances varies as displayed in the table below.

**Table 16: Leave Benefits Available to Construction Workers**

Benefit Category	Share of Workers with Access
Access to personal leave, sick leave, paid family leave, or vacation	72
Access to personal leave, sick leave, or paid family leave	46
Access to personal leave and sick leave	14
Access to personal leave, vacation, or holidays	82
Access to personal leave and vacation	17
Access to vacation and holidays	62

Source: BLS National Compensation Survey

Thus, the available data on fringe benefits do not easily permit assessing which benefits are most relevant to West Virginia workers, nor are they sufficient on their own to estimate a fringe benefit rate.

## 8 Concluding Thoughts

## **Appendix A: Prevailing Wage Survey**

## WEST VIRGINIA PREVAILING WAGE SURVEY

Administered by WORKFORCE WEST VIRGINIA

### For Staff Use Only

Date Received: \_\_\_\_\_

Entered By: \_\_\_\_\_ Status: \_\_\_\_\_

West Virginia law (§21-5A-5) requires WorkForce West Virginia to determine prevailing wage rates for specified trades and occupations involved in the construction of a public improvement. The data that you provide will be aggregated with similar information collected from other sources and will be published in a manner that will guarantee the confidentiality of your information. Please retain a copy of your forms for your records.

### 1 SURVEY ID NUMBER (FOUND ON TOP OF EACH PAGE):

FIRM: \_\_\_\_\_

COMPLETED BY (PLEASE PRINT NAME): \_\_\_\_\_

TITLE: \_\_\_\_\_

PHONE: (    ) \_\_\_\_\_ E-MAIL: \_\_\_\_\_

### 2 Did your firm do non-owner labor and non-residential construction hours performed on the construction site for the work weeks specified below: (see relevant definitions contained in this form):

August 12, 2014

November 12, 2014

February 12, 2015

May 12, 2015

**YES,** the firm did non-residential construction work during one or more of these weeks.  
Review the instructions and move to step **3** on the Wage Data Form.

**NO,** the firm did not do any non-residential construction during any of these weeks.  
Which of the following best describes why your firm answered no?

☐ THE FIRM DID ONLY RESIDENTIAL WORK DURING THE SELECTED DATES.

☐ THE FIRM IS CLOSED.

☐ THE FIRM HAD NO EMPLOYEES OTHER THAN OWNERS OR CORPORATE OFFICERS.

☐ THE FIRM HAD NO WORK IN WEST VIRGINIA DURING THE SELECTED DATES.

☐ THE FIRM SUBCONTRACTED OUT ALL WORK.

☐ THE FIRM DOES NOT DO CONSTRUCTION WORK.

(Please write on the WAGE DATA FORM a brief description of the type of work the firm does.)

Thank you for participating in this survey. Once you have completed the Wage Data Form, or checked the appropriate box(es) above, you may return the form in the provided pre-paid envelope. Please see the back of this form for more details.



## For Staff Use Only

Entered By: Status:

**3** Please report non-owner labor and non-residential construction hours performed on the construction site for the work weeks including the dates specified below. Work week means any seven (7) consecutive twenty-four (24) hour period as determined by your firm. You may combine the four reporting weeks or list them separately on the form.

**Exclude:**

- Owners
- Exempt supervisors who spend 20% or less time performing duties that are manual or physical as opposed to managerial
- Maintenance work
- Shop work

- Labor NOT performed on the job site
- Administrative staff
- Residential labor hours
- Overtime wages paid  
(include hours worked at their regular rate)
- Lead worker differentials  
(include hours at the basic worker rate)

[illegible]

\*\* Region numbers are provided on page 6.

**SS Fringe Benefits:** Report only the contributions made or costs incurred by the employer (not the contributions or amounts paid by employees) for any of the types of fringe benefits noted above. Do not report any payments required by Federal, State, or local law, such as worker's compensation or unemployment insurance.

**Non-residential construction includes initial construction, reconstruction, and major renovation. Labor performed on-site in connection with material deliveries is also considered construction work. Routine maintenance work (as described below) is not included except as noted.**

### **Construction (Report):**

Construction means the initial construction of buildings and other structures, or additions thereto, and of highways and roads. Construction does not include the transportation of material or supplies to or from a construction project by employees of a construction contractor. However, labor performed on the job-site in connection with the delivery of materials is considered construction work.

### **Major Renovation (Report):**

Major renovation means the remodeling or alteration of buildings and other structures within the framework of an existing building or structure and the alteration of existing highways and roads.

### **Reconstruction (Report):**

Means highway and road resurfacing and rebuilding, the restoration of existing highways and roads, and the restoration of buildings and other structures.

### **Demolition (Report as noted):**

Demolition is included only if it is to prepare for planned construction or renovation. If no construction is planned to replace the demolished property, then do not include the hours in this survey.

### **Maintenance (Exclude except as noted):**

General maintenance work such as sweeping, cleaning, and landscaping, is not covered unless it is done as part of a construction, reconstruction, major renovation, or painting project. Maintenance work such as repairing or replacing a roof or re-carpeting part of a building is considered to be reconstruction work.

### **Residential (Exclude):**

Residential construction projects are projects for any building or structure used or intended to be used for residential occupancy, which contains not more than 3 distinct floors which are above grade in any structural unit regardless of whether the building or structure is designed and constructed for one or more living units. The residential project includes all incidental items associated with the project, such as site work, parking areas, utilities, streets and sidewalks.

### **Examples of Residential Construction:**

Residential buildings (3 stories or less)

<i>Married student housing</i>	<i>All work incidental to residential projects:</i>
<i>Town or row houses</i>	<i>Residential sitework</i>
<i>Mobile home developments</i>	<i>Residential parking areas</i>
<i>Single family houses</i>	<i>Residential utilities</i>
<i>Multi-family houses</i>	<i>Residential streets</i>
	<i>Residential sidewalks</i>

## **How do I Submit my Information?**

**\*Retain a copy of your completed survey for your records\***

**RESPOND BY MAIL:** You may return your survey form in the postage-paid envelope provided.

**RESPOND BY ELECTRONIC FILE:** (Recommended for reporting 10 or more employees)

- Go to our website: <http://www.workforcewv.org/LMI/PrevailingWageSurvey/pwrs.html>
- Download the Survey Spreadsheet for Electronic Filing. Save a copy with the information you have to report.
- Complete section **1** - **14** and return either by mail or faxed and emailed as an attached document.
- Email your spreadsheet to [pwrsurvey@wv.gov](mailto:pwrsurvey@wv.gov). Please write in the subject line:

WAGE DATA FORM SURVEY ID \_\_\_\_\_ . (Your survey ID number is on the top of each survey page.)

**COMPLETE ONLINE SURVEY:** (Recommended for fewer than 10 employees, or no wage data)

- Go to our website at: <http://www.workforcewv.org/LMI/PrevailingWageSurvey/pwrs.html>
- Click on the link "Report Online" under the "Survey Links" section.
- Follow the instructions IN THIS FORM to report information.
- If you need a copy of what you submitted online please contact our staff.

**RESPOND BY FAX:** Fax copies of the Wage Data Form to: (304) 558-1343

**IF YOU NEED ASSISTANCE PLEASE CONTACT US**

Phone: (304) 558-3484

Fax: (304) 558-1343

Email: [pwrsurvey@wv.gov](mailto:pwrsurvey@wv.gov)

Website: <http://www.workforcewv.org/LMI/PrevailingWageSurvey/pwrs.html>

## Instructions for Reporting on the Wage Data Form:

**NOTE:** When working on Prevailing Wage Projects there is a Base Wage Rate and a Fringe Benefit Rate. **Please separate the two rates.**

GO TO: <http://www.workforcewv.org/LMI/PrevailingWageSurvey/pwrs.html> to watch a tutorial that walks you through the steps for completing this survey.

### 3 REVIEW ACTIVITY DURING REFERENCE WEEKS:

Review the four reference weeks on the form and identify the periods where your company performed construction or construction-related services on a non-residential construction site.

### 4 REVIEW THE JOB CLASSIFICATION BOOKLET:

To identify the occupations your employees performed work in, use the Job Classification Booklet to determine the job title to use on the Wage Data Form.

### 5 WAGE RATE REGION:

Identify the region where the work took place. A map and a list of West Virginia counties and the applicable wage rate regions are provided on page 6.

### 6 JOB TITLE OF EMPLOYEE:

Provide the job title for all the employees listed on the line. If a single employee worked in more than one occupation or in more than one region during the required weeks, report the employee on more than one line according to the hours worked. Job Titles and Occupational Codes are on page 7.

### 7 SKILL LEVEL:

Please enter a 1 for Skilled Craftsman/Journeyman or 0 for Entry-level Craftsman/Sub-Journeyman.

**Skilled Craftsman/Journeyman:** A fully skilled craftsman who can work independently in the trade or occupation. Generally, a skilled craftsman has a minimum of four years of verifiable trade-specific experience or has completed a state certified apprenticeship program in the applicable trade. Skilled craftsmen/journeymen are licensed where licensing is required.

**Entry-level Craftsman/Sub-Journeyman:** A worker who cannot work independently in the trade or occupation. Generally, an entry-level craftsman/sub-journeyman has fewer than four years of trade-specific experience and has not completed a state certified apprenticeship program in the applicable trade.

**Apprentice:** You are not required to submit information for the registered apprentices within your firm. If a worker does not qualify as a Skilled Craftsman/Journeyman but is not in a state approved apprenticeship program, the worker should be listed as an "Entry-level Craftsman/Sub-journeyman."

### 8 BASIC HOURLY RATE:

Enter the rate of hourly wage paid. Include **ONLY** the basic worker rate.

Exclude:

- overtime pay but include overtime hours
- per diem
- zone pay
- fringe benefits including vacation pay
- supervisor differentials
- crew leader differentials
- production bonuses

Note: If you are reporting work performed on a project subject to state or federal prevailing wage laws, and have paid required fringe benefits in cash, please separate these amounts on the Wage Data Form. See Example on next page.

**FRINGE BENEFITS**

**Report only the contributions made or costs incurred by the employer (not the contributions or amounts paid by employees). DO NOT report any payments required by Federal, State, or Local law, such as workers' compensation or unemployment**

**9 HEALTH & WELFARE:**

Monthly premium, adjusted hourly rate, or annual rate.

**10 PENSION:**

Employers contribution amount. Please enter adjusted hourly rate, monthly rate, annual rate, or percentage.

**11 HOLIDAY & VACATION:**

Number of paid days off employee receives each year.

**12 Apprenticeship Training:**

Employer contribution amount. Please indicate if the number is an Adjusted Hourly Rate, Monthly Rate, or Annual Rate.

**13 OTHER BENEFITS:**

Cash paid in lieu of fringe benefits should be reported here. DO NOT include: drug testing, industry funds, trade promo funds, safety training, travel pay per diem, equipment costs or workers' compensation. Please enter the PWR required fringe, monthly rate, or annual rate.

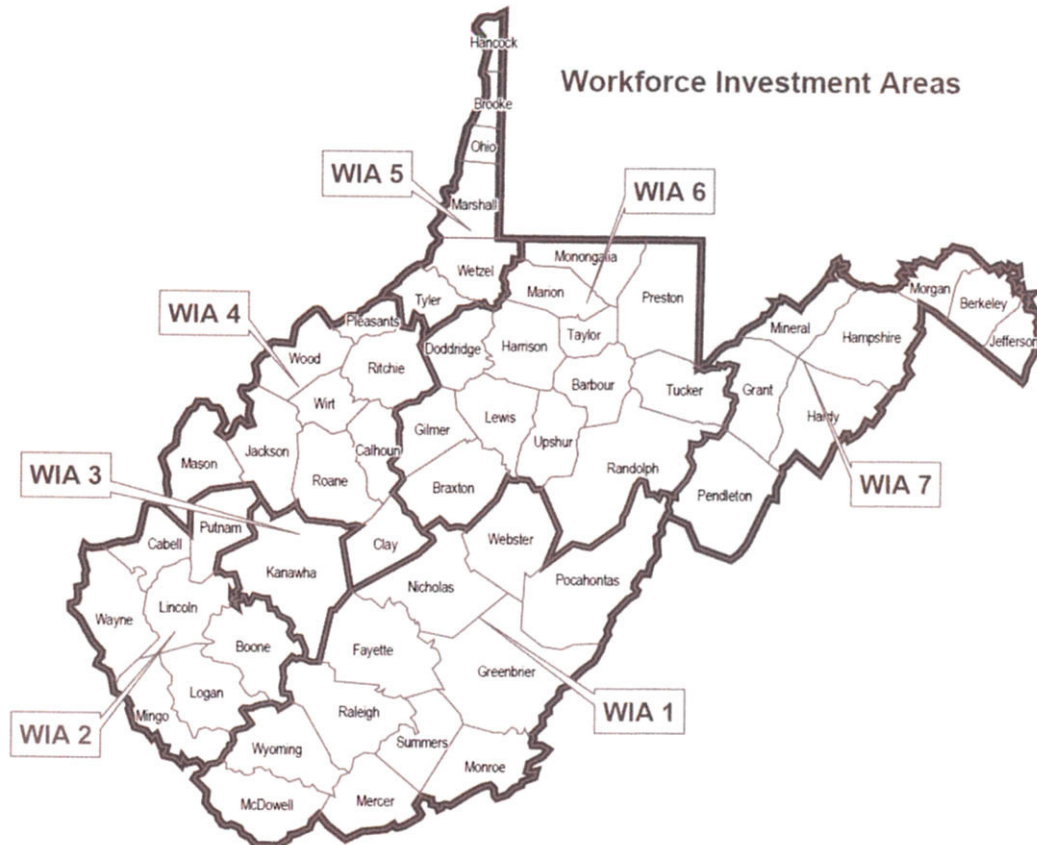
**14 NUMBER OF WORKERS:**

If more than one employee worked in the same region, has the same pay rate, skill level, and all of the same fringe benefits the total number of employees may be entered.

**Note:** If an employee was paid more than one rate of pay, or worked in more than one occupation or region, you need to provide the hours and wages for each case. When this occurs, you will need to use more than one line on the survey form for that employee.

Example 1: Projects Subject to Prevailing Wage Rate

<b>8</b> Basic Hourly Rate <sup>5</sup> Please use separate lines for each wage rate. <small>Do not include shift or overtime differentials, bonuses, awards, zone pay, or per diem</small>	<b>FRINGE BENEFITS:</b> <small>Report only contributions made by the employer<sup>55</sup></small>					<b>14</b> Number of Workers Total number of employees  <small><b>ONLY</b> If all other information on the row is EXACTLY the same</small>
	<b>9</b> Health & Welfare <small>Monthly employer contribution</small>	<b>10</b> Pension <small>Monthly employer contribution</small>	<b>11</b> Holiday & Vacation <small>Number of paid days off employee receives each year</small>	<b>12</b> Apprenticeship Training <small>Adjusted hourly rate, monthly rate, or annual rate</small>	<b>13</b> Other Benefits <small>Do not include Drug testing, Industry funds, Trade promo funds, Safety training, Workers comp</small>	
\$21.53	\$34.68	\$5.61	\$25.13	\$5.00	\$1.75	1



County	Region
Barbour	6
Berkeley	7
Boone	2
Braxton	6
Brooke	5
Cabell	2
Calhoun	4
Clay	4
Doddridge	6
Fayette	1
Gilmer	6
Grant	7
Greenbrier	1
Hampshire	7
Hancock	5
Hardy	7
Harrison	6
Jackson	4
Jefferson	7

County	Region
Kanawha	3
Lewis	6
Lincoln	2
Logan	2
Marion	6
Marshall	5
Mason	4
McDowell	1
Mercer	1
Mineral	7
Mingo	2
Monongalia	6
Monroe	1
Morgan	7
Nicholas	1
Ohio	5
Pendleton	7
Pleasants	4
Pocahontas	1

County	Region
Preston	6
Putnam	2
Raleigh	1
Randolph	6
Ritchie	4
Roane	4
Summers	1
Taylor	6
Tucker	6
Tyler	5
Upshur	6
Wayne	2
Webster	1
Wetzel	5
Wirt	4
Wood	4
Wyoming	1



## JOB CLASSIFICATION TABLE

COMPLETE JOB DESCRIPTIONS ARE LOCATED IN THE PREVAILING WAGE JOB CLASSIFICATION BOOKLET

WorkForce Job Title	Code
Asbestos & Lead Abatement Worker	47-4041
Asbestos Fire Stop Technician	47-2132
Boilemaker	47-2011
Bricklayer & Stone Setter	47-2021
Carpenter	47-2031
Cement Mason, Plasterer & Stucco Mason	47-2051
Diver	49-9092
Dredger	53-7031
Lather, Ceiling Installer, Drywall Installer & Taper	47-2081
Electrician	47-2111
Elevator Constructor & Mechanic	47-4021
Glazier	47-2121
Heavy Equipment Operator - Group 1	47-2073
Heavy Equipment Operator - Group 2	53-7091
Insulation Worker	47-2131
Ironworker	47-2221
Laborer/Helper	47-2061
Mechanic	49-3042
Painter	47-2141
Power-Line Constructor	49-9051
Plumber/Pipefitter	47-2152
Roofer	47-2181
Sheet Metal Worker	47-2211
Soft Floor Layer	47-2041
Striper Operator-Highway & Parking Lot	47-4051
Telecommunication Installer	49-2022
Truck Driver-Heavy & Tractor-Trailer	53-3032
Truck Driver-Light Truck & Forklift Operator	53-3033

