

**Appendix A**  
**Statement of Work:**  
**Measuring Voice in the Workplace: MSHA**

**TASK ORDER UNDER BPA# DOLQ109630959****EVALUATION OF VOICE IN THE WORKPLACE****A STATEMENT OF WORK (SOW) FOR  
MEASURING VOICE IN THE WORKPLACE:  
FOR THE MINE SAFETY AND HEALTH ADMINISTRATION (MSHA)**

The purpose of this evaluation is to investigate how to gauge the current level of workers' *voice in the workplace* and the factors affecting voice, specifically *voice* relating to the laws administered and enforced by DOL's Mine Safety Health Administration (MSHA).

**SECTION 1. GENERAL INFORMATION**

OASP/CEO is seeking to investigate how to gauge the current level of workers' *voice in the workplace* among workers under MSHA's jurisdiction. (At the same time, under a separate contract, an effort will be ongoing to assess voice in the workplace for all workers with respect to laws administered and enforced by DOL's Wage and Hour Division (WHD), and the Occupational Safety and Health Administration (OSHA).)

*Voice in the workplace* is a key outcome goal for the Secretary of Labor, and part of her vision of *good jobs for everyone*. DOL's working definition for voice in the workplace is the "workers' ability to access information on their rights in the workplace, their understanding of those rights, and their ability to exercise these rights without fear of discrimination or retaliation." Thus, we envision that the voice measures should gauge workers' access to information about their rights, knowledge of rights and the extent to which workers feel they can exercise that knowledge without concern of employer recrimination or penalties from others (such as the immigration services). The Department also hopes to learn how *voice* is related to employer compliance and resolution of safety measures. Do particular dimensions of *voice* impact compliance or resolution of safety issues? This study will also be useful in examining how non-compliance in one area, such as safety, is related to non-compliance rates in another.

We envision that the evaluation will help the Department in several important ways.

- 1.0 It will establish a baseline level of *voice* to which future measurement could be compared.
- 2.0 The analysis conducted in this study should help us not only to operationalize *voice in the workplace*; it should also suggest refinements of the measures. For example, items that did not correlate with others in ways they were theoretically expected to may be dropped in the future.
- 3.0 The study should provide the Department with information about what factors affect *voice* and hopefully how *voice* can be promoted in the workplace. In particular, the analysis will identify which aspects of *voice* are particularly sensitive to or theoretically linked to actions the Department may conduct to increase workers' knowledge of their rights.
- 4.0 The relationship between worker voice and worker outcomes, such as perceived workplace safety, fair compensation and employer non-compliance (or at least perceived non-compliance), will also be explored. Bidders should feel free to suggest others.

5.0 It will also provide information about the types of places where workers believe violations are more prevalent which may be useful for the enforcement agencies' targeting strategies.

MSHA is an agency of the Department of Labor that administers the provisions of the Federal Mine Safety and Health Act of 1977 (Mine Act) as amended by the Mine Improvement and New Emergency Response Act of 2006 (MINER Act) to enforce compliance with mandatory safety and health standards as a means to eliminate fatal accidents; to reduce the frequency and severity of nonfatal accidents; to minimize health hazards, and to promote improved safety and health conditions in the nation's mines more than 14,000 mines.

## **1.1 Scope of Work**

*Note, this project will be conducted simultaneously with a very similar survey measuring voice with respect to laws enforced by OSHA and WHD. The contractor of this study on MSHA voice should be prepared to work with the OSHA and WHD contractor to ensure that modules on employee and employer characteristics, voice, and perceived non-compliance are comparable across studies to the extent possible.* The current task order is an exploratory study aimed at investigating how the survey components can be adapted to measure *voice* among coal miners covered under the Federal Mine Safety and Health Act (Mine Act), as well as perceived workplace safety and perceived employer non-compliance. Because it is believed that coal miners are particularly less forthcoming with outsiders, DOL would like the vendor to explore how the accuracy of the data varies by mode of collection. For example, what are the differences in the reported measures of *voice* and non-compliance when the survey is conducted in person and/or by phone by trained interviewers who are local residents.

## **KEY RESEARCH QUESTION AND TASKS**

The proposed survey should determine the extent to which miners are aware of their rights to file a hazardous condition complaint without discrimination or fear of retaliation when they believe: a) that a mine is in violation of the Mine Act or a mandatory health or safety standard, or b) an imminent danger exists. Initial survey work will begin in FY2011.

The primary research question is:

- What measures of *voice* and perceived non-compliance, combined with what modes of data collection could be best used to track MSHA's worker protection outreach activity?

Because many miners are especially distrustful of outsiders asking questions about their jobs, we are asking the contractor conduct a measurement pilot study, developing several viable means of measuring *voice* and perceived non-compliance among coal miners, piloting several alternatives, and assessing the success of each strategy. Qualitative interviews with miners may be helpful in developing the alternatives. We expect that at least one of the alternatives will employ local residents who are trained to be in-person interviewers. Another alternative could also include phone surveys with local residents if the contractor believes this would increase the trust miners

felt in responding to the survey. The piloted surveys should include questions about *voice*, perceived violations, and employer and worker characteristics.

Another task of this study is to explore the best way of generating a sample that is as close as possible to a nationally representative sample of coal miners as possible. This will be challenging given that there is no directory of miners. However, the vendor may want to consider such techniques as sampling of geographic areas based on the density of mine employment by county (Attachment 1), using the United Mine Worker membership lists, using subscription list of *The Professional Miner*, etc. Nevertheless, because this contract involves only a measurement development pilot, the pilot surveys need not be conducted on a nationally representative sample.

The quality of data obtained from the various alternatives should be assessed in terms of rate of item non-response as well as validity of the resulting *voice* scale. For each alternative, data should be analyzed to construct, refine, and validate measures of *voice* and perceived non-compliance. The contractor should examine the similarities and differences in measured *voice* and non-compliance depending on the mode of data collection. For example:

- What are the correlations between the various *voice* measures and workers outcomes, such as perceived workplace safety and perceived employer non-compliance?
- How do the various measures of *voice* differ by mine characteristics, worker gender, ethnicity, education, hourly status or other worker characteristics? Does the presence of a union affect *voice*?
- Are there consistent patterns across measurement strategies?

In the end, the contractor should recommend what they feel is the most valid *voice* measure and data collection strategy.

This survey will also be conducted simultaneously with a very similar survey measuring *voice* in OSHA-WHD targeted populations. The team of this MSHA study will be required to share the modules described with the OSHA-WHD Voice team for their use so that these data will be consistent across the three surveys.

The data obtained from these surveys will be used to construct and refine measures of *voice*. We are interested in both what is the “best” measure of *voice* by agency, but also what measure of *voice* works well across agency. In addition, the data will be thoroughly analyzed to answer the research questions above. When examining issues of perceived non-compliance as well as its relationship to *voice*, the data from both surveys should be pooled.

## **SECTION 2. GOVERNMENT-FURNISHED MATERIALS AND SERVICES**

The resources available to the Contractor include:

- *Why Complain? Complaints, Compliance, and the Problem of Enforcement in the U.S. Workplace.* Article by David Weil and Amanda Pyles; June 20, 2006.
- Access to current performance measure information, as well as proposed measures, for OSHA and WHD.
- Contact information for OSHA/WHd voice contractor.

- List of mine operators and contractors
- Information related to 103(g) hazard complaints and 105( c) discrimination complaints
  - A proposed list of telephone exchanges with high densities of miners for use in the random digit dial portion of the sample
  - A list of phone numbers corresponding to households likely to contain miners for use in the supplemental sample, if that option is pursued.

Government Staff available to work with contractor:

Staff or Contractor	Title/Role	What They Can Provide
Melissa Beaty	Program Analyst	Coal Hazardous Condition Complaint SME
Laura McMullen	Program Analyst	Coal Hazardous Condition Complaint SME
Carolyn James	Program Analyst	105(c) Discrimination Complaint SME

Records transferred to the contractor will be returned to the government.

**SECTION 3. CONTRACTOR-FURNISHED PERSONNEL**

Except for those items or services specifically stated in Section 2 as government furnished, the contractor must furnish all supplies, equipment and personnel needed to perform this contract according to all its terms.

The Contractor shall designate persons as key personnel and essential for the successful completion of all work assigned under this BPA call. This section of the proposal shall provide sufficient information for judging the quality and competence of proposed staff, as well as the amount of time that staff will spend on the project, in order for the Department to assess the adequacy of the staff resources being bid to complete the work at a high level of quality. Successful performance of the proposed work depends heavily on the skills and qualifications of the individuals committed to this project, and the adequacy of the time commitment for each individual in relation to the specific tasks that they will perform.

The experience and qualifications of the proposed Principal Investigator as well as the amount of time committed to the project is especially important. The Principal Investigator shall have a minimum of five years experience in managing related work and a graduate degree in a relevant area of social science (e. g., economics, sociology, political science, public administration) and devote a minimum of 20% of his or her time. The experience, qualifications and organizational affiliation of all other proposed project professional staff should also be discussed. Special attention will be paid to leaders of specific project tasks. These individuals shall be specifically identified with respect to responsibility for tasks. Their education and previous similar work experience, specifically with respect to their proposed task responsibilities, shall be discussed. Each task leader must demonstrate at least three years prior experience directly relevant to their proposed role and graduate education in an area relevant to their role in the project.

The proposal shall include the current employment status of personnel proposed for work under this task order i.e., whether these personnel are currently employed by the contractor or are dependent upon planned recruitment or subcontracting. Where subcontractors or outside assistance are proposed, organizational control and specific responsibilities with respect to all tasks shall be clearly delineated so as to demonstrate and ensure responsiveness to the needs of the Government. Additionally, the proposal shall include:

- (1) A proposed plan for deploying personnel and resources including: staffing charts--listing names, organization (if there is a subcontractor), project roles, qualifications, and experience of all professional personnel (including outside consultants); staff-time-by-task loading charts showing the amount of time each staff person will devote to each task; and an indication of how staff will be allocated to perform all necessary field work during the project
- (2) Letters of intent are provided for each professional personnel who is not currently an employee of the prime, including consultants, contractors or contingency hires (defined as persons not currently employed but who have executed a binding letter for commitment for employment with the offeror, if the offeror receives award under this solicitation). Letters of intent must be dated and include signatures from the individual and the offeror/contractor. The letter must state that the individual will be available for the number of hours stated in the proposal.
- (3) A resume for each professional person to be assigned to the project. At a minimum, the resume shall include:
  - (a) The individual's current employment status and previous work experience, including position title, dates in position, duties performed, and employing organization. Duties shall be clearly defined in terms of the role performed, e.g., management, team leader, lead investigator, chief analyst.
  - (b) A statement describing the relevant work that the individual has completed or which is currently undertaking.
  - (c) The individual's educational background.

The latter two items should be in an appendix.

The Chief Evaluation Office anticipates that the successful completion of this project will require the services of people who will provide, individually or in combination, the following expertise and specialties:

- A principal investigator who has experience analyzing survey data, as well as developing scales and measures. This individual should have a Ph.D. in a social science (such as psychology, economics and sociology) and have published papers based on statistical analyses in scientific or professional journals.
- A statistician who has experience developing stratified random samples as well as experience appropriately reweighting survey data to account for stratification and non-response. This individual should have a graduate degree in statistics or a similar degree.
- At least one senior survey specialist who has experience in designing and implementing surveys using a variety of modes with high response rates.

- Developing questions that elicit honest responses;
- Survey instrument and measure development;
- Statistics, including sampling, weight development (if proposed) and the multivariate analysis of weighted data;
- On the laws and jurisdiction of MSHA; and
- Writing up technical findings for a broad audience.

Please note that this excludes persons providing routine services.

We require that the individual in charge of the survey implementation have a minimum of five years of experience directing similar surveys and that the individual or individuals in charge of developing the sample frame, developing survey weights and directing the analysis have a minimum of five years of experience with similar statistical tasks.

### **Technical Working Group**

To help ensure the study is conducted at the highest level of rigor, the contractor will convene and meet with a Technical Working Group (TWG) to provide them with useful and critical input on the evaluation. The MSHA team may choose to basically use the same TWG as the WHD and OSHA team is using but it should supplement that group with one or more experts familiar with the mining industry or miners. We leave it for the contractor to decide if that want to hold the meeting together or separately. The experts should bring a balanced perspective to the discussion. The contractor should submit names and affiliations of potential participants, explaining the expertise each brings and how it will enhance the quality of the study, to the COTR for consideration. The final TWG membership must be approved by DOL and the Contracting Officer's Technical Representative (COTR).

The contractor shall be responsible for travel arrangements and related costs and per diem, as well as for paying the experts. If there are materials to be reviewed, payments may include time for review of materials (e.g. one day) in advance of the scheduled meeting days. The contractor shall be responsible for securing meeting space and for all costs associated with the conduct of the meetings if not held in DOL's conference space. For budgeting purposes, assume meetings will last one full day and will need space shall be of sufficient size to accommodate the expert members, key contractor's staff, and 5 federal staff. The meeting shall be held in the Washington, DC metro area, unless otherwise approved by the COTR.

The contractor shall submit a draft written summary of the meeting to the COTR for review and approval no later than two weeks following the meeting date. The final shall be submitted one week after receipt of comment. A summary of key discussion points and recommendations shall be distributed to meeting attendees no later than two weeks after the final meeting summary has been approved by the COTR. The contractor shall submit brief written summaries of substantive follow-on discussions with individual experts to the COTR within two weeks of such discussions.

#### **1.1 Change in Personnel**

Prior to directing any of the key personnel to other projects, the Contractor shall provide advance notification of at least 14 calendar days to the Contracting Officer’s Technical Representative (COTR) and submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on the project. No change shall be made by the Contractor without the written consent of the COTR, ratified by the Contracting Officer.

**SECTION 4. DELIVERABLES**

All deliverable items will be delivered to the COTR. Deliverables will be produced in hard copy and an electronic format compatible with MSHA and DOL software.

**1.1 Products, Tasks, Services and the Standards for Success**

The contractor must provide all personnel, equipment, tools, materials, supervision, and other items and services necessary to perform the evaluation, as defined in this statement of work. The contractor must provide the deliverables and perform the services listed below to the standards that are included below:

<i>Products (deliverables)</i>	<i>Standards for Success</i>
1. Monthly reports	1a. Must include: <ul style="list-style-type: none"> <li>• Summary of work completed each month,</li> <li>• Summary of work planned for next month,</li> <li>• Listing of problems encountered,</li> <li>• Proposed solutions for problems encountered, and</li> <li>• Listing of outstanding things needed from DOL.</li> </ul> 1b. Must be provided by the last work day of the month.
2. Work plan and schedule	2a. Must include timeline linking tasks and deliverables to specific dates and a list of potential Technical Working Group (TWG) members 2b. Must be provided within 30 days of contract award in MS Word. 2c. Must be agreed to by agency staff and OASP/CEO prior to continuing project.
3. Design Report and Schedule	3a. Must include: <ul style="list-style-type: none"> <li>• detailed study design plan;</li> <li>• the results of the literature review and lessons from the unstructured informational conversations;</li> <li>• detailed explanation of a suggested set of the alternative data collection strategies, including the planned survey methodologies, as well as the strengths and weaknesses of each                             <ul style="list-style-type: none"> <li>• The analytical methodologies to be used for addressing each of the key research questions listed in Section 1.1;</li> <li>• detailed list of information or assistance needed from DOL</li> </ul> </li> </ul> 3b. Must be provided within 4 months of contract award in MS Word. 3c. Final due within 5 months of contract award in MS Word.



<i>Products (deliverables)</i>	<i>Standards for Success</i>
4. Survey	<p><b>Develop Survey Modules</b></p> <p>4a. Develop several survey modules:</p> <ul style="list-style-type: none"> <li>• A “long” module focused on MSHA knowledge, <i>voice</i> and perceived non-compliance. (To the extent possible the items gauging access to rights information and perceived ability to exercise their rights should be the same as in the OSHA/WHM surveys mentioned above. If it is not the same across all the two worker protection agencies, they should at least reflect uniform underlying principles and concepts.) Questions about how workers learned about the rights should also be included.</li> <li>• A module measuring worker and firm characteristics that will be comparable to the degree possible to those in the OSHA/WHM study but appropriate for mines and miners.</li> </ul> <p>4b. Questions must reflect an in-depth understanding of the MSHA laws as they pertain to workers’ rights, sensitivity for the distrust miners have about being asked about their jobs and knowledge of what constitute MSHA non-compliance that could be perceived by miners.</p> <p>4c. Get both approval from DOL. Assume this will be completed by Month 6.</p>
5. OMB PRA Clearance	<p>5a. Must include:</p> <ul style="list-style-type: none"> <li>• Preparation of all documents and analyses necessary to gain OMB PRA clearance in appropriate format.</li> </ul> <p>5b. Assume clearance will take 5 months.</p>

<i>Products (deliverables)</i>	<i>Standards for Success</i>
6. Draft Report and Final Report	<p>6a. Must include:</p> <ul style="list-style-type: none"> <li>• Description of and rationale for the alternative approaches as well for the questions and hypotheses that are tested.</li> <li>• Detailed description of the surveys and analytic methodologies</li> <li>• Summary statistics on the data collected.</li> <li>• Discuss the various <i>voice</i> measure—include what are the best measures (including reliability and validity if applicable), the items included in each subscale or sub-measure, and how they correlate with perceived non-compliance and whether and how this correlation information is useful.</li> <li>• Discuss the correlations of voice with perceived non-compliance, workers characteristics and mine characteristics.</li> <li>• Answers to all the research questions laid out in this scope of work and the contractor’s proposal.</li> <li>• Discussion of possible biases in the data or limitations of the analyses.</li> <li>• Recommend how <i>voice</i> could be monitored in an on-going cost effective fashion.</li> </ul> <p>6b. Draft must be submitted in month 21 in MS Word.</p> <p>6c. The final draft of the report (which will address the comments from the Technical Working Group, agency staff and OASP/CEO) must be submitted no later than in month 23 of the end of the period of performance in MS Word.</p> <p>6b. Must be submitted to agency staff and OASP/CEO electronically.</p> <p>6c. Must be approved by agency staff and OASP/CEO prior to completion of the contract.</p> <p>6d. Must be written in a clear easy to read manner accessible to a broad audience. The final report must include a 150-word abstract including key findings and an executive summary.</p>
7. Public Data File	<p>7a. Must include:</p> <ul style="list-style-type: none"> <li>• All survey data, in a de-identified form, including sampling weights (if relevant), and in a format easily accessible using statistical software.</li> <li>• A codebook with data descriptions, including if relevant a detailed discussion of how to use the weights appropriately for different types of analyses.</li> <li>• Documentation detailing the survey methodology and survey questions.</li> <li>• Data file must be submitted electronically using an appropriate data format (such as ASCII, SAS or Stata).</li> </ul>

<i>Tasks</i>	<i>Standards for Success</i>
1. Interview MSHA program managers and review of program information	1a. Interview questions reflect an understanding of the scope of the evaluation to be conducted. 1b. Interview questions reflect an understanding of the relationship between MSHA and their respective constituency. 1c. Conduct a literature review of prior research applicable to this project. <ul style="list-style-type: none"> <li>• Provide a bibliography of research articles, reports, and/or studies to be reviewed.</li> <li>• Prepare the final literature review.</li> </ul>
2. Conduct unstructured conversations with miners and others who would be informative to explore how best to collect voice and truthful non-compliance perceptions.	2. These conversations will feed into the recommendations in the design report.
3. Develop the Design Report and Surveys	3a. The contractor will summarize the lessons from the conversations 3b. The contractor will design several alternative surveying strategies and draft survey instruments that is easily understandable by the target population—miners—and can be completed in a time frame appropriate for the mode. 3b. The contractor will propose a sample frame or frames that could generate a sample of coal miners that will be useful for pilot testing the survey and the data collection modes.
4. Finalize survey instruments	4a. The contractor will incorporate the comments of DOL and the TWG and finalize the survey instruments. 4b. The contractor will pre-test survey questions to ensure survey length, reliability, generalizability and validity. 4c. This task supports the development of the Survey and PRA Clearance deliverables.
5. Administer surveys using the alternative strategies to comparable sample of miners that is sufficiently large to adequately validate the voice and non-compliance measures, as well as compare the properties of the measures by survey mode.	5a. The contractor will generate pilot samples for each alternative mode that will facilitate comparing results across the different survey modes while holding the population constant 5b. Conduct surveys with quality control procedures in place. 5c. DOL and OMB PRA clearance must have been obtained prior to conducting survey. 5d. Survey updates are provided to the COTR at least every two weeks once surveying begins or until the COTR feels the monthly update is sufficient. 5e. Surveys are completed in time for analysis within agreed upon deadlines and achieve the response rates and survey metrics stated in the proposal. 5f. This task supports the development of the Draft Report and Final Report Deliverables.

<i>Tasks</i>	<i>Standards for Success</i>
6. Analyze survey results	6a. Analysis is fully explained and understandable. 6b. Analysis is statistically appropriate given the data and yields the best inferences possible. 6c. Analysis plan is discussed with OASP/CEO, the agencies, and the COTR before data analysis begins in earnest. 6d. In particular the contractor should at a minimum, using multivariate statistical techniques, evaluate and test alternative scales of voice and mode of data collection. Where appropriate analyzing: <ul style="list-style-type: none"> <li>• How the different measure of voice correlated with various factors. How do firm characteristics affect it? Does voice differ by gender, ethnicity, education, hourly status or other worker characteristics? Does the presence of a union affect voice? Is it associated with activities the Department could promote, such as a workers' rights media campaign, media reports on firms that has been audited or inspected for non-compliance, etc.?</li> <li>• How do these measures related to perceived non-compliance? In which types of entities do workers feel that their rights have been compromised?</li> </ul>
<i>Meetings and Briefings (Base Period)</i>	<i>Standards for Success</i>
1. Kick-Off Meeting	1a. Will occur within two weeks of the start of the performance period.
2. Two (2) Technical Working Group Meetings	2a. Present the design of the survey to a technical working group within five (5) months of the start of the performance period. 2b. Present the findings of the study to the technical working group two month at least before the draft final report is due.
3. Final Briefing	3a. Will occur no later than three weeks before the end of the performance period. 3b. The presentation will be non-technical and accessible to a broad audience.
4. Ad-Hoc Briefings	4. Will occur as needed.

Depending on the proposed data collection tools, this project may require OMB Paperwork Reduction Act (PRA) clearance for data collections. Internal DOL clearances by BLS and the Policy Planning Board and at least one Federal Register Notice soliciting public comments (60 days) also apply to PRA clearance of surveys. Altogether, these approvals can add several months to the evaluation process. Additionally, this project will require agreement with or permission from other organization(s) (e.g., a State or other Federal agency) for access to personnel, clients, or existing database information. Therefore, any evaluation with a survey may include at least one option year.

## **1.2 Notice to the Government of Delay**

Whenever the Contractor has knowledge that any actual or potential situation is delaying or threatens to delay the timely performance of this Agreement, the Contractor will notify the COTR within ten days.

## **SECTION 5. APPLICABLE PUBLICATIONS AND FORMS**

## 1.1 Confidentiality

The Contractor cannot make use of any information obtained through this agreement for any activity outside the scope of this project.

All records developed during the course of this agreement shall be protected from examination by unauthorized agencies or persons. Such records include all forms, computer files, program listings, manuals, documentation, correspondence files, contract records, and reports. The Contractor shall retain all copies in a secure manner with release to the Department of Labor. No materials or any summary of these materials shall be released to any individual or organization without prior written permission from the COTR and CEO.

No work involving information furnished under this agreement will be subcontracted without the specific approval of the COTR and CEO.

In performance of the terms of this agreement, the Contractor agrees to comply with and assumes responsibility for compliance by employees with the following requirements:

1. All work will be performed under the supervision of the Contractor or the Contractor's responsible employees.
2. Any information provided to the Contractor, in any format, will be used only for the purpose of carrying out the provisions of this contract. This information will be treated as confidential and will not be made known in any manner to any person except as may be necessary in the performance of the Agreement.
3. All information provided to the Contractor will be accounted for upon receipt and properly stored before, during, and after processing. In addition, all related output shall be given the same level of protection as required for the source material.
4. All persons employed under this agreement and any Contractor managers and supervisors with access to the records and data obtained and used under this agreement shall sign the attached confidentiality and non-disclosure agreement. The original signed confidentiality and non-disclosure agreement shall be given to the COTR and CEO prior to the beginning of work. (See Attachment A for Contractor Confidentiality/Non-Disclosure Agreement).
5. The Contractor shall certify in writing that the data processed during the performance of this agreement will be completely purged from all data storage components of the computer facility in accordance with instructions from the COTR. Until purging of all data storage components, the Contractor shall certify that any data remaining in any storage component will be safeguarded to prevent unauthorized disclosure.

All records developed during the course of this agreement – forms, computer files, program listings, manuals, documentation, correspondence files, contract records, and reports – and all records and data provided to the Contractor by MSHA for use under this agreement remain the

property of these agencies and will be handed over to these agencies at the conclusion of the work under this agreement.

## **1.2 Rights in Data and Copyright**

Throughout the period of this Agreement, the Government reserves exclusive and unlimited rights to the information provided to the Contractor, except for the information the Government makes available to the public. The Government however gives the contractor rights to publish the results and findings produced by this project nine months after the submission of the draft final report as long as anything published as a result of this project has the disclaimer that the material does not necessarily represent the opinion of the Department of Labor. The contractor may publish results and findings earlier with written permission of the COTR who would review a draft of the product.

After the life of the contract, however, the Government gives the Contractor unrestrictive use of the results and findings by this task order as well as any publication of these results acknowledges that the study was funded by the Department of Labor but that the opinions stated in the publication may not reflect the position of the Department of Labor.

## Attachment 1: Miners by County

County Name	State	Average Employment for CY 2009	Population Estimates for 2009	Percent of Coal Employees
Boone	WV	4,163	24,709	16.85%
Campbell	WY	5,616	43,967	12.77%
Oliver	ND	134	1,643	8.16%
Martin	KY	1,061	13,070	8.12%
Mercer	ND	614	7,873	7.80%
Harlan	KY	2,362	30,956	7.63%
Perry	KY	2,205	29,136	7.57%
Leslie	KY	852	11,503	7.41%
Knott	KY	1,245	17,126	7.27%
Buchanan	VA	1,538	22,860	6.73%
Emery	UT	660	10,629	6.21%
Greene	PA	2,432	39,245	6.20%
Webster	WV	583	9,444	6.17%
Mingo	WV	1,557	26,387	5.90%
Logan	WV	2,088	35,498	5.88%
Saline	IL	1,457	25,738	5.66%
Union	KY	847	14,990	5.65%
Pike	KY	3,614	65,446	5.52%
Mcdowell	WV	1,175	22,398	5.25%
Letcher	KY	1,196	23,633	5.06%
Carbon	UT	1,002	19,989	5.01%
Gunnison	CO	752	15,350	4.90%
Nicholas	WV	775	16,385	4.73%
Wise	VA	1,972	41,773	4.72%
Clay	WV	469	10,022	4.68%
Pike	IN	571	12,259	4.66%
Big Horn	MT	587	13,015	4.51%
Wyoming	WV	973	23,304	4.18%
Marshall	WV	1,307	32,556	4.01%
Rosebud	MT	395	10,303	3.83%
Musselshell	MT	175	4,600	3.80%
Converse	WY	488	13,578	3.59%
Moffat	CO	502	13,980	3.59%
Schuylkill	PA	585	16,714	3.50%
Monroe	OH	492	14,058	3.50%
Mclean	ND	289	8,310	3.48%
Gallatin	IL	186	5,705	3.26%
Gibson	IN	998	32,750	3.05%
Tucker	WV	196	6,812	2.88%
Magoffin	KY	378	13,166	2.87%
Bell	KY	831	28,972	2.87%
Dickenson	VA	460	16,087	2.86%

County Name	State	Average Employment for CY 2009	Population Estimates for 2009	Percent of Coal Employees
Hopkins	KY	1,318	46,167	2.85%
Rio Blanco	CO	173	6,534	2.65%
Barbour	WV	411	15,758	2.61%
Routt	CO	564	23,469	2.40%
Harrison	OH	365	15,268	2.39%
Muhlenberg	KY	736	31,274	2.35%
Fayette	WV	1,061	46,123	2.30%
White	IL	329	14,661	2.24%
Choctaw	MS	200	9,023	2.22%
Webster	KY	292	13,706	2.13%
Fayette	AL	370	17,371	2.13%
Yukon-Koyukuk	AK	119	5,627	2.11%
Raleigh	WV	1,648	79,187	2.08%
Leon	TX	346	16,923	2.04%
Marion	WV	1,152	56,706	2.03%
Knox	IN	751	37,907	1.98%
Wayne	WV	767	41,119	1.87%
Sevier	UT	369	19,976	1.85%
Panola	TX	425	23,310	1.82%
Floyd	KY	757	41,899	1.81%
Lincoln	WY	302	16,995	1.78%
Sweetwater	WY	630	41,226	1.53%
Lee	TX	245	16,231	1.51%
Monongalia	WV	1,323	90,080	1.47%
Lincoln	WV	324	22,147	1.46%
Ohio	KY	333	23,534	1.41%
Breathitt	KY	213	15,575	1.37%
Sullivan	IN	289	21,153	1.37%
Greenbrier	WV	461	34,527	1.34%
Somerset	PA	981	76,953	1.27%
Freestone	TX	237	19,390	1.22%
Lee	VA	298	25,166	1.18%
Russell	VA	343	29,250	1.17%
Belmont	OH	764	68,066	1.12%
Johnson	KY	243	23,827	1.02%
Delta	CO	314	31,322	1.00%
Kanawha	WV	1,897	191,663	0.99%
Vinton	OH	128	13,228	0.97%
Daviess	IN	293	30,620	0.96%
Tuscaloosa	AL	1,740	184,035	0.95%
Perry	IL	204	22,424	0.91%
Walker	AL	621	68,742	0.90%
Claiborne	TN	275	31,243	0.88%
Clearfield	PA	715	82,324	0.87%
Lawrence	KY	141	16,573	0.85%
Randolph	IL	277	32,686	0.85%



County Name	State	Average Employment for CY 2009	Population Estimates for 2009	Percent of Coal Employees
Limestone	TX	184	22,287	0.83%
De Soto	LA	213	26,401	0.81%
Knox	KY	192	23,827	0.81%
Upshur	WV	181	23,806	0.76%
Perry	OH	262	35,359	0.74%
San Juan	NM	914	124,131	0.74%
Mckinley	NM	510	70,513	0.72%
Campbell	TN	296	40,970	0.72%
Macoupin	IL	331	47,774	0.69%
Robertson	TX	106	15,706	0.67%
Garrett	MD	188	29,555	0.64%
Titus	TX	183	30,206	0.61%
Henderson	KY	273	45,496	0.60%
Armstrong	PA	397	67,851	0.59%
Livingston	KY	54	9,598	0.56%
Indiana	PA	490	87,450	0.56%
Red River	LA	50	9,003	0.56%
Nowata	OK	56	10,528	0.53%
Jefferson	OH	359	67,691	0.53%
Clay	KY	121	23,629	0.51%
Rusk	TX	247	49,180	0.50%
Noble	OH	71	14,311	0.50%
Randolph	WV	138	28,390	0.49%
Tazewell	VA	208	44,907	0.46%
Wabash	IL	55	11,997	0.46%
Atascosa	TX	203	44,633	0.45%
Washington	PA	922	207,389	0.44%
Craig	OK	64	15,158	0.42%
Harrison	TX	259	64,795	0.40%
Navajo	AZ	425	112,975	0.38%
Whitley	KY	146	38,813	0.38%
Hopkins	TX	130	34,581	0.38%
Preston	WV	113	30,247	0.37%
Owsley	KY	17	4,619	0.37%
Jefferson	PA	162	44,634	0.36%
Jackson	IL	206	58,103	0.35%
Winston	AL	80	23,997	0.33%
Mason	WV	107	32,556	0.33%
Allegany	MD	231	72,532	0.32%
Clarion	PA	122	39,479	0.31%
Vigo	IN	317	105,967	0.30%
Williamson	IL	176	65,169	0.27%
Tuscarawas	OH	243	91,137	0.27%
Anderson	TN	195	74,849	0.26%
Warrick	IN	143	58,521	0.24%
Meigs	OH	54	22,838	0.24%

County Name	State	Average Employment for CY 2009	Population Estimates for 2009	Percent of Coal Employees
Le Flore	OK	108	49,915	0.22%
Franklin	IL	83	39,312	0.21%
Bourbon	KS	31	14,884	0.21%
Carbon	WY	32	15,720	0.20%
Morgan	KY	28	14,092	0.20%
Dubois	IN	82	41,419	0.20%
Cambria	PA	281	143,998	0.20%
Haskell	OK	24	12,393	0.19%
Coshocton	OH	69	35,767	0.19%
Marion	AL	55	29,116	0.19%
Boyd	KY	91	48,527	0.19%
Northumberland	PA	171	91,311	0.19%
Jackson	OH	59	33,440	0.18%
Marshall	KY	55	31,200	0.18%
Elliott	KY	16	9,083	0.18%
Jefferson	AL	1,150	665,027	0.17%
Elk	PA	54	32,011	0.17%
Harrison	WV	107	68,911	0.16%
Clay	IN	40	26,533	0.15%
Las Animas	CO	24	16,020	0.15%
Sangamon	IL	292	195,716	0.15%
La Plata	CO	75	51,464	0.15%
Carroll	OH	41	28,539	0.14%
Bates	MO	23	16,761	0.14%
Grant	WV	16	11,833	0.14%
Vermilion	IL	107	80,067	0.13%
Jackson	AL	66	52,838	0.12%
Franklin	AL	38	31,091	0.12%
Richland	MT	11	9,313	0.12%
Shelby	AL	224	192,503	0.12%
Cameron	PA	6	5,163	0.12%
Brooke	WV	27	23,509	0.11%
Mclean	KY	11	9,607	0.11%
Luzerne	PA	336	312,845	0.11%
Lee	KY	7	7,339	0.10%
Columbia	PA	60	65,111	0.09%
Scott	TN	20	21,866	0.09%
Hot Springs	WY	4	4,590	0.09%
Lewis	WA	65	74,741	0.09%
Mcdonough	IL	28	32,770	0.09%
Bibb	AL	17	21,587	0.08%
Guernsey	OH	31	40,054	0.08%
Mineral	WV	21	27,204	0.08%
Montrose	CO	28	41,412	0.07%
Columbiana	OH	67	107,722	0.06%
Washington	IL	9	14,560	0.06%

County Name	State	Average Employment for CY 2009	Population Estimates for 2009	Percent of Coal Employees
Cullman	AL	42	81,778	0.05%
Garfield	CO	27	56,298	0.05%
Fayette	PA	68	142,605	0.05%
McCreary	KY	8	17,795	0.04%
Ohio	WV	18	44,015	0.04%
Grimes	TX	8	26,011	0.03%
Jackson	KY	4	13,243	0.03%
Carbon	PA	19	63,865	0.03%
Daviess	KY	28	95,394	0.03%
Lycoming	PA	34	116,840	0.03%
Milam	TX	7	24,628	0.03%
Fentress	TN	5	17,677	0.03%
Montgomery	IL	8	29,500	0.03%
Lawrence	OH	17	62,744	0.03%
Butler	PA	50	184,694	0.03%
Athens	OH	16	63,026	0.03%
Muskingum	OH	21	84,884	0.02%
Venango	PA	12	54,183	0.02%
Mercer	WV	13	61,921	0.02%
Jefferson	IL	8	39,944	0.02%
Okmulgee	OK	2	10,924	0.02%
Stark	OH	63	379,466	0.02%
Pulaski	KY	10	60,853	0.02%
Bedford	PA	8	49,579	0.02%
Beaver	PA	27	171,673	0.02%
Sebastian	AR	19	123,597	0.02%
Blount	AL	8	58,345	0.01%
Scott	VA	3	22,585	0.01%
Westmoreland	PA	48	362,251	0.01%
Gallia	OH	4	30,694	0.01%
Rogers	OK	11	85,654	0.01%
Greene	IN	4	32,463	0.01%
Laurel	KY	6	57,749	0.01%
Washington	OH	6	61,048	0.01%
Cumberland	TN	5	54,109	0.01%
Lackawanna	PA	19	208,801	0.01%
Lawrence	PA	7	90,160	0.01%
Marion	TN	2	28,068	0.01%
Dauphin	PA	18	258,934	0.01%
Centre	PA	8	146,212	0.01%
Tioga	PA	2	40,875	0.00%
Mercer	PA	5	116,071	0.00%
Mahoning	OH	10	236,735	0.00%
Allegheny	PA	38	1,218,494	0.00%
Davidson	TN	19	635,710	0.00%
Fulton	IL	1	36,652	0.00%

County Name	State	Average Employment for CY 2009	Population Estimates for 2009	Percent of Coal Employees
Montgomery	PA	6	782,339	0.00%
Berks	PA	2	407,125	0.00%
<b>AVERAGE</b>		<b>90884</b>		<b>7.28%</b>