



## **LBNL Stimulus Projects Management Plan**

### **Plan Objective**

LBNL anticipates the receipt of upwards of \$115 million in ARRA funding beginning April 2009 for a variety of projects, designated Stimulus Projects. It is expected that all project funds need to be obligated by DOE into Contract 31 by September 30, 2010. LBNL has five years from the date of obligation—or September 30, 2015—to spend the funds. The projects range from conventional facilities in nature (e.g. new construction, building renovation, building replacement, utilities, and energy conservation) to additional project support for research in the fields of advanced computing, materials, energy, and biology.

A noticeable percentage of the Stimulus Projects is accelerated funding for existing Line Item projects (e.g. USB, Seismic Phase 2, and BELLA). The impact of accelerating project schedules has been reviewed and project schedules have been re-baselined.

The objective of this Management Plan is to identify protocols and processes to complete all projects safely; within budget, scope, and schedule; and in compliance with DOE requirements. Once proper assurances are documented and provided to DOE and the appropriate Contract 31 clauses are invoked, LBNL needs to manage the projects with a sense of urgency, and project teams need to commence the work immediately.

This is a preliminary Management Plan. Once the number, size, and type of Stimulus Projects are known, the Management Plan will be updated. The Plan will also be updated periodically based on evolving guidance from DOE.

### **Executive Oversight Committee**

LBNL has established an Executive Oversight Committee to provide oversight of the Stimulus Program at LBNL. The Committee will approve projects prior to execution and provide oversight for risk management and change control. Project teams will report project performance and risks at least monthly. Members include the Berkeley Site Office (BSO) Manager, BSO Division Director for Projects and Facilities, the LBNL Chief Operating Officer (COO), Deputy COO, Chief Financial Officer (CFO), Internal Audit Services, Chief Human Resources Officer, Public Affairs Department Head, Facilities Division Director, Environment, Health & Safety (EH&S) Division Director, Budget Officer, Procurement Department representatives, scientific division representation, and others as appropriate. The Committee Charter is attached (Attachment 1).

### **Human Resources**

LBNL, for internal tracking purposes only, will utilize Human Resources' processes and systems to capture internal ARRA headcount hires. New hires will be tracked by distinct job opening codes that will be used consistently throughout LBNL systems.

## **Project Management**

Depending on the size of the ARRA program and projects approved, project teams will be established to manage the procurement, design, and execution. The project management team is responsible for the overall success of the project (safety, scope, schedule, budget, and client relationship) and for compliance with all pertinent contractual (e.g., DOE Order 413.3A) and regulatory requirements, including the following:

- Setting up separate project IDs for ARRA-funded projects or ARRA-designated tasks when projects include both ARRA and non-ARRA funding
- Accurately segregating costs incurred on ARRA-funded projects or ARRA-designated tasks when projects include both ARRA and non-ARRA funding
- Ensuring that costs charged to ARRA-designated project IDs are for items delivered and/or work performed that satisfies a purpose, and is within the scope, authorized by the sponsor under ARRA.

## **Change Control**

Changes to ARRA-funded projects inclusive of scope, schedule, and budget will be presented to the Executive Oversight Committee for review and approval. The Executive Oversight Committee will work with the project team members to make appropriate formal notifications to DOE.

## **Conventional Facilities Projects**

Conventional facilities projects will be executed by the Facilities Division. The Capital Projects and Small Projects departments within Facilities will lead these projects. Staffing of the teams will be a combination of term employees and contract employees. Team composition will include a Project Director (LBNL Career Employee), Project Manager (PM), Construction Manager (CM), Project Coordinator, and Project Controls. Project teams will have the benefit of existing project management, procurement, EH&S and financial systems, and will be assigned to Stimulus projects as a first priority.

Some of the projects in the Stimulus Program are bound by DOE Project Management Order 413.3A. For projects that are provided accelerated funding (e.g., USB and Seismic Phase 2), the existing project teams will continue to manage the projects. For projects with Total Project Cost (TPC) over \$5 million, which are bound by DOE Order 413.3A, project teams will use a tailored approach to the Order (e.g., Design-Build). For projects with TPC under \$5 million, 413.3A is not required. These projects will use the new Capital Projects and Small Projects Procedures as applicable.

Facilities currently has one contract in place for PM and CM services as well as pre-design services (scoping). This contract is being utilized to staff the project teams. All new employees, whether contract or term, shall utilize LBNL's Job Hazards Analysis (JHA) process for training requirements as well as reviewing all Capital Projects and Small Projects procedures.

Facilities and Procurement will continue to develop any necessary blanket agreements for PMs and CMs so contract employees can be quickly acquired. Facilities will continue to review PM resumes from other DOE Laboratories.

## **Delivery Method and Procurement**

All conventional facilities projects shall require the services of Architecture/Engineering (A/E) teams and Construction Contractors (subcontractors). The Stimulus Program requires aggressive execution in a very timely manner. The acceptable delivery methods for responding to three criteria—the 18-24 month project schedule and the proposed project types and sizes—are:

- Job Order Contracting (JOC)
- Contract Labor
- Design-Build

The benefit of a JOC results from competitively awarded contracts that are already in place with pricing that is known advance. Facilities currently has two Job Order Contracts. A third JOC to a small business is being actively pursued and should be available shortly. A fourth is being evaluated for an expedited bid process. Project size and types best suited for JOC include small- to medium-sized renovations projects (TPC under \$5 million).

Currently, Facilities has a Contract Labor agreement in place. Project size and types best suited for Contract Labor projects include site utility, site development (pipelines and roadways), and small renovation projects.

For the JOC and Contract Labor delivery methods, A/E services will need to be procured via existing blanket agreements.

Design-Build is a delivery method where the A/E is under contract with the Construction Contractor (versus Design-Bid-Build where the A/E is under contract with the Lab). The benefit of Design-Build is quicker execution of work. In addition, DOE Order 413.3A allows for this delivery method, and LBNL staff has some experience with Design-Build (e.g., USB project). One downside of Design-Build however, is that the Construction Contractor is in greater control of the quality of materials and equipment. The Project teams and design reviewers need to carefully review the design submittals and inspect the construction work.

### **Construction Management & Inspection**

In Facilities, Construction Managers manage the day-to-day activities of construction contractors in the field. This is a key position, ensuring that projects are executed safely and within scope. Inspectors are responsible for quality assurance, and they ensure projects are executed in accordance with building codes and contract requirements.

The Stimulus Projects will use the existing construction management and inspection programs within Facilities. Facilities will have two to three months before construction activities begin to acquire construction managers and inspectors (i.e., contract labor) to dedicate to the project teams.

Facilities will staff the project teams with construction managers via the PM/CM blanket agreements. Additional inspectors will be contracted via the current inspection services agreement. Additional resources for the administrative management of the Contract Labor (GSE) expansion will be identified and acquired.

### **EH&S**

Currently EH&S assigns a Team Lead to conventional facilities projects. The Team Lead is responsible for coordinating design and construction reviews with the EH&S subject matter experts and updating the team as to the status of the assigned project. This process works well and is scalable from small to large projects.

All projects shall undergo some level of California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA) review. Most renovation, utility, and roadway projects will be Ce/Cx, and their reviews will be quick. Building replacement projects may be Ce/Cx but need further and careful review. If any of the projects require greater evaluation than Ce/Cx (e.g., environmental assessment

[EA]), the project schedule may be impacted. A preliminary review of all projects prior to initiation will be required to determine potential schedule impact and project feasibility.

Construction truck traffic is capped at 33 trucks per day. With the five major construction projects currently underway, this limit is often reached. LBNL is updating the site-wide Environmental Impact Report to address the increased truck traffic.

LBNL will consider the assignment of a dedicated, full-time EH&S Team Lead for the Stimulus Projects. It is likely that a new Industrial Hygienist (IH), a Radiation Technician, and at least one new Construction Safety Professional will be needed during design and construction. Once the Stimulus Projects are known and funded, LBNL will either have in-house or consultant reviews of projects for the appropriate level of CEQA/NEPA review needed.

### **Risk Management**

Managing project risks will be key to the success of the Stimulus Program. For Stimulus Projects that are provided accelerated funding and for projects bound by DOE Order 413.3A, a Risk Management Plan is required, along with a Risk Registry and Contingency Analysis. For projects with TPC less than \$5 million, a tailored approach needs to be developed. In either case, Risk Registries will be updated monthly and results presented to the Executive Oversight Committee.

### **Design Standards, Reviews, and Approvals**

Current LBNL Design Standards shall be used for all Stimulus Projects. A/E and Construction Contractors shall be encouraged to critique the standards and offer higher value solutions. Updated standards shall be shared with all project teams.

All Stimulus Projects shall submit designs for review and approval at least once in the design cycle. Final design sign-offs shall be used per the Facilities Planning Group and the Facilities Capital Projects Department or Small Projects Department procedures.

For any Stimulus Project that affects the external environment (building mass, color, material, fenestration), there shall be a 50% design review presented to the Executive Oversight Committee for consideration and approval.

### **Project Team Reporting**

Projects that are bound by DOE Order 413.3A shall use EVMS (Earned Value Management System) and report to Facilities, the Executive Oversight Committee, and DOE accordingly (TPC greater than \$5 million). Projects with a TPC less than \$5 million shall use the Project Workbook and report to Facilities, the Executive Oversight Committee, and DOE accordingly. Project risks and mitigations shall also be presented.

The Capital Projects Update process shall be expanded to include presentation and review of all Stimulus Projects to the Executive Oversight Committee on a monthly basis (financial and risks).

Master project schedules and status reports, including all Stimulus Projects, will be updated and distributed monthly.

## Procurement

Procurement is working closely with Facilities, both Capital Projects and the Small Projects, and the science divisions to tailor its efforts to best fit the final list of funded projects. The plan is to make full use of existing competitively bid contractual arrangements and to add resources as necessary to enable effective turnaround of subcontracting efforts.

### A/E Resources (Master Task Agreements [MTA]) Currently in Place

1. Blanket subcontract with RMW Architects for program, project, and construction management. This agreement has one more option year, which can be exercised, and is used for everything except Title I and II design services. RMW can be used to supplement in-house staff.
2. Multi-disciplinary A/E subcontracts: LBNL currently has competitively awarded blankets with five small businesses. LBNL plans to open up a dialogue with these companies so that their services and pricing are also consistent with Small Project needs.
3. Structural engineering, plan check services, and estimating services: LBNL recently competitively awarded new MTAs for these services.

### Additional A/E Needs and Plans for Obtaining Them

1. Electrical/Mechanical Engineering Services: This is underway, but submittals have not been received. Lead time: 45 days.
2. Additional Multi-disciplinary A/E services: LBNL may need to request additional submittals on a competitive basis in order to award an MTA to one or more large A/E firms. Lead time: 45 days.

### Construction Resources Currently in Place

1. Labor Only agreement with GSE for labor hour construction services.
2. Job Order Contracts with Crouse Construction and Gwinn Construction.

### Additional Construction Needs and Plans for Obtaining Them

1. LBNL is negotiating to award an additional JOC subcontract to the third-ranked small business from the recent competition. Lead time: 2 weeks.
2. LBNL is working on revising our JOC RFP to allow a competitive award to one or more large businesses that could perform several JOC projects valued at \$2-8 million or more. Lead time: 45 days.
3. LBNL is working on a public announcement and pre-qualification questionnaire that can be used to pre-qualify general contractors for multiple projects. We may also enter into un-priced master task agreements with pre-qualified firms that would shorten the proposal time after development of work scopes. Lead time: 45 days.
4. A small business source for project management services has been identified.

### Reporting on Subcontracting

1. Procurement will include appropriate provisions in ARRA-funded subcontracts and compile information biweekly on subcontracts based on requirements of the H.999 provision to support reporting requirements.
2. Procurement will review transactions under \$25,000 on a quarterly basis to assess needs for special reporting on repetitive requirements.

#### Plans for Acquiring Additional Procurement Staff

1. Procurement will acquire additional staff needed to meet long-term ARRA subcontracting workload (administration through 2015) with hiring to be approved based on assessment of concurrent attrition projections.
2. LBNL can also supplement procurement resources through one or more of the following:
  - Diversion of staff personnel with construction experience to construction projects, if necessary
  - Use of temporary labor through OSI
  - Obtain assistance from LLNS and/or UC
  - Invoke a temporary increase in P-card limits to \$25,000 (thereby permitting diversion of in-house staff to critical needs, such as ARRA).

#### Buy American Act

Existing practice solicitations include requirements for certifying use of domestic products and identifying any proposed introduction of foreign product. LBNL does not foresee exceptional ARRA-related Buy American issues, and non-compliance in construction projects is extremely rare. Any discovered non-compliance would be addressed as currently handled, by requiring removal and replacement for domestic product. Circumstances arising with non-availability of equivalent domestic products will be processed as required under the Act.

### **Reporting Strategy & Tracking**

LBNL has extrapolated Laboratory requirements by reviewing evolving guidance, including the initial OMB Guidance to Agencies and DOE guidance from various sources. A dedicated Budget Office manager has been assigned for all the Stimulus Projects to assure compliance with budget guidance. LBNL will determine if additional personnel need to be hired, or if current employees can be re-assigned.

#### Basic Assumptions

- LBNL will segregate all ARRA funding and costs incurred in financial systems
- LBNL will build an ARRA database by (extracting or inputting) ARRA-only data to meet specialized ARRA reporting requirements
- LBNL will identify all ARRA funding:
  - **DOE Direct – No issue**
  - **WFO (Work For Others) – LBNL will have to ask sponsor and document response**
  - **IWOs (Inter-entity Work Order) – Process pending DOE CFO approval to use IWO process. (Original Guidance was that all ARRA funding had to be processed through the AFP. That guidance is currently under review and expected to change to allow for use of IWO process). ARRA IWO funding will be noted by flagging the award/project utilizing the funds as ARRA.**
- Third-Party Money: assume no LBNL reporting requirements (see OMB Guidance)
- LBNL will assume monthly reporting requirement (constrained by current labor/effort system—no weekly feeder capability)
- LBNL as “prime” recipient of DOE Direct ARRA funding will have to collect ARRA costs/reporting data from our subcontractors
- LBNL as a subcontractor of other prime recipients will have to report ARRA data to our sponsors
- LBNL will assume that a “Job(s) created or maintained” is equivalent to an FTE(s) employed on an ARRA-funded project
- Assume no CAS (cost accounting standards) issue with GPP (General Plant Projects) funding provided via ARRA vs. IGPP (Institutional General Plant Projects) spending
- At this time LBNL has not received WFO guidance and will update this plan as soon as it is received.

## Controls

- ARRA funds control can be achieved utilizing current Laboratory funds control processes and systems because ARRA financial funding and costing data will be tracked and accumulated via a separate and distinct funding chart string that will be used consistently throughout LBNL systems (fund type, B and R, BRN, BRNsub, Program Task [Project Code]). The unique funding string will be associated with a unique, high-detail financial project for each ARRA-funded DOE Direct project and a unique award for each ARRA-funded Sponsored Project.
- ARRA Management and Control Reporting will be done from a single institutional ARRA database to ensure reporting consistency. The database will include baseline (plan) data elements and actual data elements so that actuals can be easily tracked against baseline data for control purposes. A cross-functional Reporting Stimulus team has been formed to build the institutional reporting database. The team has broken into seven sub-teams to address segments of ARRA reporting requirements. The sub-teams are:
  - Procurement
  - Accounts Payable
  - WFO Requirements
  - Recovery Header System Design and Implementation
  - Reporting
  - Workflow
  - Data Element Identification and Sourcing.

See attached DRAFT Data elements spreadsheet (Attachment 2).

- Various control reports will be produced from the database, including a monthly ARRA status report, by project, for review by the Executive Oversight Committee, LBNL senior management, UCOP, and BSO. LBNL envisions the capability to source from the database for the FederalReporting.gov report template which has yet to be defined.
- FTE reporting will be handled consistently through the application of standardized institutional conversion factors which convert subcontractor reported hours and purchases to FTEs for purposes of reporting Jobs data. See attached memos detailing factors (Attachment 3).

## Follow-up Issues

- Consistency of reporting requirements (e.g., EERE Reporting)
- Divisional Update sessions on ARRA reporting requirements will be scheduled as will formal training sessions once the institutional database functionality is in place.

## **Internal Audit and Oversight**

To ensure that LBNL is in compliance with all requirements of ARRA, the Executive Oversight Committee includes a member from Internal Audit Services (IAS). IAS has been working with the DOE Inspector General to address internal review requirements and expectations. The DOE IG has requested that contractor internal auditors include audit coverage of risks associated with compliance with ARRA requirements in their audit effort for the remainder of FY 2009 and FY 2010.

To support that request, IAS will perform an Advisory Service review for LBNL's efforts to-date around Stimulus Funding. The review will begin in the third quarter of FY 2009 and will be completed by the end of the fourth quarter of FY 2009. The objective of the review is to provide input to LBNL management on implementation of internal controls to ensure that LBNL complies with the unique requirements associated with ARRA funding. Based on a preliminary review of these requirements, IAS anticipates providing input on controls in the following areas:

- Segregation of costs incurred with ARRA funding, especially where ARRA funding was an augmentation of existing non-ARRA funding
- Procurement Department's implementation of "Buy American" provision for construction materials and new flow-down requirements for subcontractors who are sub-recipients of ARRA funding
- Generation of timely and reliable reporting on use of ARRA funding, including identification and tracking of tangible accomplishments, costs expended, and jobs created or retained.

In addition, IAS will perform a compliance audit in FY 2010 to assess compliance with, and adequacy of, established controls for compliance with LBNL internal controls, along with DOE and OMB requirements.

## Risks

- Construction truck trips at LBNL are managed individually by the project management teams and as a program by the Site Construction Coordinator. Increasing average truck trips is being reviewed and may change to 49 trips per day (vs. 33). Complete by June 1, 2009. (Medium risk factor)
- GPP projects are renovation or replacement in scope. While it is believed a NEPA Cx is applicable to the projects, if an EA is necessary, this may put schedule performance at risk. Time to complete: 1 month. (Low risk factor)
- Identification of additional Construction Managers, inspectors, IH, radiation protection, construction safety, project controls, and procurement support in progress. We are initiating the process to hire term or contract CMs. Time to complete: 1-3 months. (Low to medium risk factor)
- For Stimulus Projects that provide accelerated funding and for projects bound by DOE Order 413.3A, a Risk Management Plan is required along with a Risk Registry and Contingency Analysis. For projects with TPC less than \$5 million a tailored approach will be developed. In either case, Risk Registries will be updated monthly and results presented to the Executive Oversight Committee.
- Garnering support from local residents, neighbors, and the political community for Stimulus-funded work. Representative Barbara Lee held a forum on February 27, 2009 to discuss the impacts of the Stimulus Spending Package on the 9th Congressional District. Public Affairs attended the forum and provided an update on LBNL projects submitted and potential for funding and jobs created, and also discussed potential concerns. We will work with Public Affairs to develop a communication strategy with our local stakeholders. Time to complete: ongoing. (Medium to high risk factor)
- To mitigate execution and compliance risks, LBNL Internal Audit Services is a member of the Executive Oversight Committee and will advise on implementing and updating this plan and on establishment of additional controls to ensure compliance with unique Stimulus funding contractual requirements. See section entitled "Internal Audit and Oversight" for further information.

## Communication

Berkeley Lab has launched a website for all activities related to Stimulus funding. This site ([recovery.lbl.gov](http://recovery.lbl.gov)) lists all ARRA-funded projects as the money is received and also serves as a resource for researchers and businesses interested in learning more about how to apply for Stimulus funding. Opportunities will be posted as they become available.

## Attachment 1

### **STIMULUS STEERING COMMITTEE CHARTER**

#### **Charter**

The Stimulus Steering Committee (SSC) provides high level oversight, strategic direction and operational support to the Stimulus Program at LBNL. The SSC coordinates communication and reporting with all affected internal and external organizations. The Committee is led by the Chief Financial Officer (CFO) and includes technical representatives from scientific and operations divisions, and the Berkeley Site Office.

The SSC plays a critical role in coordinating the Stimulus Program at the Laboratory by ensuring that all policies, resources, and systems are aligned with institutional and DOE objectives. The Committee helps shape decisions in the interest of ensuring compliance and furthering the interests of UC and DOE.

The Committee meets on a periodic basis to exchange knowledge and ideas and determine strategies for implementing stimulus funds. The Committee:

- Maintains and manages a master list of funded stimulus projects
- Approves initiation of infrastructure projects prior to execution
- Provides support to acquire additional resources
- Reviews project performance and risks on a monthly basis
- Coordinates communication and reporting to third parties
- Provides formal end-user representation
- Assures economic impacts are assessed and reported
- Assures that all projects are completed safely, within budget, scope and schedule.

#### **Organization**

The SSC includes:

Jeffrey Fernandez (Chair), Anita Gursahani (co-chair), Sarah Eary, Derrol Hammer, Howard Hatayama, Minh Huebner, Jim Krupnick, Don Medley, Jeff Miller, Jerry Ohearn, Aundra Richards, Jennifer Ridgeway, Suzanne Suskind, Diana Attia, Terry Hamilton, Vera Potapenko, Bill Fortney, Marcy Beck, Kristin Balder-Froid, Anil More (coordinator)

Team Members are responsible for communicating all relevant information to key stakeholders of their respective organizations as well as acting as ambassadors for the Laboratory. Team members are authorized to make recommendations and make decisions on behalf of their respective organizations.

Attachment 2

**Draft Data Elements Spreadsheet**

<u>Reviewed</u>	<u>Grouping</u>	<u>Old Order</u>	<u>Data Element</u>	<u>Description</u>	<u>Source of Data</u>	<u>Owner</u>	<u>Frequency</u>	<u>Data Type</u>
x	Proposal	4	Reporting Entity	Name of the Entity Reporting the ARRA activity	Constant (LBNL)	LBNL	Once	Code
?	Proposal	11	Proposal ID, DOE	Approved Proposal used to obtain ARRA funding.	?	Proposal Sponsor	Once	Code
x	Proposal	11	Proposal ID, Internal	Approved Proposal used to obtain ARRA funding.	Planning, FBSS, Paper, G	Proposal Sponsor	Once	Code
x	Proposal	11.1	Proposal Source	Source of Proposal (Planning, FBSS,Grants, Online	Proposal	Proposal Sponsor	Once	Code
x	Proposal	5	LD_Division_ID	Lead Level One Division	Proposal	Proposal Sponsor	Once	Code
x	Proposal	5	C_Division_ID	Collaborative Level One Division	Proposal	Proposal Sponsor	Once	Code
x	Proposal	6	Contact Name	Contact name for ARRA Activity	Proposal	Proposal Sponsor	Once	Character
x	Proposal	7	Contact Phone	Phone for ARRA Activity	Proposal	Proposal Sponsor	Once	Character
x	Proposal	8	Contact email	Contact Email for ARRA Activity	Proposal	Proposal Sponsor	Once	Character
?	Proposal	9	Name of Funding Program	Name of DOE Program/Sponsor providing the fund	Proposal		Once	Code (2- 4-6)
x	FMS	10	LBNL Role (ARRA_TYPE)	LBNL Reporting Role (Primary, Secondary,Tertiar	Project Costing	Division/SPO	Once	Code
x	FMS	12	FMS Project ID	Projects which associates LBNL activity with the A	Division	Division		Code
x	FMS		Project Rollup Rule	If needed, will use Super Project for DOE projects (not using Super Projects for WFO)				
x	FMS	12	FMS Project UDF	Project User defined field groups LBNL Project acti	Division	Division		Code
x	FMS	12.1	FMS Award Number	LBNL	Rapid	SPO	Once	Character
x	FMS		FMS RWO Number	DOE	Rapid/DOE	System	Once	Character
x	Proposal	13	Project Title_DOE_Award	Project Title DOE POP - Recovery Act Project	DOE/Sponsor			
x	FMS	13	Project Title	FMS Project Description	Project Costing			
x	Proposal		NAICS Code (Proposal Level)	Initial NAICS High Level Code				
	Proposal		LBNL_Work_Congressional District	Congressional District Performance Location for LE				
x	Proposal	14	Description of Project Activity	Abstract - Work Scope	Planning, FBSS, Paper, G	Division	Once	Long
x	Subcontract	14.1	PO Number	FMS PO Number	Purchasing	Procurement	Once	Code
??????	Subcontract	14.2	PO MOD Number/PO line	FMS PO MOD Number	Purchasing	Procurement	Once	Code
x	Subcontract	15	First Tier Subcontractor Name	FMS Subcontractor/Vendor Name	Purchasing	Procurement	Once	Code
x	Subcontract	14.3	PO Award Date	Subcontract Award Date	Purchasing	Procurement	Once	Code
x	Proposal	16	Additional NEPA Requirements (Y/N	ARRA NEPA Requirements	Division	Proposal Sponsor	Once	Y/N
x	Subcontract	17	DUNS Number	Vendor DUNS Number	Vendor	Procurement	Once	Code
x	Subcontract	17.1	CAGE Number	Vendor CAGE Number	Vendor	Procurement	Once	Code
x	Subcontract	17.2	NAICS Number	Vendor NAICS Number	Vendor	Procurement	Once	Code
x	Subcontract	17.3	Subcontract Description	Subcontract Description	Division/PO	Procurement	Once	Code
x	Subcontract	17.4	Subcontract Address	Vendor Physical Address	PO-Vendor	Procurement	Once	Code
x	Subcontract	17.5	Subcontract Location	Vendor Performance Location	PO-New Setup	Procurement	Once	Code
x	Subcontract	17.6	Congressional District Physical	Congressional District Physical Location	Internet by location	Procurement		
x	Subcontract	17.7	Congressional District Performance	Congressional District Performance Location	Internet by location	Procurement		
x	Subcontract	17.8	TOP 5 compensated employees	TOP 5 compensated employees non SEC	Vendor	Procurement		
x	FMS Project	18	Color of Money/MARS Type	FMS MARS Attribute of Project	FMS		Once	
	Subcontract R&C's		Est. Subcontractor Internal Labor Hours Jobs Created					
	Subcontract R&C's		Est. Subcontractor Internal Labor Hours Jobs Maintained					
	Subcontract R&C's		Est. 2nd Subcontractor Internal Labor Hours Jobs Created					
	Subcontract R&C's		Est. 2nd Subcontractor Internal Labor Hours Jobs Maintained					
	Subcontract R&C's		Est. Subcontractor External Dollars Materials and Services Purchased					
?	Proposal	19	Proposed Total Project Cost					
?	Proposal	20	Proposed Start Date					
?	Proposal	21	Proposed End Date					
?	Proposal	22	Revised Start Date					
?	Proposal	23	Revised End Date					
?	Proposal	24	Milestones (freeform 10 ?)	H.999(H)(C) (2)iii for reference				
x	?		Major Milestone Phase/Activity	Need at least 10 milestone buckets	Various			
x	?		Major Milestone Start		Various			
x	?		Major Milestone End		Various			
x	?		Major Milestone Dollars		Various			
?			% Completion on Milestone					
x	Proposal	25	Planned Obligated	Detailed Plan of Liens by month	Proposal/Plan	Division	Once (baseline Plus?)	Monetary

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Data Elements for Stimulus Projects Included in Stimulus Data Base

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<u>Reviewed</u>	<u>Grouping</u>	<u>Old Order</u>	<u>Data Element</u>	<u>Description</u>	<u>Source of Data</u>	<u>Owner</u>	<u>Frequency</u>	<u>Data Type</u>
x	Proposal	49	Planned Cost	Detailed Plan of Costs by month	Proposal/Plan	Division	Once (baseline Plus?)	Monetary
			Planned Direct Labor					
			Planned Direct FTE's					
			Planned Direct Materials and Services					
x	Baseline		% Indirect Cost					
x	Baseline		Planned Indirect Labor					
			Planned Indirect FTE's					
			Planned Indirect Materials and Services					
x	Baseline		Planned Indirect Total Cost					
			Planned Capital Cost	Subcontracted Capital and Construction Costs related to Line Items, Capital Equipment and GPP Projects				
			Planned Other Cost	Anything not included in any other category (see final POP definition)				
?	Proposal		Planned Alloted (funding)	Detailed Plan of Funding by month	Proposal/Plan	Division		
x	Proposal	73	Estimated LBNL FTES	In Total or By month	Proposal/Plan	Division		
x	Proposal	74	Est. Subcontractor Internal Labor Hours Jobs Created		Proposal/Plan	Division		
x	Proposal	75	Est. Subcontractor Internal Labor Hours Jobs Maintained		Proposal/Plan	Division		
x	Proposal	74	Est. 2nd Subcontractor Internal Labor Hours Jobs Created		Proposal/Plan	Division		
x	Proposal	75	Est. 2nd Subcontractor Internal Labor Hours Jobs Maintained		Proposal/Plan	Division		
x	Proposal	76	Subcontractor External Dollars Materials and Services Purchased		Proposal/Plan	Division		
x	FMS Project	79	Fund Type	Fund Type, Part of DOE Chart Fields	DOE Mod	DOE	Once plus incremental	Character
x	FMS Project	80	B&R	B&R, Part of DOE Chart Fields	DOE Mod	DOE	Once plus incremental	Character
x	FMS Project	81	BRN	BRN, Part of DOE Chart Fields	DOE Mod	DOE	Once plus incremental	Character
x	FMS Project	82	BRN SUB	BRN SUB, Part of DOE Chart Fields	DOE Mod	DOE	Once plus incremental	Character
x	FMS Project	83	Program Task (Stim Project Code)	Program Task, Part of DOE Chart Fields	DOE Mod	DOE	Once plus incremental	Character
x	FMS	84	Cumulative Total Amount of Spend	Calculated from FMS	FMS			
x	FMS	85	Cumulative total Prior Year Spend	Calculated from FMS	FMS			
x	FMS		Total Funding	Calculated from MOD	DOE Mod			
x	FMS		Total Contract Value	when we are not prime	WFO Contract			
x	FMS		Monthly Funding	incremental to total funds received	DOE MOD			
x	FMS	86	Current Year Beginning Uncosted Balance	Current Year Beginning Uncosted Balance	Funding System			
x	FMS	87	Current Year to Date Cost (cumulative)	Current Year to Date Cost (cumulative)	FMS			
x	FMS		Actual Direct Labor Cost monthly	needs to determine consistent definition between direct and indirect labor				
	FMS		Actual LBNL Direct FTE's Monthly	(see page 3 of CFO POP)				
	FMS		Actual Direct Materials and services	(see page 3 of CFO POP)				
	FMS		Actual Indirect labor monthly	(see page 3 of CFO POP)				
	FMS		Actual Indirect FTE's Monthly	(see page 3 of CFO POP)				
	FMS		Actual Indirect Materials and Services	(see page 3 of CFO POP)				
??????	FMS		Actual Capital Cost	Subcontracted Capital and Construction Costs related to Line Items, Capital Equipment and GPP Projects				
	FMS		Actual Other Cost	Anything not included in any other category (see final POP definition)				
x	FMS	88	Current Year Commitments	Current Year Commitments	FMS			
x	FMS	89	Uncosted Balance					
x	FMS	90	Uncommitted Balance					
	?	91	% Completion	Program Estimate ?				
	?		% Completion Narrative	Explanation of Current Project Status		Division		
x	FMS	92	% Spent	Total Cost divided by Total Project Value	FMS	System Calculated		
	FMS	93	Total FTE's (LBNL + subcontract)	Actual Expenditures of Funds (current activity and Life to date)				
	FMS		Subcontractor FTE's	Actuals based on Sub Hours/Material Formula				
	FMS	94	Monthly cost	Actual Expenditures of Funds (current activity and Life to date)			Monthly	
	FMS	95	Monthly commitments	Actual Commitments of Funds (current activity and Life to date balance)			Monthly	
	Proposal	77	Construction Project GC Internal Labor Hours					
	Proposal	78	Construction Project GC Lower Tier Subcontracted Labor Hours					

Attachment 3

**Memo: Standard Hour Conversion to FTE Metric (with attachment)**

**Memo: Purchased Services or Materials Cost Conversion to FTE Metric (with attachments)**



# CFO

LAWRENCE BERKELEY NATIONAL LABORATORY

## Office of the Chief Financial Officer

Budget Office

One Cyclotron Road, MS: 90H

Berkeley, CA 94720

Voice: 510.486.5293/ Fax: 510.486.6282

March 23, 2009

To: Memorandum for Budget Office File

From:  Brian Fox, Indirect Budget Manager

Subject: American Recovery & Reinvestment Act (ARRA) Funds to Tier 1 Subcontractors from LBNL -- Standard Hour Conversion to FTE Metric

A reporting requirement for the ARRA Act [reference, Contract Clause H.999 Special Provisions Relating to Work Funded Under American Recovery & Reinvestment Act of 2009 (Feb 2009)] is that LBNL must report the estimated number of jobs created and the estimated number of jobs retained from its First-tier Subcontractors paid by funds from ARRA.<sup>1</sup> The number shall be expressed as “full-time equivalent” (FTE) and as defined by LBNL’s existing personnel procedures.<sup>2</sup>

Based on LBNL’s historical information, the number of annual productive hours per FTE is 1,820 hours / year. Hourly information from First-tier Subcontractors will be converted to FTE using this conversion rate. Attachment 1 is the detail derivation of 1,820 hours / FTE.

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<sup>1</sup> Contract Clause H.999, page 3

<sup>2</sup> *ibid.*

# Attachment 1

## Summary of LBNL's Productive Hours

Base on GR1 Overhead Labor Base

GR1 MON PLF	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ave PLF
FY07	0.9200	0.8405	0.7053	0.8400	0.8825	0.9270	0.9154	0.8825	0.9083	0.8517	0.8803	0.8757	0.8692
FY08	0.9326	0.8432	0.6750	0.8436	0.8910	0.9250	0.9317	0.8825	0.9114	0.8653	0.8939	0.8849	0.8737
FY09	0.9290	0.8354	0.6905	0.8442	0.8983	0.9260	0.9235	0.8825	0.9098	0.8585	0.8871	0.8803	0.8716

MON Hrs	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
FY07	176	176	168	184	160	176	168	184	168	176	184	160	2,080
FY08	184	176	168	184	168	168	176	176	168	184	168	176	2,096
FY09	184	160	184	176	160	176	176	168	176	184	168	176	2,088

MON GR1 Productive Hrs	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
FY07	161.9	147.9	118.5	154.6	141.2	163.2	153.8	162.4	152.6	149.9	162.0	140.1	1,808.0
FY08	171.6	148.4	113.4	155.2	149.7	155.4	164.0	155.3	153.1	159.2	150.2	155.7	1,831.3
FY09	170.9	133.7	127.0	148.6	143.7	163.0	162.5	148.3	160.1	158.0	149.0	154.9	1,819.8
3 Yr Average Hrs													1,819.7

GR1 BWK PLF	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ave PLF
FY07	0.8907	0.8409	0.9082	0.7008	0.8695	0.9098	0.8912	0.9021	0.8673	0.8535	0.8994	0.8822	0.8613
FY08	0.9005	0.8330	0.7637	0.7655	0.8789	0.9258	0.9102	0.9078	0.8765	0.8802	0.9058	0.8401	0.8642
FY09	0.9108	0.9274	0.7458	0.7077	0.8760	0.9178	0.9007	0.9049	0.8719	0.8669	0.9026	0.8612	0.8640

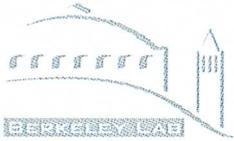
BWK Hrs	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
FY07	120	200	120	240	160	160	160	200	160	160	200	200	2,080
FY08	160	160	120	240	160	160	200	160	160	200	160	216	2,096
FY09	144	160	200	160	160	160	200	160	160	200	160	224	2,088

BWK GR1 Productive Hrs	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
FY07	106.9	168.2	109.0	168.2	139.1	145.6	142.6	180.4	138.8	136.6	179.9	176.4	1,791.6
FY08	144.1	133.3	91.6	183.7	140.6	148.1	182.0	145.3	140.2	176.0	144.9	181.5	1,811.5
FY09	131.1	148.4	149.2	113.2	140.2	146.8	180.1	144.8	139.5	173.4	144.4	192.9	1,804.1
3 Yr Average Hrs													1,802.4

GR1													
% MON FTE to total FTE	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ave
FY07	86.2%	86.5%	86.4%	86.7%	86.5%	86.4%	86.5%	86.5%	85.5%	84.7%	83.5%	84.8%	85.8%
FY08	85.5%	85.4%	86.1%	86.7%	86.4%	86.2%	86.5%	85.9%	85.2%	84.4%	84.3%	86.1%	85.7%
Projected FY09 %MON	86.8%	86.7%	87.4%	87.3%	86.3%	86.2%	86.5%	85.9%	85.2%	84.4%	84.3%	86.1%	86.1%
FY07 Wt Ave Hrs	154.3	150.7	117.2	156.4	140.9	160.8	152.3	164.8	150.6	147.9	164.9	145.6	1806.3
FY08 Wt Ave Hrs	167.6	146.2	110.4	159.0	148.5	154.4	166.4	153.9	151.2	161.8	149.3	159.3	1828.1
FY09 Wt Ave Hrs	165.7	135.6	129.8	144.1	143.2	160.7	164.9	147.8	157.1	160.4	148.3	160.2	1817.9
Wt Ave MON & BWK Hrs													1,817.4

Note, Projected Monthly FY09 PLF from Mar to Sep = Average FY07 & FY08  
 FY07, FY08 & FY09 Oct to Feb are actual PLF.

Annual Hours / FTE	1,820
Round to	1,820



# CFO

LAWRENCE BERKELEY NATIONAL LABORATORY

## Office of the Chief Financial Officer

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March 24, 2009

To: Memorandum for Budget Office File

From: Ann Moore, Direct Budget Manager *am*

Subject: American Recovery & Reinvestment Act (ARRA) Funds to Tier 1 Subcontractors from LBNL – Purchased Services or Materials Cost Conversion to FTE Metric

A reporting requirement for the ARRA Act [reference, Contract Clause H.999 Special Provisions Relating to Work Funded Under American Recovery & Reinvestment Act of 2009 (Feb 2009)] is that LBNL must report the estimated number of jobs created and the estimated number of jobs retained from its First-tier Subcontractors paid by funds from ARRA.<sup>1</sup> The number shall be expressed as “full-time equivalent” (FTE) and as defined by LBNL’s existing personnel procedures.<sup>2</sup>

Based on 4<sup>th</sup> quarter 2008 US GDP of \$14.3 trillion and the number employed of 142 million in Jan 2009, the calculated GDP per worker is \$100K. The calculated \$100K per worker is used to calculate the equivalent of one FTE for every \$100K of purchased services or materials. The cost of services or materials (before LBNL burdens) from First-tier Subcontractors will be converted to an equivalent number of FTEs using this conversion rate.

Attachment 1 is an article from Fisher Investments that provided the logic for calculating the \$100K of GDP per worker.

Attachment 2 is Table 1.1.5 Gross Domestic Product from the Bureau of Economic Analysis

Attachment 3 is Table A-3 Employment Status (number of employed) from the Bureau of Labor Statistics

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<sup>1</sup> Contract Clause H.999, page 3

<sup>2</sup> *ibid.*



### A Calculator, and Bananas

Topic: US Economy Politics

2/19/2009 By Fisher Investments Editorial Staff

#### Story Highlights:

- The newly signed-into-law American Recovery and Reinvestment Act promises to save and create 3.5 million jobs—but this number rests on fuzzy mathematics.
- Historically, employment's peaks and troughs lag the economic cycle, which in turn lags the market.
- Given the stimulus package's size and scope, the government can monkey around all it wants initially, as long as that capital eventually makes its way to more efficient, private hands.

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A room full of monkeys on typewriters eventually produces masterful literary works—or so we're told (we're doubtful). Is the same true for a room full of monkeys with calculators? We're not sure exactly, but maybe, just maybe, the result is justification behind the American Recovery and Reinvestment Act's (or less formally, the \$789 billion stimulus package) promise to create and "save" 3.5 million jobs.

What Nobel-prize winning econometrics was deployed to arrive at this scenario? Surely, an undertaking this noble—the creating and saving of millions of jobs—deserves some hardcore linear algebraic wizardry, no?

It's not hard to figure out where the 3.5 million number came from. The US economy shed about 3.6 million jobs since the recession's start, so 3.5 million created "or saved" jobs will mitigate job losses to almost pre-recession levels. But how do we know the price tag necessary to create and "save" those jobs?

Even after setting aside the impossible-to-measure "saved jobs" aspect, it's apparent the calculations behind the jobs creation number are wonky at best. Government economic advisers figured a \$775 billion "prototypical" stimulus package translates to an additional 3,675,000 jobs based on multipliers and the rule of thumb a 1% increase in GDP equals 1 million jobs created. But no one can quite describe with certainty what this multiplier is and how anyone arrived at it.

But allow us to take a stab at detailing how the economic gurus seem to have come up with \$790 billion creating and saving 3.5 million jobs:

Take the \$14.3 trillion US GDP.

Divide by 142 million employed people.

You get \$100,000 output per worker.

A \$790 billion stimulus plan spent roughly over two years equals \$395 billion per year.

Divide \$395 billion by \$100,000 per worker = 3.9 million jobs created in one year!

Round that down to 3.5 million, because it'll presumably take longer than two years for all that money to get spent!

No matter if this is their exact methodology—the point is all this is fuzzy math no matter which way you spin it. The real puzzler, though, is the administration's determined focus on unemployment as the metric signaling the stimulus is working. To us, it seems they're setting themselves up for failure. Unemployment will, in all likelihood, be one of the last economic numbers to improve. Unemployment is a lagging economic indicator. Historically, employment's peaks and troughs lag the economic cycle, which in turn lags the market. Said another way, the economy will recover before employment recovers, and the market will recover before the economy.

Don't expect the stimulus to be perfect. Rather than focus on its minute details or its political promises (i.e., 3.5 million jobs), it's more important to see the stimulus as a massive spending boost. Given the package's size and scope, the government can monkey around all it wants initially, as long as that capital eventually makes its way to more efficient, private hands and increases velocity.

*\*The content contained in this article represents only the opinions and viewpoints of the [Fisher Investments](#) editorial staff.*

## Attachment 2

Table I.1.5. Gross Domestic Product

[Billions of dollars]

Seasonally adjusted at annual rates

Bureau of Economic Analysis

Downloaded on 3/25/2009 At 11:29:26 AM Last Revised February 27, 2009

Line	2007-I	2007-II	2007-III	2007-IV	2008-I	2008-II	2008-III	2008-IV
1 Gross domestic product	13,510.9	13,737.5	13,950.6	14,031.2	14,150.8	14,294.5	14,412.8	<b>14,200.3</b>
2 Personal consumption expenditures	9,524.9	9,657.5	9,765.6	9,892.7	10,002.3	10,138.0	10,163.5	9,923.5
3 Durable goods	1,076.6	1,085.3	1,086.2	1,083.0	1,071.0	1,059.3	1,016.2	946.3
4 Nondurable goods	2,761.5	2,817.7	2,846.6	2,906.2	2,950.7	3,026.2	3,044.6	2,839.3
5 Services	5,686.8	5,754.4	5,832.8	5,903.5	5,980.6	6,052.5	6,102.7	6,137.9
6 Gross private domestic investment	2,117.8	2,147.2	2,164.0	2,092.3	2,056.1	2,000.9	2,010.9	1,915.1
7 Fixed investment	2,133.4	2,148.1	2,141.0	2,113.4	2,081.7	2,077.0	2,060.6	1,946.3
8 Nonresidential	1,456.4	1,493.7	1,522.9	1,542.1	1,553.6	1,571.9	1,581.2	1,507.4
9 Structures	449.6	469.8	492.9	508.7	522.7	549.8	572.4	573.7
10 Equipment and software	1,006.8	1,023.9	1,030.0	1,033.4	1,030.9	1,022.1	1,008.8	933.7
11 Residential	677.0	654.4	618.1	571.3	528.1	505.0	479.4	439.0
12 Change in private inventories	(15.6)	(0.9)	23.0	(21.1)	(25.6)	(76.0)	(49.7)	(31.3)
13 Net exports of goods and services	(728.8)	(723.1)	(682.6)	(696.7)	(705.7)	(718.2)	(707.7)	(551.5)
14 Exports	1,560.5	1,614.4	1,714.9	1,759.7	1,820.8	1,923.2	1,968.9	1,730.5
15 Goods	1,085.0	1,116.8	1,181.2	1,213.7	1,256.9	1,343.7	1,374.3	1,157.5
16 Services	475.5	497.6	533.8	546.0	563.9	579.5	594.6	573.0
17 Imports	2,289.4	2,337.5	2,397.5	2,456.5	2,526.5	2,641.4	2,676.6	2,282.0
18 Goods	1,917.4	1,957.1	2,005.4	2,060.9	2,118.0	2,225.5	2,251.0	1,868.1
19 Services	372.0	380.5	392.1	395.6	408.5	415.9	425.6	413.9
20 Government consumption expenditures and gross investment	2,597.0	2,655.9	2,703.5	2,742.9	2,798.1	2,873.7	2,946.1	2,913.2
21 Federal	950.3	974.6	994.0	998.3	1,026.5	1,056.1	1,098.0	1,106.4
22 National defense	636.9	656.8	675.6	679.3	699.9	723.3	759.5	756.6
23 Nondefense	313.4	317.8	318.3	319.0	326.6	332.9	338.5	349.9
24 State and local	1,646.8	1,681.3	1,709.5	1,744.6	1,771.6	1,817.6	1,848.1	1,806.8

**99,932 Estimated GDP per worker:**

<http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=5&FirstYear=2007&LastYear=2008&Freq=Qtr>

# Attachment 3

HOUSEHOLD DATA  
SEASONALLY ADJUSTED

HOUSEHOLD DATA  
SEASONALLY ADJUSTED

A-3. Employment status of the civilian noninstitutional population by sex and age, seasonally adjusted

HOUSEHOLD DATA

(Numbers in thousands)

Employment status, sex, and age	2008												2009	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
<b>TOTAL</b>														
Civilian noninstitutional population (1).....	232,809	232,995	233,198	233,405	233,627	233,864	234,107	234,360	234,612	234,828	235,035	234,739	234,913	
Civilian labor force.....	153,498	153,843	153,932	154,510	154,400	154,506	154,823	154,621	154,878	154,620	154,447	153,716	154,214	
Percent of population.....	65.9	66	66	66.2	66.1	66.1	66.1	66	66	65.8	65.7	65.5	65.6	
Employed.....	146,075	146,023	146,257	145,974	145,738	145,596	145,273	145,029	144,657	144,144	143,338	142,099	141,748	
Employment-population ratio...	62.7	62.7	62.7	62.5	62.4	62.3	62.1	61.9	61.7	61.4	61	60.5	60.3	
Unemployed.....	7,423	7,820	7,675	8,536	8,662	8,910	9,550	9,592	10,221	10,476	11,108	11,616	12,467	
Unemployment rate.....	4.8	5.1	5	5.5	5.6	5.8	6.2	6.2	6.6	6.8	7.2	7.6	8.1	
Not in labor force.....	79,311	79,152	79,267	78,895	79,227	79,358	79,284	79,739	79,734	80,208	80,588	81,023	80,699	
Persons who currently want a job.....	4,777	4,747	4,782	4,813	4,925	5,033	4,836	5,140	5,065	5,393	5,488	5,643	5,645	
<b>Men, 16 years and over</b>														
Civilian noninstitutional population (1).....	112,596	112,695	112,803	112,912	113,029	113,154	113,281	113,414	113,546	113,660	113,769	113,573	113,666	
Civilian labor force.....	82,212	82,235	82,290	82,627	82,563	82,829	82,790	82,885	82,892	82,666	82,338	81,863	81,994	
Percent of population.....	73	73	73	73.2	73	73.2	73.1	73.1	73	72.7	72.4	72.1	72.1	
Employed.....	78,171	77,985	78,029	77,932	77,726	77,683	77,484	77,249	76,938	76,577	75,847	75,092	74,777	
Employment-population ratio...	69.4	69.2	69.2	69	68.8	68.7	68.4	68.1	67.8	67.4	66.7	66.1	65.8	
Unemployed.....	4,041	4,250	4,262	4,695	4,837	5,146	5,306	5,636	5,954	6,089	6,491	6,771	7,217	
Unemployment rate.....	4.9	5.2	5.2	5.7	5.9	6.2	6.4	6.8	7.2	7.4	7.9	8.3	8.8	
Not in labor force.....	30,384	30,460	30,512	30,285	30,467	30,324	30,491	30,529	30,654	30,994	31,431	31,710	31,672	
<b>Men, 20 years and over</b>														
Civilian noninstitutional population (1).....	103,961	104,052	104,152	104,258	104,371	104,490	104,613	104,741	104,869	104,978	105,083	104,902	104,999	
Civilian labor force.....	78,806	78,866	78,820	78,913	79,055	79,286	79,308	79,392	79,380	79,335	78,998	78,585	78,687	
Percent of population.....	75.8	75.8	75.7	75.7	75.7	75.8	75.8	75.8	75.7	75.6	75.2	74.9	74.9	
Employed.....	75,395	75,216	75,147	74,992	74,949	74,973	74,737	74,503	74,292	74,045	73,285	72,613	72,293	
Employment-population ratio...	72.5	72.3	72.2	71.9	71.8	71.4	71.1	70.8	70.5	69.7	68.7	69.2	68.9	
Unemployed.....	3,412	3,650	3,673	3,921	4,106	4,313	4,572	4,889	5,088	5,290	5,714	5,972	6,394	
Unemployment rate.....	4.3	4.6	4.7	5	5.2	5.4	5.8	6.2	6.4	6.7	7.2	7.6	8.1	
Not in labor force.....	25,155	25,186	25,332	25,345	25,315	25,204	25,305	25,349	25,489	25,643	26,085	26,318	26,312	
<b>Women, 16 years and over</b>														
Civilian noninstitutional population (1).....	120,213	120,300	120,396	120,493	120,598	120,710	120,825	120,946	121,066	121,168	121,266	121,166	121,247	
Civilian labor force.....	71,286	71,608	71,641	71,883	71,838	71,676	72,033	71,735	71,986	71,954	72,109	71,853	72,220	
Percent of population.....	59.3	59.5	59.5	59.7	59.6	59.4	59.6	59.3	59.5	59.4	59.5	59.3	59.6	
Employed.....	67,904	68,038	68,228	68,042	68,012	67,913	67,789	67,780	67,720	67,567	67,491	67,007	66,970	
Employment-population ratio...	56.5	56.6	56.7	56.5	56.4	56.3	56.1	56	55.9	55.8	55.7	55.3	55.2	
Unemployed.....	3,382	3,570	3,413	3,841	3,825	3,763	4,244	3,956	4,267	4,387	4,618	4,845	5,250	
Unemployment rate.....	4.7	5	4.8	5.3	5.3	5.3	5.9	5.5	5.9	6.1	6.4	6.7	7.3	
Not in labor force.....	48,927	48,692	48,754	48,610	48,760	49,034	48,792	49,210	49,080	49,214	49,157	49,313	49,027	
<b>Women, 20 years and over</b>														
Civilian noninstitutional population (1).....	111,822	111,902	111,990	112,083	112,183	112,290	112,401	112,518	112,633	112,731	112,825	112,738	112,824	
Civilian labor force.....	67,879	68,174	68,118	68,367	68,421	68,273	68,666	68,385	68,700	68,753	68,891	68,584	68,917	
Percent of population.....	60.7	60.9	60.8	61	61	60.8	61.1	60.8	61	61	61.1	60.8	61.1	
Employed.....	64,993	65,079	65,196	65,114	65,169	65,103	65,003	65,008	64,975	64,902	64,860	64,298	64,271	
Employment-population ratio...	58.1	58.2	58.2	58.1	58.1	58	57.8	57.8	57.7	57.6	57.5	57	57	
Unemployed.....	2,886	3,095	2,923	3,252	3,252	3,170	3,662	3,377	3,725	3,851	4,031	4,286	4,646	
Unemployment rate.....	4.3	4.5	4.3	4.8	4.8	4.6	5.3	4.9	5.4	5.6	5.9	6.2	6.7	
Not in labor force.....	43,943	43,728	43,872	43,716	43,762	44,017	43,736	44,133	43,933	43,978	43,935	44,154	43,907	
<b>Both sexes, 16 to 19 years</b>														
Civilian noninstitutional population (1).....	17,027	17,041	17,056	17,064	17,073	17,084	17,092	17,101	17,110	17,118	17,126	17,098	17,090	
Civilian labor force.....	6,813	6,803	6,993	7,231	6,924	6,947	6,849	6,844	6,799	6,531	6,557	6,547	6,610	
Percent of population.....	40	39.9	41	42.4	40.6	40.7	40.1	40	39.7	38.2	38.3	38.3	38.7	
Employed.....	5,688	5,729	5,914	5,868	5,620	5,520	5,533	5,518	5,390	5,196	5,194	5,188	5,184	
Employment-population ratio...	33.4	33.6	34.7	34.4	32.9	32.3	32.4	32.3	31.5	30.4	30.3	30.3	30.3	
Unemployed.....	1,125	1,075	1,079	1,363	1,304	1,427	1,316	1,326	1,408	1,335	1,363	1,359	1,427	
Unemployment rate.....	16.5	15.8	15.4	18.9	18.8	20.5	19.2	19.4	20.7	20.4	20.8	20.8	21.6	
Not in labor force.....	10,214	10,237	10,063	9,834	10,149	10,137	10,243	10,257	10,311	10,587	10,568	10,551	10,480	

1 The population figures are not adjusted for seasonal variation.  
NOTE: Updated population controls are introduced annually with the release of January data.

<http://www.bls.gov/web/epseca3.pdf>