PROTECH-WEATHER LABOR CATEGORY
DESCRIPTIONS

Category 1: Scientific Services. Examples include (but are not limited to) Atmospheric Sciences, Chemistry, Climatology, Environmental, Geology, Materials Science, Meteorology, Oceanography, Physics, and Space Applications.

Scientific Services Subcategories
Level 1: *See the standard "level 1" definition at the end of this discussion.*
Level 2: *See the standard "level 2" definition at the end of this discussion.*
Level 3: *See the standard "level 3" definition at the end of this discussion.*
Level 4: *See the standard "level 4" definition at the end of this discussion.*

Scientific Services Core Labor Categories:

* Levels I through IV are not equivalent to the standard levels 1 through 4 defined at the end of this discussion.

Labor Category *	Labor Category Qualifications
Meteorologist I	**Education:** BS/BA degree (or equivalent) **Functions:** This work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, technique, and theory. Has knowledge commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 2-4 years of experience in related area.
Meteorologist II	**Education:** BS/BA degree (or equivalent). **Functions:** This work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, technique, and theory. Has knowledge commonly used concepts, practices,

Labor Category *	Labor Category Qualifications
	and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 5-7 years of experience in related area.
Meteorologist III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** This work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, technique, and theory. Has knowledge commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 8-10 years of experience in related area.
Meteorologist IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** This work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, technique, and theory. Has knowledge commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 10+ years of experience in related area.

Labor Category *	Labor Category Qualifications
Hydrometeorologist I	**Education:** BS/BA degree (or equivalent) **Functions:** Perform analysis and assimilation of real-time hydrometeorological data using operational hydrometeorological expertise in conjunction with advanced processing techniques, data sources, and equipment. Perform subsequent re-analysis of portions of the mosaiced fields or analysis of gage-only data to provide alternative precipitation estimate. Assimilation and quality control of hydrometeorological forecasts for input to an operational forecast system. Perform mosaicking of forecasts for other hydrometeorological variables (e.g., wind, humidity), when advanced modeling technologies are implemented which require this input. Analyze effects of observed precipitation and other hydro-meteorological phenomena on river flows and to generate daily hydrometeorological situation discussion products describing impacts of recent events on river flows, including droughts and other events that are not of sufficient magnitude to cause rivers to reach flood stage. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 2-4 years of experience in related area.
Hydrometeorologist II	**Education:** BS/BA degree (or equivalent) **Functions:** Perform analysis and assimilation of real-time hydrometeorological data using operational hydrometeorological expertise in conjunction with advanced processing techniques, data sources, and equipment. Perform subsequent re-analysis of portions of the mosaiced fields or analysis of gage-only data to provide alternative precipitation estimate. Assimilation and quality control of hydrometeorological forecasts for input to an operational forecast system. Perform mosaicking of forecasts for other hydrometeorological variables (e.g., wind, humidity), when advanced modeling technologies are implemented which require this input. Analyze effects of observed precipitation and other hydro-meteorological phenomena on river flows and to generate daily hydrometeorological situation discussion products describing impacts of recent events on river flows, including droughts and other events that are not of sufficient magnitude to cause rivers to reach flood stage. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 4-8 years of experience in related area.
Hydrometeorologist III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Perform analysis and assimilation of real-time hydrometeorological data using operational hydrometeorological expertise in conjunction with advanced processing techniques, data sources, and equipment. Perform subsequent re-analysis of portions of the mosaiced fields or analysis of gage-only data to provide alternative precipitation estimate. Assimilation and quality control of

Labor Category *	Labor Category Qualifications
	hydrometeorological forecasts for input to an operational forecast system. Perform mosaicking of forecasts for other hydrometeorological variables (e.g., wind, humidity), when advanced modeling technologies are implemented which require this input. Analyze effects of observed precipitation and other hydro-meteorological phenomena on river flows and to generate daily hydrometeorological situation discussion products describing impacts of recent events on river flows, including droughts and other events that are not of sufficient magnitude to cause rivers to reach flood stage. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 8-10 years of experience in related area.
Hydrometeorologist IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Perform analysis and assimilation of real-time hydrometeorological data using operational hydrometeorological expertise in conjunction with advanced processing techniques, data sources, and equipment. Perform subsequent re-analysis of portions of the mosaiced fields or analysis of gage-only data to provide alternative precipitation estimate. Assimilation and quality control of hydrometeorological forecasts for input to an operational forecast system. Perform mosaicking of forecasts for other hydrometeorological variables (e.g., wind, humidity), when advanced modeling technologies are implemented which require this input. Analyze effects of observed precipitation and other hydro-meteorological phenomena on river flows and to generate daily hydrometeorological situation discussion products describing impacts of recent events on river flows, including droughts and other events that are not of sufficient magnitude to cause rivers to reach flood stage. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 10+ years of experience in related area.
Scientist I	**Education:** BS/BA degree (or equivalent) **Functions:** Perform routine technical tasks using standard scientific methods and techniques. Provide technical science and engineering support in the areas of data acquisition and reduction, equipment maintenance and repair, and information display for scientific analysis. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Provide support to analyze, design, code, and document computer applications used for scientific projects. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Typically reports to a supervisor or manager. **Experience:** 0-2 years of experience in related area.

Labor Category *	Labor Category Qualifications
Scientist II	**Education:** BS/BA degree (or equivalent) **Functions:** Perform scientific analysis/research in support of more senior level scientists. Provide technical science and engineering support in the areas of data acquisition and education, equipment maintenance and repair, and information display for scientific analysis. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Analyze, design, code, and document computer applications used for scientific projects. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Typically reports to a supervisor or manager. **Experience:** 2-4 years of experience in related area.
Scientist III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Perform complex scientific research and analysis. Provide advanced technical science and engineering support in the areas of data acquisition and reduction, equipment maintenance and repair, and information display for scientific analysis. Support the design, development, and test of complex instruments for scientific measurements. Familiar with standard concepts, practices, and procedures within a particular field. Analyze, design, code, and document complex computer applications used for scientific projects. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision. May lead and direct others. A certain degree of creativity and latitude is required. Typically reports to a supervisor or manager. **Experience:** 4-6 years of experience in related area.
Scientist IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Conduct advanced scientific research and analyses to solve physical problems. Perform the design, development, and test of complex instruments for scientific measurements. Contribute to scientific papers to be published in refereed scientific publications and/or presented at scientific conferences. Familiar with standard concepts, practices, and procedures within a particular field. Analyze, design, code, and document complex computer applications used for scientific projects. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision. May lead and direct others. A certain degree of creativity and latitude is required. Typically reports to a supervisor or manager. **Experience:** 6-10 years of experience in related area.
Chief Scientist	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Establishes the overall objectives and initiatives of a science department. Leads advanced scientific research and analyses to solve physical problems. Lead the design, development, and test of complex instruments for scientific measurements. Author papers to be published in refereed scientific publications and/or presented at scientific conferences.

Labor Category *	Labor Category Qualifications
	Provides scientific expertise to other departments where needed. Demonstrates expertise in a variety of the field's concepts, practices, and procedures. Leads efforts to analyze, design, code, and document complex applications for computers appropriate to scientific projects. Relies on extensive experience and judgment to plan and accomplish goals. Performs a variety of tasks. Leads and directs the work of others. A wide degree of creativity and latitude is expected. Typically reports to CEO or top management. **Experience:** 10+ years of experience in related area.
Physical Scientist I	**Education:** BS/BA degree (or equivalent) **Functions:** Perform meteorological or hydrologic analysis and data integration, emerging operational problems, identifies new data sets, and develops routine forecast guidance and analyses. Maintaining situational awareness through continuous assessment, interpretation and collaboration of meteorological or hydrologic data and forecast model output, and related decision support activities. Forecasting products, such as inundation mapping. Ability to understand and analyze problems, define potential solutions, and conduct in-depth analysis, assessments and trades and explain results of weather related studies. **Experience:** 2-4 years of experience in related area.
Physical Scientist II	**Education:** BS/BA degree (or equivalent) **Functions:** Perform meteorological or hydrologic analysis and data integration, emerging operational problems, identifies new data sets, and develops routine forecast guidance and analyses. Maintaining situational awareness through continuous assessment, interpretation and collaboration of meteorological or hydrologic data and forecast model output, and related decision support activities. Forecasting products, such as inundation mapping. Ability to understand and analyze problems, define potential solutions, and conduct in-depth analysis, assessments and trades and explain results of weather related studies. **Experience:** 5-7 years of experience in related area.
Physical Scientist III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Perform meteorological or hydrologic analysis and data integration, emerging operational problems, identifies new data sets, and develops routine forecast guidance and analyses. Maintaining situational awareness through continuous assessment, interpretation and collaboration of meteorological or hydrologic data and forecast model output, and related decision support activities. Forecasting products, such as inundation mapping. Ability to understand and analyze problems, define potential solutions, and conduct in-depth analysis, assessments and trades and explain results of weather related studies. **Experience:** 8-10 years of experience in related area.

Labor Category *	Labor Category Qualifications
Physical Scientist IV	**Education:** MA/MS/PhD degree (or equivalent)
	Functions: Perform meteorological or hydrologic analysis and data integration, emerging operational problems, identifies new data sets, and develops routine forecast guidance and analyses. Maintaining situational awareness through continuous assessment, interpretation and collaboration of meteorological or hydrologic data and forecast model output, and related decision support activities. Forecasting products, such as inundation mapping. Ability to understand and analyze problems, define potential solutions, and conduct in-depth analysis, assessments and trades and explain results of weather related studies.
	Experience: 10+ years of experience in related area.

Category 2: Engineering Services. Examples include (but are not limited to) Electrical, Chemical, Electronics, Systems, Software, Network, Telecommunications, Equipment, Environmental, Industrial, General, Materials, and Mechanical.

Engineering Services Subcategories
Level 1: *See the standard "level 1" definition at the end of this discussion.*
Level 2: *See the standard "level 2" definition at the end of this discussion.*
Level 3: *See the standard "level 3" definition at the end of this discussion.*
Level 4: *See the standard "level 4" definition at the end of this discussion.*

Engineering Services Core Labor Categories:

* Levels I through IV are not equivalent to the standard levels 1 through 4 defined at the end of this discussion.

Labor Category *	Labor Category Qualifications
Software Engineer I	**Education:** BS in computer science, engineering, or IT related field. **Functions:** Performs functional/system analysis, design/coding of software, develops user documentation. **Experience:** 2-4 years software development/programming.
Software Engineer II	**Education:** BS in computer science, engineering, or IT related field. **Functions:** Technical resource for lower-level developers, design/coding of software, participates in system planning, develop detailed flowcharts and instructions for programs **Experience:** 5-7 years software engineering/programming.

Labor Category *	Labor Category Qualifications
Software Engineer III	**Education:** BS/MS in computer science, engineering, or IT related field **Functions:** Performs complex analysis, design, development, integration, testing and debugging of computer software. Verify the accuracy and completeness of programs and systems. Expert knowledge of operating systems. **Experience:** 8-10 years software engineering/development
Software Engineer IV	**Education:** BS/MS in computer science, engineering, or IT related field **Functions:** Performs complex analysis, design, development, integration, testing and debugging of computer software. Verify the accuracy and completeness of programs and systems. Expert knowledge of operating systems. **Experience:** 10+ years software engineering/development
Systems Engineer I	**Education:** BS in engineering **Functions:** Assists in defining and executing systems engineering activities within a project. Systems planning, information security planning, geospatial design and management, performance management, capacity planning, testing and validation, risk assessment, benchmarking, information engineering, and development. **Experience:** 2-4 years engineering experience.
Systems Engineer II	**Education:** BS in engineering **Functions:** Assists in defining and executing systems engineering activities within a project. Systems planning, information security planning, geospatial design and management, performance management, capacity planning, testing and validation, risk assessment, benchmarking, information engineering, and development. Closely coordinates with programmers. **Experience:** 5-7 years software engineering/programming.
Systems Engineer III	**Education:** BS/MS in engineering **Functions:** Engineers software solutions based upon client requirements, supervises a staff of engineers as required, system testing, and appraising and presenting solutions. **Experience:** 8-10 years engineering experience.
Systems Engineer IV	**Education:** BS/MS in engineering **Functions:** Engineers software solutions based upon client requirements, supervises a staff of engineers as required, system testing, and appraising and presenting solutions. **Experience:** 10+ years engineering experience.
Test Engineer I	Equivalent to Sys Eng I

Labor Category *	Labor Category Qualifications
Test Engineer II	Equivalent to Sys Eng II
Test Engineer III	Equivalent to Sys Eng III
Test Engineer IV	Equivalent to Sys Eng IV
Systems Analyst I	**Education:** BS/BA degree (or equivalent) **Functions:** Research, evaluate and recommend new technologies for service delivery and improvement. Devise ways to add new functionality to existing operational capabilities. Design and develop solution by preparing and evaluating alternative workflow solutions. Controls solution by establishing specifications; coordinating production with various engineers. Assist with verification and validation of designing and testing standards solutions. **Experience:** 2-4 years engineering experience.
Systems Analyst II	**Education:** BS/BA degree (or equivalent) **Functions:** Research, evaluate and recommend new technologies for service delivery and improvement. Devise ways to add new functionality to existing operational capabilities. Design and develop solution by preparing and evaluating alternative workflow solutions. Controls solution by establishing specifications; coordinating production with various engineers. Assist with verification and validation of designing and testing standards solutions. **Experience:** 5-7 years software engineering/programming.
Systems Analyst III	**Education:** BS/BA/MA/MS degree (or equivalent) **Functions:** Research, evaluate and recommend new technologies for service delivery and improvement. Devise ways to add new functionality to existing operational capabilities. Design and develop solution by preparing and evaluating alternative workflow solutions. Controls solution by establishing specifications; coordinating production with various engineers. Assist with verification and validation of designing and testing standards solutions. **Experience:** 8-10 years engineering experience.
Systems Analyst IV	**Education:** BS/BA/MS/MA degree (or equivalent) **Functions:** Research, evaluate and recommend new technologies for service delivery and improvement. Devise ways to add new functionality to existing operational capabilities. Design and develop solution by preparing and evaluating alternative workflow solutions. Controls solution by establishing specifications; coordinating production with various engineers. Assist with verification and validation of

Labor Category *	Labor Category Qualifications
	designing and testing standards solutions. **Experience:** 10+ years engineering experience.
Telecom Engineer I	**Education:** BS in communications or electronics engineering **Functions:** Concentrate on applying technical knowledge, including internet and computing technologies, networking and telecommunications, and radio. Specialist knowledge to design and deliver solutions, as well as providing technical guidance. **Experience:** 2-4 years engineering experience.
Telecom Engineer II	**Education:** BS in communications or electronics engineering **Functions:** Concentrate on applying technical knowledge, including internet and computing technologies, networking and telecommunications, and radio. Specialist knowledge to design and deliver solutions, as well as providing technical guidance. **Experience:** 5-7 years engineering experience.
Telecom Engineer III	**Education:** BS/MS in communications or electronics engineering **Functions:** Concentrate on applying technical knowledge, including internet and computing technologies, networking and telecommunications, and radio. Specialist knowledge to design and deliver solutions, as well as providing technical guidance. **Experience:** 8-10 years software engineering/development
Telecom Engineer IV	**Education:** BS/MS in communications or electronics engineering **Functions:** Concentrate on applying technical knowledge, including internet and computing technologies, networking and telecommunications, and radio. Specialist knowledge to design and deliver solutions, as well as providing technical guidance. **Experience:** 10+ years software engineering/development
Industrial Engineer I	**Education:** BS/BA in civil engineering or physical sciences field **Functions:** Plans and oversees layout of equipment, office, and production facilities. Conducts studies in operations to maximize work flow and spatial utilization. Ensures facility efficiency and workplace safety. **Experience:** 2-4 years civil engineering experience.
Industrial Engineer II	**Education:** BS/BA in civil engineering or physical sciences field **Functions:** Plans and oversees layout of equipment, office, and production facilities. Conducts studies in operations to maximize work flow and spatial utilization. Ensures facility efficiency and workplace safety. **Experience:** 5-7 years civil engineering experience.

Labor Category *	Labor Category Qualifications
Industrial Engineer III	**Education:** BS/MA/MS/PhD in civil engineering or physical sciences field **Functions:** Plans and oversees layout of equipment, office, and production facilities. Conducts studies in operations to maximize work flow and spatial utilization. Ensures facility efficiency and workplace safety. **Experience:** 8-10 years civil engineering experience.
Industrial Engineer IV	**Education:** MA/MS/PhD in civil engineering or physical sciences field **Functions:** Plans and oversees layout of equipment, office, and production facilities. Conducts studies in operations to maximize work flow and spatial utilization. Ensures facility efficiency and workplace safety. **Experience:** 10+ years civil engineering experience.
Environmental Engineer I	**Education:** BS in civil engineering or physical sciences field **Functions:** Identifies, assesses and resolves problems concerning the environment; design or operate facilities for environmental protection. May also design, install, operate and maintain measuring apparatus to determine the level of pollutants involving air, land, and water. Performs experiments and reports findings on environmental consequences of equipment, tools, and procedures. Ensures the organization's conformance to federal, state, and local environmental legislation. **Experience:** 2-4 years civil engineering experience.
Environmental Engineer II	**Education:** BS in civil engineering or physical sciences field **Functions:** Identifies, assesses and resolves problems concerning the environment; design or operate facilities for environmental protection. May also design, install, operate and maintain measuring apparatus to determine the level of pollutants involving air, land, and water. Performs experiments and reports findings on environmental consequences of equipment, tools, and procedures. Ensures the organization's conformance to federal, state, and local environmental legislation. **Experience:** 5-7 years civil engineering experience.
Environmental Engineer III	**Education:** BS/MS in civil engineering or physical sciences field **Functions:** Identifies, assesses and resolves problems concerning the environment; design or operate facilities for environmental protection. May also design, install, operate and maintain measuring apparatus to determine the level of pollutants involving air, land, and water. Performs experiments and reports findings on environmental consequences of equipment, tools, and procedures. Ensures the organization's conformance to federal, state, and local environmental legislation. **Experience:** 8-10 years civil engineering experience.

Labor Category *	Labor Category Qualifications
Environmental Engineer IV	**Education:** BS/MS/PhD in civil engineering or physical sciences field **Functions:** Plans, designs, and oversees construction and maintenance of structures and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power-plants, water and sewage systems, and waste disposal units to solve environmental problems. Conducts research to identify and abate or eliminate sources of pollutants. Analyzes and reports measurements and observations of air, water, soil, and other sources to make recommendations on how best to clean and preserve the environment. Designs and engineers' abatement operations, waste disposal sites, and reclamation of contaminated land and water. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. A wide degree of creativity and latitude is expected. Will very likely direct and lead others. Works under general supervision. Typically reports to a manager or head of a unit/department. **Experience:** 10+ years civil engineering experience.
Chief Engineer / Principal Consultant I	**Education:** BS/MS/PhD in computer science/engineering. **Functions:** Acts as a lead in defining and executing integration engineering activities within a project, system integration, testing/validation, prime POC for customer **Experience:** 10+ years with BS, 10+ years with MS
Chief Engineer / Principal Consultant II	**Education:** BS/MS/PhD in computer science/engineering. **Functions:** Establishes the overall objectives and initiatives of an engineering department. Develops ideas for new products or product enhancements and oversees the creation and improvement of products that involve the engineering department. Provides engineering expertise to other departments where needed. Demonstrates expertise in a variety of the field's concepts, practices, and procedures. Relies on extensive experience and judgment to plan and accomplish goals. Performs a variety of tasks. Leads and directs the work of others. A wide degree of creativity and latitude is expected. Typically reports to CEO or top management. BS/BA degree (or equivalent) in a related area as well as 10+ years of experience in the field or in a related area. License and certification may be required. **Experience:** 15+ years with BS, 15+ years with MS
Subject Matter Expert I	**Education:** BS/BA degree (or equivalent) **Functions:** Possess source of knowledge, technique, or expertise in a specific subject area, such as Electrical, Chemical, Electronics, Systems, Software, Network, Telecommunications, Equipment, Environmental, Industrial, General, Materials, and Mechanical engineering. Understands, articulates and implements best practices related to their area of expertise. Depending on the work environment, the subject matter expert may lead or be an active participant of a work-group with the need for specialized knowledge. The subject matter expert provides guidance on how their area of capability can resolve an organizational need and actively participates in all phases of the system development life cycle.

Labor Category *	Labor Category Qualifications
	Experience: 3-5 years of experience in related area.
Subject Matter Expert II	**Education:** BS/BA degree (or equivalent) **Functions:** Possess source of knowledge, technique, or expertise in a specific subject area, such as Electrical, Chemical, Electronics, Systems, Software, Network, Telecommunications, Equipment, Environmental, Industrial, General, Materials, and Mechanical engineering. Understands, articulates and implements best practices related to their area of expertise. Depending on the work environment, the subject matter expert may lead or be an active participant of a work-group with the need for specialized knowledge. The subject matter expert provides guidance on how their area of capability can resolve an organizational need and actively participates in all phases of the system development life cycle. **Experience:** 5-7 years of experience in related area.
Subject Matter Expert III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Possess source of knowledge, technique, or expertise in a specific subject area, such as Electrical, Chemical, Electronics, Systems, Software, Network, Telecommunications, Equipment, Environmental, Industrial, General, Materials, and Mechanical engineering. Understands, articulates and implements best practices related to their area of expertise. Depending on the work environment, the subject matter expert may lead or be an active participant of a work-group with the need for specialized knowledge. The subject matter expert provides guidance on how their area of capability can resolve an organizational need and actively participates in all phases of the system development life cycle **Experience:** 8-10 years of experience in related area.
Subject Matter Expert IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Possess source of knowledge, technique, or expertise in a specific subject area, such as Electrical, Chemical, Electronics, Systems, Software, Network, Telecommunications, Equipment, Environmental, Industrial, General, Materials, and Mechanical engineering. Understands, articulates and implements best practices related to their area of expertise. Depending on the work environment, the subject matter expert may lead or be an active participant of a work-group with the need for specialized knowledge. The subject matter expert provides guidance on how their area of capability can resolve an organizational need and actively participates in all phases of the system development life cycle. **Experience:** 10+ years of experience in related area.

Category 3: Analytical Services. Examples include (but not limited to) Computer Science, Mathematics, Operations Research, and Statistics.

Analytical Services Subcategories
Level 1: *See the standard "level 1" definition at the end of this discussion.*
Level 2: *See the standard "level 2" definition at the end of this discussion.*
Level 3: *See the standard "level 3" definition at the end of this discussion.*
Level 4: *See the standard "level 4" definition at the end of this discussion.*

Analytical Services Core Labor Categories:

* Levels I through IV are not equivalent to the standard levels 1 through 4 defined at the end of this discussion.

Labor Category *	Labor Category Qualifications
Computer Scientist I	**Education:** BS/BA degree (or equivalent) **Functions:** Work as part of a research team with programmers, information technology professionals, scientists, and mechanical or electrical engineers, used to design new technology or solve complex computing problems. Results of their research can lead to the improved performance and efficiencies of existing systems and software as well as the development of new hardware or computing techniques and materials. **Experience:** 2-4 years of experience in related area.
Computer Scientist II	**Education:** BS/BA degree (or equivalent). **Functions:** Work as part of a research team with programmers, information technology professionals, scientists, and mechanical or electrical engineers, used to design new technology or solve complex computing problems. Results of their research can lead to the improved performance and efficiencies of existing systems and software as well as the development of new hardware or computing techniques and materials. **Experience:** 5-7 years of experience in related area.
Computer Scientist III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Work as part of a research team with programmers, information technology professionals, scientists, and mechanical or electrical engineers, used to design new technology or solve complex computing problems. Results of their research can lead to the improved performance and efficiencies of existing systems and software as well as the development of new hardware or computing techniques and materials. **Experience:** 8-10 years of experience in related area.

Labor Category *	Labor Category Qualifications
Computer Scientist IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Work as part of a research team with programmers, information technology professionals, scientists, and mechanical or electrical engineers, used to design new technology or solve complex computing problems. Results of their research can lead to the improved performance and efficiencies of existing systems and software as well as the development of new hardware or computing techniques and materials. **Experience:** 10+ years of experience in related area.
Operations Researcher I	**Education:** BS/BA degree (or equivalent) **Functions:** Work involves using mathematical and statistical models, computer software and data analysis. Ability to examine the way an organization operates, using mathematical and analytical techniques to help it to develop better business practices and systems. Collecting, analyzing and interpreting data. Observing trends within data using complex mathematical and statistical methods. Perform validation and testing of models to ensure adequacy and reformulate models as necessary. Develop scientific or mathematical models. Apply mathematical principles or statistical approaches to solve problems in scientific or applied fields. Ability to design, conduct, and evaluate experimental operational models in cases where models cannot be developed from existing data. **Experience:** 2-4 years of experience in related area.
Operations Researcher II	**Education:** BS/BA degree (or equivalent) **Functions:** Work involves using mathematical and statistical models, computer software and data analysis. Ability to examine the way an organization operates, using mathematical and analytical techniques to help it to develop better business practices and systems. Collecting, analyzing and interpreting data. Observing trends within data using complex mathematical and statistical methods. Perform validation and testing of models to ensure adequacy and reformulate models as necessary. Develop scientific or mathematical models. Apply mathematical principles or statistical approaches to solve problems in scientific or applied fields. Ability to design, conduct, and evaluate experimental operational models in cases where models cannot be developed from existing data. **Experience:** 4-8 years of experience in related area.
Operations Researcher III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Work involves using mathematical and statistical models, computer software and data analysis. Ability to examine the way an organization operates, using mathematical and analytical techniques to help it to develop better business practices and systems. Collecting, analyzing and interpreting data. Observing trends within data using complex mathematical and statistical methods. Perform validation and testing of models to ensure adequacy and reformulate models as

Labor Category *	Labor Category Qualifications
	necessary. Develop scientific or mathematical models. Apply mathematical principles or statistical approaches to solve problems in scientific or applied fields. Ability to design, conduct, and evaluate experimental operational models in cases where models cannot be developed from existing data. **Experience:** 8-10 years of experience in related area.
Operations Researcher IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Work involves using mathematical and statistical models, computer software and data analysis. Ability to examine the way an organization operates, using mathematical and analytical techniques to help it to develop better business practices and systems. Collecting, analyzing and interpreting data. Observing trends within data using complex mathematical and statistical methods. Perform validation and testing of models to ensure adequacy and reformulate models as necessary. Develop scientific or mathematical models. Apply mathematical principles or statistical approaches to solve problems in scientific or applied fields. Ability to design, conduct, and evaluate experimental operational models in cases where models cannot be developed from existing data. **Experience:** 10+ years of experience in related area.
Statistician I	**Education:** BS/BA degree (or equivalent) **Functions:** Analyzes and interprets weather related data from various sources. Compiles reports, charts, and tables based on established statistical methods. Work is generally independent and collaborative in nature. Provide statistical consultations to researchers or scientists. Responsible for developing statistical/mathematical models in the evaluation of weather climatic data. **Experience:** 0-2 years of experience in related area.
Statistician II	**Education:** BS/BA degree (or equivalent) **Functions:** Analyzes and interprets weather related data from various sources. Compiles reports, charts, and tables based on established statistical methods. Work is generally independent and collaborative in nature. Provide statistical consultations to researchers or scientists. Responsible for developing statistical/mathematical models in the evaluation of weather climatic data. **Experience:** 2-4 years of experience in related area.
Statistician III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Analyzes and interprets weather related data from various sources. Compiles reports, charts, and tables based on established statistical methods. Work is generally independent and collaborative in nature. Provide statistical consultations to researchers or scientists. Responsible for developing statistical/mathematical models in the evaluation of weather

Labor Category *	Labor Category Qualifications
	climatic data. **Experience:** 4-6 years of experience in related area.
Statistician IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Analyzes and interprets weather related data from various sources. Compiles reports, charts, and tables based on established statistical methods. Work is generally independent and collaborative in nature. Provide statistical consultations to researchers or scientists. Responsible for developing statistical/mathematical models in the evaluation of weather climatic data. **Experience:** 6-8 years of experience in related area.
Mathematician I	**Education:** BS/BA degree (or equivalent) **Functions:** Ability to use mathematical formulas and models to prove or disprove theories. Apply mathematical theories and techniques to solve practical problems in climatic weather, engineering, the sciences, or other fields. Develop mathematical or statistical models to analyze data. Interpret data and report conclusions from their analyses. Develop mathematical or statistical models of weather climatic phenomena to be used for analysis or for computational simulation. Design computer modeling or simulation programs. Perform computations and apply methods of numerical analysis to data. Analyze data to identify trends or relationships among variables. Design, analyze, and decipher encryption systems designed to transmit weather or meteorological related information in code. **Experience:** 2-4 years of experience in related area.
Mathematician II	**Education:** BS/BA degree (or equivalent) **Functions:** Ability to use mathematical formulas and models to prove or disprove theories. Apply mathematical theories and techniques to solve practical problems in climatic weather, engineering, the sciences, or other fields. Develop mathematical or statistical models to analyze data. Interpret data and report conclusions from their analyses. Develop mathematical or statistical models of weather climatic phenomena to be used for analysis or for computational simulation. Design computer modeling or simulation programs. Perform computations and apply methods of numerical analysis to data. Analyze data to identify trends or relationships among variables. Design, analyze, and decipher encryption systems designed to transmit weather or meteorological related information in code. **Experience:** 5-7 years of experience in related area.

Labor Category *	Labor Category Qualifications
Mathematician III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Ability to use mathematical formulas and models to prove or disprove theories. Apply mathematical theories and techniques to solve practical problems in climatic weather, engineering, the sciences, or other fields. Develop mathematical or statistical models to analyze data. Interpret data and report conclusions from their analyses. Develop mathematical or statistical models of weather climatic phenomena to be used for analysis or for computational simulation. Design computer modeling or simulation programs. Perform computations and apply methods of numerical analysis to data. Analyze data to identify trends or relationships among variables. Design, analyze, and decipher encryption systems designed to transmit weather or meteorological related information in code. **Experience:** 8-10 years of experience in related area.
Mathematician IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Ability to use mathematical formulas and models to prove or disprove theories. Apply mathematical theories and techniques to solve practical problems in climatic weather, engineering, the sciences, or other fields. Develop mathematical or statistical models to analyze data. Interpret data and report conclusions from their analyses. Develop mathematical or statistical models of weather climatic phenomena to be used for analysis or for computational simulation. Design computer modeling or simulation programs. Perform computations and apply methods of numerical analysis to data. Analyze data to identify trends or relationships among variables. Design, analyze, and decipher encryption systems designed to transmit weather or meteorological related information in code. **Experience:** 10+ years of experience in related area.

Category 4: Program Operations Services. Examples include (but not limited to) Budget Analysis, Education and Training, Financial Management, International Cooperation, Management and Program Analysis, Program Management, and Technical Writing and Editing.

Program Operations Services Subcategories
Level 1: *See the standard "level 1" definition at the end of this discussion.*
Level 2: *See the standard "level 2" definition at the end of this discussion.*
Level 3: *See the standard "level 3" definition at the end of this discussion.*
Level 4: *See the standard "level 4" definition at the end of this discussion.*

Program Operations Core Labor Categories:

* Levels I through IV are not equivalent to the standard levels 1 through 4 defined at the end of this discussion.

Labor Category *	Labor Category Qualifications
Outreach & Education Specialist I	**Education:** BS/BA degree (or equivalent) **Functions:** This work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, technique, and theory. Has knowledge commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 2-4 years of experience in related area.
Outreach & Education Specialist II	**Education:** BS/BA degree (or equivalent). **Functions:** This work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, technique, and theory. Has knowledge commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 5-7 years of experience in related area.
Outreach & Education Specialist III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** This work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, technique, and theory. Has knowledge commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific

Labor Category *	Labor Category Qualifications
	equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 8-10 years of experience in related area.
Outreach & Education Specialist IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** This work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, technique, and theory. Has knowledge commonly used concepts, practices, and procedures within a particular field. Has working knowledge of measuring meteorological phenomena with scientific equipment and instrumentation. Develop test plans and reports for weather systems or components of the systems. Implement the processes and procedures to complete the test and write final reports. Briefings maybe necessary on an ad-hoc basis. Work in a team environment. **Experience:** 10+ years of experience in related area.
Business/Budget Analyst I	**Education:** BS/BA degree (or equivalent) **Functions:** Reviews, analyzes, and evaluates business systems and user needs. Formulates systems to parallel overall business strategies. Writes detailed description of user needs, program functions, and steps required to develop or modify computer programs. Familiar with relational database concepts, and client-server concepts. Relies on limited experience and judgment to plan and accomplish goals. Work with management to develop the organization's budget. Review budget proposals for completeness, accuracy, and compliance with laws and other regulations. Review and monitor various financial reports to ensure accurate spending. Estimate future financial needs. Monitor organizational spending to ensure that it is within budget. Performs a variety of tasks. Works under general supervision; typically reports to a project leader or manager. A certain degree of creativity and latitude is required. **Experience:** 2-4 years of experience in related area.

Labor Category *	Labor Category Qualifications
Business/Budget Analyst II	**Education:** BS/BA degree (or equivalent) **Functions:** Reviews, analyzes, and evaluates business systems and user needs. Formulates systems to parallel overall business strategies. Writes detailed description of user needs, program functions, and steps required to develop or modify computer programs. Familiar with relational database concepts, and client-server concepts. Relies on experience and judgment to plan and accomplish goals. Work with management to develop the organization's budget. Review budget proposals for completeness, accuracy, and compliance with laws and other regulations. Review and monitor various financial reports to ensure accurate spending. Estimate future financial needs. Monitor organizational spending to ensure that it is within budget. Performs a variety of complicated tasks. **Experience:** 4-8 years of experience in related area.
Business/Budget Analyst III	**Education:** BS/BA degree (or equivalent) **Functions:** Reviews, analyzes, and evaluates business systems and user needs. Formulates systems to parallel overall business strategies. Writes detailed description of user needs, program functions, and steps required to develop or modify computer programs. Familiar with related computer software/programs used to perform job functions. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. Work with management to develop the organization's budget. Review budget proposals for completeness, accuracy, and compliance with laws and other regulations. Review and monitor various financial reports to ensure accurate spending. Estimate future financial needs. Monitor organizational spending to ensure that it is within budget. May lead and direct the work of other. **Experience:** 8-10 years of experience in related area.
Business/Budget Analyst IV	**Education:** MS/MA degree (or equivalent) **Functions:** Reviews, analyzes, and evaluates business systems and user needs. Formulates systems to parallel overall business strategies. Writes detailed description of user needs, program functions, and steps required to develop or modify computer programs. Familiar with related computer software/programs used to perform job functions. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. Work with management to develop the organization's budget. Review budget proposals for completeness, accuracy, and compliance with laws and other regulations. Review and monitor various financial reports to ensure accurate spending. Estimate future financial needs. Monitor organizational spending to ensure that it is within budget. May lead and direct the work of others. **Experience:** 10+ years of experience in related area.

Labor Category *	Labor Category Qualifications
Program Manager I	**Education:** BS/BA degree (or equivalent) **Functions:** Program Manager must be PMP certified demonstrated, in-depth knowledge consistent with PMBOK best practices as reflected/describe by Project Management Institute (PMI). Demonstrates writing and oral communication skills, and demonstrates proven skills in programmatic areas addressed by the delivery order to be managed. Organizes, directs, and coordinates the planning and production of all activities associated with assigned delivery order projects **Experience:** 2-4 years of experience in programmatic strategic portfolio management, 2+ years' experience in program/project management.
Program Manager II	**Education:** BS/BA degree (or equivalent) **Functions:** Program Manager must be PMP certified demonstrated, in-depth knowledge consistent with PMBOK best practices as reflected/describe by Project Management Institute (PMI). Demonstrates writing and oral communication skills, and demonstrates proven skills in programmatic areas addressed by the delivery order to be managed. Organizes, directs, and coordinates the planning and production of all activities associated with assigned delivery order projects **Experience:** 5-7 years of experience in programmatic strategic portfolio management, 5+ years' experience in program/project management
Program Manager III	**Education:** BA/BS/MS/PhD degree (or equivalent) **Functions:** Program Manager must be PMP certified demonstrated, in-depth knowledge consistent with PMBOK best practices as reflected/describe by Project Management Institute (PMI). Demonstrates writing and oral communication skills, and demonstrates proven skills in programmatic areas addressed by the delivery order to be managed. Organizes, directs, and coordinates the planning and production of all activities associated with assigned delivery order projects **Experience:** 8-10 years of experience in programmatic strategic portfolio management, 8+ years' experience in program/project management
Program Manager IV	**Education:** BA/BS/MS/PhD degree (or equivalent) **Functions:** Program Manager must be PMP certified demonstrated, in-depth knowledge consistent with PMBOK best practices as reflected/describe by Project Management Institute (PMI). Demonstrates writing and oral communication skills, and demonstrates proven skills in programmatic areas addressed by the delivery order to be managed. Organizes, directs, and coordinates the planning and production of all activities associated with assigned delivery order projects **Experience:** 10+ years of experience in programmatic strategic portfolio management, 10+ years' experience in program/project management.

Labor Category *	Labor Category Qualifications
Project Manager I	**Education:** BA/BS degree (or equivalent) **Functions:** Demonstrates writing and oral communication skills, manages day-to-day activities of engineering team, and demonstrates proven skills in those technical areas addressed by the delivery order to be managed. Organizes, directs, and coordinates the planning and production of all activities associated with assigned delivery order projects **Experience:** 2-4 years of experience in technical area to be managed, 2+ years' experience in program/project management.
Project Manager II	**Education:** BA/BS degree (or equivalent) **Functions:** Demonstrates writing and oral communication skills, manages day-to-day activities of engineering team, and demonstrates proven skills in those technical areas addressed by the delivery order to be managed. Organizes, directs, and coordinates the planning and production of all activities associated with assigned delivery order projects **Experience:** 5-7 years of experience in technical area to be managed, 5+ years' experience in program/project management.
Project Manager III	**Education:** MA/MS degree (or equivalent) **Functions:** Demonstrates writing and oral communication skills, manages day-to-day activities of engineering team, and demonstrates proven skills in those technical areas addressed by the delivery order to be managed. Organizes, directs, and coordinates the planning and production of all activities associated with assigned delivery order projects **Experience:** 8-10 years of experience in technical area to be managed, 8+ years' experience in program/project management.
Project Manager IV	**Education:** MA/MS degree (or equivalent) **Functions:** Demonstrates writing and oral communication skills, manages day-to-day activities of engineering team, and demonstrates proven skills in those technical areas addressed by the delivery order to be managed. Organizes, directs, and coordinates the planning and production of all activities associated with assigned delivery order projects **Experience:** 10+ years of experience in technical area to be managed, 10+ years' experience in program/project management.
Technical Writer I	**Education:** BS/BA degree (or equivalent) **Functions:** Researches subject matter, writes a variety of technical articles, reports, brochures, and/or manuals for documentation for a wide range of uses. May be responsible for coordinating the display of graphics and the production of the document. Familiar with standard concepts, practices, and procedures within a particular field. A high degree of creativity and latitude is required. Relies on limited experience and judgment to plan and accomplish goals. Works under general supervision. **Experience:** 2-4 years of experience in related area.

Labor Category *	Labor Category Qualifications
Technical Writer II	**Education:** BS/BA degree (or equivalent) **Functions:** Researches subject matter, writes a variety of technical articles, reports, brochures, and/or manuals for documentation for a wide range of uses. May be responsible for coordinating the display of graphics and the production of the document. Familiar with standard concepts, practices, and procedures within a particular field. A high degree of creativity and latitude is required. Relies on experience and judgment to plan and accomplish goals. Works under general supervision. Performs a variety of tasks. May direct and lead the work of others. **Experience:** 5-7 years of experience in related area.
Technical Writer III	**Education:** MA/MS degree (or equivalent) **Functions:** Researches subject matter, writes and edits material for reports, manuals, proposals, instructional material, catalogs, technical and outreach publications, and software and hardware documentations. Task may also include obtaining technical data from independent observation, reviews with staff members, and/or studies of published materials and existing documentation. Coordinate efforts of technical artists and illustrators in preparing reports, articles, and publications of internal and external distribution. Obtain background information on technologies, methods, and standards. Revises text and recommends changes in scope, format, and content to ensure conformance with established standards. A high degree of creativity and latitude is required. Relies on experience and judgment to plan and accomplish goals. Works under general supervision. Performs a variety of tasks. May direct and lead the work of others. Typically reports to a manager or head of a unit/department. **Experience:** 8-10 years of experience in related area.
Technical Writer IV	**Education:** MA/MS degree (or equivalent) **Functions:** Researches subject matter, writes and edits material for reports, manuals, proposals, instructional material, catalogs, technical and outreach publications, and software and hardware documentations. Task may also include obtaining technical data from independent observation, reviews with staff members, and/or studies of published materials and existing documentation. Coordinate efforts of technical artists and illustrators in preparing reports, articles, and publications of internal and external distribution. Obtain background information on technologies, methods, and standards. Revises text and recommends changes in scope, format, and content to ensure conformance with established standards. A high degree of creativity and latitude is required. Relies on experience and judgment to plan and accomplish goals. Works under general supervision. Performs a variety of tasks. Will very likely direct and lead the work of others. Typically reports to a manager or head of a unit/department. **Experience:** 10+ years of experience in related area.

Category 5: Scientific Information Services. Examples include (but not limited to) Data Collection, Data Processing, Image Analysis, Information Systems, Quality Control Inspection, Scientific Applications Programing, Scientific Systems Analysis, and Web Designing.

Scientific Information Services Subcategories
Level 1: *See the standard "level 1" definition at the end of this discussion.*
Level 2: *See the standard "level 2" definition at the end of this discussion.*
Level 3: *See the standard "level 3" definition at the end of this discussion.*
Level 4: *See the standard "level 4" definition at the end of this discussion.*

Scientific Information Services Core Labor Categories:

* Levels I through IV are not equivalent to the standard levels 1 through 4 defined at the end of this discussion.

Labor Category *	Labor Category Qualifications
Web Designer/Developer I	**Education:** BS/BA degree (or equivalent) **Functions:** Assists with website design and creation. Helps plan, design, develop, test, edit, maintain, and document look and flow of websites. Interviews clients to help them clarify their goals for establishing a website. Designs or supervises design of digitized images, banners, bullets, charts, image maps and other graphics to enhance appearance of site. May require knowledge of programming techniques and computer internet systems. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. Works under general supervision. **Experience:** 2-4 years of experience in related area.
Web Designer/Developer II	**Education:** BS/BA degree (or equivalent). **Functions:** Performs website design and creation. Plans, designs, develops, tests, edits, maintains, and documents look and flow of websites. Interviews clients to help them clarify their goals for establishing a website. Designs or supervises design of digitized images, banners, bullets, charts, image maps and other graphics to enhance appearance of site. Requires knowledge of programming techniques and computer internet systems. Performs a variety of tasks. Works under general supervision; typically reports to a project leader or manager. A certain degree of creativity and latitude is required. Familiar with standard concepts, practices, and procedures within a particular field. May lead or direct others. **Experience:** 5-7 years of experience in related area.
Web Designer/Developer III	**Education:** MA/MS degree (or equivalent) **Functions:** Performs website design and creation. Plans, designs, develops, tests, edits, maintains, and documents look and flow of websites. Interviews clients to help them clarify their goals for establishing a website. Designs or supervises design of digitized images, banners, bullets, charts, image maps and other graphics to enhance

Labor Category *	Labor Category Qualifications
	appearance of site. Requires knowledge of programming techniques and computer internet systems. Performs a variety of tasks. Works under general supervision; typically reports to a project leader or manager. A certain degree of creativity and latitude is required. Familiar with standard concepts, practices, and procedures within a particular field. May lead or direct others. **Experience:** 8-10 years of experience in related area.
Web Designer/Developer IV	**Education:** MA/MS degree (or equivalent) **Functions:** Controls all technical aspects of website, including performance issues, such as speed of access, and approving site content. May also have responsibilities for site design and creation. Plans, develops, tests, edits, maintains, documents and controls content, look, and flow of websites. Applies knowledge of programming techniques and computer internet systems. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. A wide degree of creativity and latitude is expected. Very likely directs and leads others. Works under general supervision. Typically reports to a manager or head of a unit/department. **Experience:** 10+ years of experience in related area.
Quality Assurance Specialist I	**Education:** BS/BA degree (or equivalent) **Functions:** Responsible for assisting with all activities involving quality assurance and compliance with applicable regulatory requirements; conducts audits and reviews/analyzes data and documentation. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision. Relies on instructions and pre-established guidelines to perform the functions of the job., but a certain degree of creativity and latitude is required. Typically reports to a supervisor or manager. **Experience:** 2-4 years of experience in related area.
Quality Assurance Specialist II	**Education:** BS/BA degree (or equivalent) **Functions:** Responsible for quality assurance and compliance with applicable regulatory requirements; conducts audits and reviews/analyzes data and documentation. Familiar with a variety of the field's concepts, practices, and procedures. Relies on extensive experience and judgment to plan and accomplish goals. Performs a variety of tasks. May lead and direct the work of others. A wide degree of creativity and latitude is expected. **Experience:** 4-8 years of experience in related area.

Labor Category *	Labor Category Qualifications
Quality Assurance Specialist III	**Education:** BS/BA degree (or equivalent) **Functions:** Responsible for quality assurance and compliance with applicable regulatory requirements; conducts audits and reviews/analyzes data and documentation. Familiar with a variety of the field's concepts, practices, and procedures. Relies on extensive experience and judgment to plan and accomplish goals. Performs a variety of tasks. May lead and direct the work of others. A wide degree of creativity and latitude is expected. Typically reports to a manager or head of a unit/department. **Experience:** 8-10 years of experience in related area.
Quality Assurance Specialist IV	**Education:** MS/MA degree (or equivalent) **Functions:** Responsible for all aspects of quality assurance and compliance with applicable regulatory requirements; conducts audits and reviews/analyzes data and documentation. Familiar with a variety of the field's concepts, practices, and procedures. Relies on extensive experience and judgment to plan and accomplish goals. Performs a variety of tasks. Will very likely lead and direct the work of others. A wide degree of creativity and latitude is expected. Typically reports to a manager or head of a unit/department. **Experience:** 10+ years of experience in related area.
Scientific Systems Analyst I	**Education:** BS/BA degree (or equivalent) **Functions:** Assists to solve computer, business, scientific, engineering, policy/compliance or other discipline system/process problems and enables system to meet the needs of the organization. Performs system studies to assist organization to realize maximum benefit from investments in equipment, personnel, and business processes or to comply with internal or external requirements. Plans and designs new systems/processes or devises ways to apply existing systems resources to additional operations. Analyzes requirements, procedures, and problems to improve existing system/processes. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. Works under general supervision. **Experience:** 2-4years of experience in related area.
Scientific Systems Analyst II	**Education:** BS/BA degree (or equivalent) **Functions:** Solves computer, business, scientific, engineering, policy/compliance or other discipline system/process problems and enables system to meet the needs of the organization. Performs system studies to assist organization to realize maximum benefit from investments in equipment, personnel, and business processes or to comply with internal or external requirements. Plans and designs new systems/processes or devises ways to apply existing systems resources to additional operations. Analyzes requirements, procedures, and problems to improve existing system/processes. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish

Labor Category *	Labor Category Qualifications
	goals. Performs a variety of complicated tasks. A wide degree of creativity and latitude is expected. Works under general supervision. **Experience:** 5-7 years of experience in related area.
Scientific Systems Analyst III	**Education:** MA/MS degree (or equivalent) **Functions:** Solves computer, business, scientific, engineering, policy/compliance or other discipline system/process problems and enables system to meet the needs of the organization. Performs system studies to assist organization to realize maximum benefit from investments in equipment, personnel, and business processes or to comply with internal or external requirements. Plans and designs new systems/processes or devises ways to apply existing systems resources to additional operations. Analyzes requirements, procedures, and problems to improve existing system/processes. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. A wide degree of creativity and latitude is expected. May direct and lead others. Works under general supervision. Typically reports to a manager or head of a unit/department. **Experience:** 8-10 years of experience in related area.
Scientific Systems Analyst IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Solves computer, business, scientific, engineering, policy/compliance or other discipline system/process problems and enables system to meet the needs of the organization. Performs system studies to assist organization to realize maximum benefit from investments in equipment, personnel, and business processes or to comply with internal or external requirements. Plans and designs new systems/processes or devises ways to apply existing systems resources to additional operations. Analyzes requirements, procedures, and problems to improve existing system/processes. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. A wide degree of creativity and latitude is expected. Will very likely direct and lead others. Works under general supervision. Typically reports to a manager or head of a unit/department. **Experience:** 10+ years of experience in related area.
Scientific Applications Programmer I	**Education:** BS/BA degree (or equivalent) **Functions:** Converts scientific, engineering, and other technical problem formulations to formats that can be processed by computer. Resolves symbolic formulations, prepares flowcharts and block diagrams, and encodes resultant equations for processing by applying extensive knowledge of branch of science, engineering, or advanced mathematics, such as differential equations or numerical analysis, and understanding of capabilities and limitations of computer. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision.

Labor Category *	Labor Category Qualifications
	Experience: 2-4 years of experience in related area.
Scientific Applications Programmer II	**Education:** BS/BA degree (or equivalent) **Functions:** Converts scientific, engineering, and other technical problem formulations to formats that can be processed by computer. Resolves symbolic formulations, prepares flowcharts and block diagrams, and encodes resultant equations for processing by applying extensive knowledge of branch of science, engineering, or advanced mathematics, such as differential equations or numerical analysis, and understanding of capabilities and limitations of computer. Familiar with standard concepts, practices, and procedures within a particular field. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision. May lead and direct others. A certain degree of creativity and latitude is required. **Experience:** 5-7 years of experience in related area.
Scientific Applications Programmer III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Converts scientific, engineering, and other technical problem formulations to formats that can be processed by computer. Resolves symbolic formulations, prepares flowcharts and block diagrams, and encodes resultant equations for processing by applying extensive knowledge of branch of science, engineering, or advanced mathematics, such as differential equations or numerical analysis, and understanding of capabilities and limitations of computer. Familiar with standard concepts, practices, and procedures within a particular field. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision. May lead and direct others. A certain degree of creativity and latitude is required. Typically reports to a supervisor or manager. **Experience:** 8-10 years of experience in related area.
Scientific Applications Programmer IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Converts scientific, engineering, and other technical problem formulations to formats that can be processed by computer. Resolves symbolic formulations, prepares flowcharts and block diagrams, and encodes resultant equations for processing by applying extensive knowledge of branch of science, engineering, or advanced mathematics, such as differential equations or numerical analysis, and understanding of capabilities and limitations of computer. Familiar with standard concepts, practices, and procedures within a particular field. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision. Very likely will lead and direct others. A certain degree of creativity and latitude is required. Typically reports to a supervisor or manager. **Experience:** 10+ years of experience in related area.

Labor Category *	Labor Category Qualifications
Geographic Information System (GIS) Specialist I	**Education:** BS/BA degree (or equivalent) **Functions:** Utilizes Geographic Information System techniques to provide a better understanding of certain variables in a given geographic location. Extracts data from GIS software and uses varying analysis methods to arrive at results. Recommends appropriate reactionary strategies in response to GIS analysis. Provides maps and data sets to clients to supplement analysis. Knowledgeable of GIS software and technology. Works in conjunction with CADD drafters and technicians. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. **Experience:** 2-4 years of experience in related area.
Geographic Information System (GIS) Specialist II	**Education:** BS/BA degree (or equivalent) **Functions:** Utilizes Geographic Information System techniques to provide a better understanding of certain variables in a given geographic location. Extracts data from GIS software and uses varying analysis methods to arrive at results. Recommends appropriate reactionary strategies in response to GIS analysis. Provides maps and data sets to clients to supplement analysis. Knowledgeable of GIS software and technology. Works in conjunction with CADD drafters and technicians. Familiar with standard concepts, practices, and procedures within a particular field. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision. May lead and direct others. A certain degree of creativity and latitude is required. **Experience:** 5-7 years of experience in related area.
Geographic Information System (GIS) Specialist III	**Education:** MA/MS degree (or equivalent) **Functions:** Utilizes Geographic Information System techniques to provide a better understanding of certain variables in a given geographic location. Extracts data from GIS software and uses varying analysis methods to arrive at results. Recommends appropriate reactionary strategies in response to GIS analysis. Provides maps and data sets to clients to supplement analysis. Knowledgeable of GIS software and technology. Works in conjunction with CADD drafters and technicians. Familiar with standard concepts, practices, and procedures within a particular field. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision. May lead and direct others. A certain degree of creativity and latitude is required. Typically reports to a supervisor or manager. **Experience:** 8-10 years of experience in related area.
Geographic Information System (GIS) Specialist IV	**Education:** MA/MS degree (or equivalent) **Functions:** Utilizes Geographic Information System techniques to provide a better understanding of certain variables in a given geographic location. Extracts data from GIS software and uses varying analysis methods to arrive at results. Recommends appropriate reactionary strategies in response to GIS

Labor Category *	Labor Category Qualifications
	analysis. Provides maps and data sets to clients to supplement analysis. Knowledgeable of GIS software and technology. Works in conjunction with CADD drafters and technicians. Familiar with standard concepts, practices, and procedures within a particular field. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision. Very likely will lead and direct others. A certain degree of creativity and latitude is required. Typically reports to a supervisor or manager.
	Experience: 10+ years of experience in related area.

Category 6: Social Science Services. Examples include (but not limited to) Anthropology, Economics, and Social Science.

Social Science Subcategories
Level 1: *See the standard "level 1" definition at the end of this discussion.*
Level 2: *See the standard "level 2" definition at the end of this discussion.*
Level 3: *See the standard "level 3" definition at the end of this discussion.*

Social Science Services Core Labor Categories:

* Levels I through IV are not equivalent to the standard levels 1 through 4 defined at the end of this discussion.

Labor Category *	Labor Category Qualifications
Social Scientist I	**Education:** BS/BA degree (or equivalent) **Functions:** Responsible for studying and researching the link between society and human behavior. Specializes in any of the natural sciences, including hydrology, meteorology, oceanography, economics, climatology, political science and international relations, sociology, geography, law, and psychology. Observe links between society and human behavior via conducting field studies. Design and lead research projects, including both long and short-term projects. Formulate research questions. Provide analysis of collected information. Plans, designs, and authorizes highly complex research projects to provide a framework for collection and analysis. Directs and participates in qualitative and quantitative data collection methodologies to include direct observation, visual ethnography, key leader engagement, participant observation, depth interviewing, group or focus group interviewing, surveying, secondary source research, and mixed method approaches. Conduct statistical analysis at varying levels of complexity. Participate in outreach events to communicate research and network with study participants as needed.
	Experience: 2-4 years of experience in related area.

Labor Category *	Labor Category Qualifications
Social Scientist II	**Education:** BS/BA degree (or equivalent) **Functions:** Responsible for studying and researching the link between society and human behavior. Specializes in any of the natural sciences, including hydrology, meteorology, oceanography, economics, climatology, political science and international relations, sociology, geography, law, and psychology. Observe links between society and human behavior via conducting field studies. Design and lead research projects, including both long and short-term projects. Formulate research questions. Provide analysis of collected information. Plans, designs, and authorizes highly complex research projects to provide a framework for collection and analysis. Directs and participates in qualitative and quantitative data collection methodologies to include direct observation, visual ethnography, key leader engagement, participant observation, depth interviewing, group or focus group interviewing, surveying, secondary source research, and mixed method approaches. Conduct statistical analysis at varying levels of complexity. Participate in outreach events to communicate research and network with study participants as needed. **Experience:** 5-7 years of experience in related area.
Social Scientist III	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Responsible for studying and researching the link between society and human behavior. Specializes in any of the natural sciences, including hydrology, meteorology, oceanography, economics, climatology, political science and international relations, sociology, geography, law, and psychology. Observe links between society and human behavior via conducting field studies. Design and lead research projects, including both long and short-term projects. Formulate research questions. Provide analysis of collected information. Plans, designs, and authorizes highly complex research projects to provide a framework for collection and analysis. Directs and participates in qualitative and quantitative data collection methodologies to include direct observation, visual ethnography, key leader engagement, participant observation, depth interviewing, group or focus group interviewing, surveying, secondary source research, and mixed method approaches. Conduct statistical analysis at varying levels of complexity. Participate in outreach events to communicate research and network with study participants as needed. **Experience:** 8-10 years of experience in related area.
Social Scientist IV	**Education:** MA/MS/PhD degree (or equivalent) **Functions:** Responsible for studying and researching the link between society and human behavior. Specializes in any of the natural sciences, including hydrology, meteorology, oceanography, economics, climatology, political science and international relations, sociology, geography, law, and psychology. Observe links between society and human behavior via conducting field studies. Design and lead research projects, including both long and short-term projects. Formulate research questions. Provide analysis of collected information. Plans, designs, and authorizes highly complex

Labor Category *	Labor Category Qualifications
	research projects to provide a framework for collection and analysis. Directs and participates in qualitative and quantitative data collection methodologies to include direct observation, visual ethnography, key leader engagement, participant observation, depth interviewing, group or focus group interviewing, surveying, secondary source research, and mixed method approaches. Conduct statistical analysis at varying levels of complexity. Participate in outreach events to communicate research and network with study participants as needed.
	Experience: 10+ years of experience in related area.

Standard Level Definitions

Advanced degrees from an accredited institution and/or professional credentials from a recognized entity may be cumulatively tallied and substituted for experience. Masters and associates degrees are equivalent to two years of experience; bachelors and doctoral degrees are equivalent to four years of experience. Requirements for specialized degrees, credentials, and experience will be specified at the task order level.

Level 1: Minimum of two years of relevant experience, with up to four years total relevant experience.
Level 2: Minimum of five years of relevant experience, with up to seven years total relevant experience.
Level 3: Minimum of eight years of relevant experience, with up to ten years total relevant experience.
Level 4: Minimum of ten years of relevant experience.