



Impacts and Costs of the October 2013 Federal Government Shutdown

NOVEMBER 2013



Executive Summary

The October 2013 Federal government shutdown was the second longest since 1980 and the most significant on record, measured in terms of employee furlough days. Outside experts estimate that the shutdown will reduce fourth quarter Gross Domestic Product (GDP) growth by 0.2-0.6 percentage points. The Council of Economic Advisers estimates that the combination of the government shutdown and debt limit brinksmanship may have resulted in 120,000 fewer private-sector jobs created during the first two weeks of October.¹

This report examines the economic, budgetary, and programmatic costs of the government shutdown. These costs include economic disruption, Federal employee furloughs, programmatic impacts, other costs to the Federal budget, and impacts on the Federal workforce.

Economic Disruption

Independent forecasters estimate that the shutdown will lower fourth quarter real GDP growth by 0.2-0.6 percentage points, or \$2-\$6 billion in lost output. Most of these estimates of the shutdown's economic costs are model-based projections, which incorporate only the shutdown's effects on the flow of government spending. As a result, they may not fully account for the direct economic disruption that resulted from the shutdown of government services important to the functioning of the private economy.

The Federal government shutdown:

- **Halted permitting and environmental and other reviews, delaying job-creating transportation and energy projects.** For example, *the Bureau of Land Management (BLM) was unable to process about 200 Applications for Permit to Drill*, delaying energy development on Federal lands in North Dakota, Wyoming, Utah, and other states.
- **Hindered trade by putting import and export licenses and applications on hold.** For example, because the Treasury Department's Alcohol and Tobacco Tax and Trade Bureau was unable to issue export certificates for beer, wine, and distilled spirits, *more than two million liters of U.S. products were left sitting at ports unable to ship.*

¹ Council of Economic Advisers, "Economic Activity During the Government Shutdown and Debt Limit Brinksmanship," October 2013, http://www.whitehouse.gov/sites/default/files/docs/weekly_indicators_report_final.pdf.

Impacts and Costs of the October 2013 Federal Government Shutdown

- **Disrupted private-sector lending to individuals and small businesses.** During the shutdown, banks and other lenders could not access government income and Social Security Number verification services. Two weeks into the shutdown, the Internal Revenue Service (IRS) had an inventory of 1.2 million verification requests that could not be processed, potentially delaying approval of mortgages and other loans.
- **Halted Federal loans to small businesses, homeowners, and housing and healthcare facility developers.** The Small Business Administration (SBA) was unable to process about 700 applications for \$140 million in small business loans, and the Federal Housing Administration (FHA) was unable to process over 500 applications for loans to develop, rehabilitate, or refinance around 80,000 multifamily rental units.
- **Delayed the Alaskan crab fishing season, costing fisherman thousands of dollars in lost revenue.** Because the National Oceanic and Atmospheric Administration (NOAA) was unable to apportion harvest levels, the start of the season was delayed for three to four days. The fishing industry estimates these delays cost fisherman thousands of dollars of lost revenue per day, since days lost at the beginning of the season cannot be made up later.
- **Disrupted tourism and travel by closing national parks and the Smithsonian.** The National Park Service (NPS) estimates that the shutdown led to over \$500 million in lost visitor spending nationwide, a significant economic hit to communities surrounding national parks and monuments.
- **Significantly impacted small businesses that contract with the Federal government.** Compared with the same period last year, small business contracts with the Department of Defense (DOD) dropped by almost one-third during the shutdown, and spending dropped 40 percent.
- **Delayed aircraft purchases and deliveries by closing the Federal Aviation Administration (FAA)'s Aircraft Registry.** The General Aviation Manufacturers Association estimates that this delayed 156 aircraft deliveries valued at \$1.9 billion.
- **Delayed Food and Drug Administration (FDA) approval of medical products, devices, and drugs.** This delayed businesses in moving products to market.

- **Deprived businesses of important information about the state of the economy.** During the shutdown, Federal statistical agencies were unable to release data and reports ranging from the October jobs report and the Consumer Price Index to the Energy Information Administration's reports on petroleum, diesel prices, heating oil, and natural gas storage. Businesses count on these data to make investment, pricing, and other decisions.

Federal Employee Furloughs

During the 16-day shutdown, *Federal government employees were furloughed for a combined total of 6.6 million days*, more than during any previous Federal government shutdown. Employees not on the job could not conduct food, product, and workplace safety inspections; prepare for flu season or monitor other public health issues; process tax refunds or respond to taxpayer questions; or provide numerous other services important to the general public and the economy.

One way to quantify the cost of Federal employee furloughs is in terms of payroll costs for furloughed employee pay --- costs the Federal government incurred for services that could not be performed. We estimate that *the total cost of pay for furloughed Federal employees during the period of the shutdown is roughly \$2.0 billion.*² *Total compensation costs, including benefits, are about 30 percent larger, in the range of \$2.5 billion.*

Impacts on Programs and Services

An alternative way to quantify the cost of Federal employee furloughs is in terms of their impact on programs and services. Millions of Americans were impacted by the shutdown, due to furloughs of Federal employees, reduced services for the public, and delays in payments to Federal grantees, States, localities, contractors, and individuals. For example, the shutdown:

- Stalled weekly progress in reducing the backlog of veterans' disability claims, which was previously being reduced at a rate of *almost 20,000 claims per week*.
- Delayed *almost \$4 billion in tax refunds* and will delay the start of the 2014 tax filing season by *up to two weeks*.
- Prevented *hundreds of patients* from enrolling in National Institutes of Health (NIH) clinical trials.

² This estimate is based on average salary costs for furloughed employees by agency. It includes only costs for normal work days (excluding weekends and Columbus Day).

Impacts and Costs of the October 2013 Federal Government Shutdown

- Forced Head Start grantees serving nearly 6,300 children to close their centers for up to nine days (before re-opening with the help of private philanthropists or their state).
- Delayed home loan decisions for 8,000 rural families.
- Led the FDA to delay nearly 500 food and feed domestic inspections and roughly 355 food safety inspections under State contracts. These routine inspections enable FDA to determine compliance with law and ensure that unsanitary conditions and practices that may result in foodborne illness are addressed.
- Prevented the timely and complete investigation of 59 airplane accidents by the National Transportation Safety Board (NTSB).
- Delayed workshops for 1,400 military service members to help them transition to civilian life and employment.
- Forced cut-backs in Centers for Disease Control and Prevention (CDC) flu season surveillance and monitoring, leaving local public health authorities without access to complete national flu season data for two weeks.
- Brought new Federal research activities to a standstill, with 98 percent of National Science Foundation (NSF), nearly three-quarters of NIH, and two-thirds of CDC employees furloughed.
- Required the National Institutes of Standards and Technology (NIST) and the National Aeronautics and Space Administration (NASA) to furlough four out of the five Nobel Prize-winning researchers currently employed by the Federal government.
- Halted Environmental Protection Agency (EPA) inspections at about 1200 sites, including hazardous waste facilities, chemical facilities, and drinking water systems.
- Denied assistance to almost 500 small businesses seeking to keep their workplaces safe, because many States had to shut down the federally-funded Consultation Program.

Other Costs to the Federal Budget

On top of furloughs, the Federal government also incurred other direct budgetary costs as a result of the shutdown. For example:

- **Fees went uncollected.** For example, the National Park Service estimates that it lost about \$7 million in revenue as a result of the shutdown, while the Smithsonian lost an additional \$4 million in revenue.
- **IRS enforcement and other program integrity measures were halted.** The IRS was unable to conduct most enforcement activities during the shutdown, which normally collect about \$1 billion per week. The Social Security Administration (SSA) was delayed in completing over 1,600 medical disability reviews and over 10,000 Supplemental Security Income (SSI) redeterminations each day. These reviews ensure that only eligible individuals receive Disability Insurance and SSI benefits.
- **The Federal government will owe interest on late payments.** Under the Prompt Payment Act and the Cash Management Improvement Act, the Federal government will be required to pay interest on billions of dollars of payments that could not be made on time during the shutdown, ranging from IRS refunds to payments to contractors.
- **Agencies incurred personnel and other costs for shutdown implementation.** Even when employees were able to work during the shutdown, thousands of employee hours – and other resources – were diverted to planning for and executing shutdown and startup activities. For example:
 - At the Department of Defense, civilian and military employees at hundreds of installations across the United States and around the world spent thousands of hours developing and implementing plans for managing a shutdown, implementing the Pay Our Military Act, and restarting full operations.
 - The National Nuclear Security Administration (NNSA) at the Department of Energy (DOE) devoted time and resources to placing nuclear weapons labs into safe standby condition, only to direct additional resources to restoring normal operations at these facilities days later.
 - The NSF and its contractors were forced to incur costs to begin placing assets that are part of the U.S. Antarctic Program into caretaker status, in order to safeguard them in the absence of funds to conduct planned research.

Impacts and Costs of the October 2013 Federal Government Shutdown

- In a world of diminished program budgets, these shutdown and restart costs came at the expense of support for mission-related work.

Impacts on the Federal Workforce

The recent shutdown jeopardized both the income stability of hundreds of thousands of Federal employees and their ability to focus on important agency missions that citizens rely upon each day.

During the shutdown, hundreds of thousands of Federal employees did not receive their full paychecks, including many employees that were legally required to work during the lapse. While all Federal employees ultimately have been compensated for the period of the shutdown, the burden of delayed paychecks on Federal workers and their families was significant and harmful.

Furloughs during the shutdown also followed an unprecedented three-year pay freeze for Federal employees, and, for hundreds of thousands of workers, administrative furloughs earlier this year caused by sequestration. The shutdown disrupted agency operations in many ways and has been challenging to recover from.

Economic Cost of the Federal Government Shutdown

Leading independent forecasters estimate that the shutdown will lower fourth quarter real GDP growth by 0.2-0.6 percentage points or more, or \$2-\$6 billion in lost output.³

- **Standard and Poor's:** *"We believe that, to date, the shutdown has shaved at least 0.6% off of annualized fourth-quarter 2013 GDP growth..."*⁴
- **Macroeconomic Advisers:** *"Calibrating [the 1995-1996 shutdowns] to today's economy, we estimate that a two-week shutdown would directly trim about 0.3 percentage point from fourth quarter growth, mainly by interrupting the flow of services produced by federal employees."*⁵
- **Goldman Sachs** projected that the shutdown would reduce GDP growth by 0.14 percentage points per week, even after most furloughed Department of Defense employees returned to work.⁶
- **Mark Zandi, Moody's:** *"The 16-day Federal shutdown and political brinksmanship around the Treasury debt ceiling hurt the economy. The hit to fourth quarter real GDP is estimated at... half a percentage point of growth."*⁷

However, most of these estimates of the shutdown's economic costs are model-based projections that only take into account how the shutdown affected the direct flow of spending into the economy. There are other factors that should be considered as well, for example:

1. The estimates do not capture any additional costs imposed through the impact of the shutdown on consumer and business confidence.

³ Some have reported this output loss on an annualized basis, in which case it amounts to up to \$24 billion.

⁴ Standard and Poor's, October 16, 2013.

⁵ Macroeconomic Advisers, on behalf of the Peterson Foundation, "The Costs of Crisis-Driven Fiscal Policy," October 2013.

⁶ Goldman Sachs Global Economics, "Shutdown Continues But Recent Actions Are Likely to Reduce Economic Effects," October 6, 2013.

⁷ Mark Zandi, "A Budget Battle Postmortem," Moody's Analytics, October 2013.

Impacts and Costs of the October 2013 Federal Government Shutdown

- During the shutdown, the Gallup Daily Economic Confidence Index fell to its lowest level since December 2011, likely reflecting the combined impact of the shutdown and debt limit brinksmanship.
- The October Reuters/Michigan Index of Consumer was at its lowest level since December 2012.
- The Index of Consumer Expectations fell to its lowest level since November 2011.
- A survey commissioned by Goldman Sachs found that two out of five Americans said they would reduce their spending due to the government shutdown.⁸

Using actual high-frequency economic data from the period of the shutdown, the Council of Economic Advisers has estimated that the combination of the Federal government shutdown and debt limit brinksmanship may have reduced fourth-quarter GDP growth by 0.25 percentage points and resulted in 120,000 fewer private sector jobs created between October 1 and October 12.⁹ The shutdown lasted until October 16, meaning that the total impact may have been even greater.

2. The projections do not fully capture the direct economic disruption caused by the shutdown of government activities the private sector relies on. For example, the Federal government shutdown:

- **Halted permitting and environmental and other reviews, delaying job-creating transportation and energy projects in North Dakota, Wyoming, Utah and other states.** The Federal government was unable to issue permits to conduct drilling operations on Federal lands, and it stopped or delayed environmental reviews of planned transportation and energy projects, which prevented companies from moving forward on these projects. In particular, *BLM was unable to process about 200 Applications for Permit to Drill (APDs)*. This delayed energy development on Federal lands in North Dakota, Wyoming, Utah and other states. Oil and gas lease sales were also postponed.
- **Hindered trade by putting import and export licenses and applications on hold and halting export promotion activities.**

⁸ Minsi Chung, "Two Out of Five Americans Cut Spending Amid Government Shutdown," Bloomberg, October 15, 2013.

⁹ Council of Economic Advisers, "Economic Activity During the Government Shutdown and Debt Limit Brinksmanship," October 2013, http://www.whitehouse.gov/sites/default/files/docs/weekly_indicators_report_final.pdf.

Impacts and Costs of the October 2013 Federal Government Shutdown

- The Treasury Department's Alcohol and Tobacco Tax and Trade Bureau was unable to issue export certifications for beer, wine, and distilled spirits in response to 100 requests from approximately 65 businesses. As a result, more than two million liters of U.S. products were left sitting at ports, unable to ship.
- The Department of Commerce's Bureau of Industry and Security could not accept new export license applications and pending requests were put on hold, preventing some sellers of high-tech goods from exporting their products.
- The Export-Import Bank (Ex-Im) suspended approvals of new applications for loans, guarantees, and insurance. In a typical month, Ex-Im approves nearly \$3 billion in authorizations with export value close to \$4.2 billion.
- **Disrupted private-sector lending to individuals and small businesses.** Financial institutions depend on IRS income verification (with taxpayer permission) to determine eligibility for loans such as mortgages. The IRS usually receives close to 400,000 requests per week; two weeks into the shutdown, IRS had an inventory of 1.2 million requests that could not be processed. Meanwhile, SSA suspended its consent-based Social Security Number verification system, a system that many financial institutions use to verify Social Security numbers prior to granting credit. This led a number of financial institutions to suspend mortgage processing due to the inability to verify Social Security numbers, according to the Mortgage Bankers Association.
- **Halted Federal loans to small businesses, homeowners, and housing and healthcare facility developers.**
 - Roughly 700 small businesses applied for roughly \$140 million in loans during the shutdown; none of these loans could be approved until the shutdown ended.
 - FHA delayed processing over 500 applications for loans to develop, rehabilitate, or refinance around 80,000 units of multifamily rental housing.
 - FHA also suspended the Home Equity Conversion Mortgage (HECM) program, a program that serves seniors who need to draw on their

Impacts and Costs of the October 2013 Federal Government Shutdown

home equity to cover living expenses and medical costs. During a typical two-week period, FHA insures over 2,300 HECM loans.

- **Delayed the Alaskan crab fishing season by three to four days, costing fisherman thousands of dollars in lost revenue.** To prevent unsustainable overfishing, NOAA Fisheries allocate harvest levels and issue permits to fishermen before they can fish. Because the NOAA Fisheries staff were furloughed, fishermen were not able to fish until the government was reopened and these permits were processed, which was 3-4 days after the regularly scheduled start of the season. Industry estimates that each lost day led to thousands of dollars of lost revenue for both the fishing industry and coastal communities, revenue needed to recoup the millions of dollars invested to prepare for the season.
- **Disrupted tourism and travel by closing national parks and the Smithsonian** Normally, National Parks welcome an average of 715,000 visitors a day during October, and these visitors spend an average of \$33 million a day, benefiting local communities surrounding the parks. NPS estimates that the shutdown led to over \$500 million in lost visitor spending nationwide, even after taking into account the 13 parks that were re-opened using state funds after more than a week of being shut down. The park closures also impacted the broader travel industry and local businesses, as families across the country cancelled their travel plans. The travel industry and tourism were also impacted by the Smithsonian closures. For example, the National Gallery of Art receives approximately 12,000 visitors a day on average in the fall, suggesting that some 200,000 people missed visiting the Gallery during the shutdown.
- **Significantly impacted small businesses that contract with the Federal government.** Over the first two weeks of the shutdown, small businesses contracts with DOD were cut by almost one-third and spending was down 40 percent, compared to the same period in the previous year. Payment delays during the shutdown forced contractors to temporarily lay off employees and imposed particular financial hardship on small businesses with less ability to absorb losses and put off payments of their own.
- **Delayed aircraft purchases and deliveries by closing the FAA's Aircraft Registry.** During the shutdown, aircraft registrations were put on hold due to furloughs of employees at the Office of Aircraft Registry. The General Aviation Manufacturers Association reports that the shutdown delayed delivery of 156 aircraft deliveries valued at \$1.9 billion. The FAA is currently working to clear the backlog of delayed registrations.

- **Delayed efforts to combat invasive species that are endangering Great Lakes fisheries.** U.S. Geological Survey (USGS) scientists were unable complete field-testing of a technology to prevent the spread of Asian carp into the Great Lakes. The window of opportunity to field test this technology was missed, due to cooling water temperatures, and *testing will now be delayed for six months*. Work was also delayed on other invasive species projects, including research on the spread of dangerous Africanized honeybees in the Southwest, invasive grass species involved in intensifying wildfires, and white-nose bat syndrome impacting bats in national parks.
- **Delayed FDA approval of medical products, devices, and drugs.** In general, no new Fiscal Year (FY) 2014 drug applications, biologics applications, generic drug applications, animal drug applications, or medical device applications sent to the FDA during the shutdown could be accepted, processed, or reviewed. This delayed businesses in moving these products to market.
- **Deprived businesses of important information about the state of the economy.** During the shutdown, Federal statistical agencies were unable to release most economic data and reports. For example:
 - The Bureau of Labor Statistics did not release monthly reports on the Employment Situation, the Producer Price Index, the Consumer Price Index, Real Earnings, or the U.S. Import and Export Price Indexes;
 - The Department of Commerce's Census Bureau and Bureau of Economic Analysis did not release key monthly reports on International Trade, Retail Sales, or Construction;
 - The Energy Information Administration delayed reports including the Principal Economic Indicator for natural gas storage, a report that sets diesel compensation rates for many commercial truckers, a report of heating oil and propane prices faced by many households, and a report assessing petroleum inventories;
 - The National Agricultural Statistics Service postponed, cancelled, or reduced in scope 21 commodity, service, and farm wage reports and data releases; and
 - The release of Census of Agriculture statistical products was postponed.

Federal Employee Furloughs

The largest direct cost of the Federal government shutdown – both to the Federal budget and to the economy – was work not performed by Federal employees during the 16-day period. Federal employees were furloughed for a combined total of *6.6 million work days*, with furloughs affecting workers at the vast majority of agencies. Although the October 2013 shutdown was shorter than the 21-day shutdown that took place in December 1995 – January 1996, the total number of employee furlough days was larger, even if one adjusts for growth in the size of the Federal workforce. This is largely because seven appropriations bills were enacted before the start of the December 1995 – January 1996 shutdown, so several major agencies were able to operate normally during that period of time. By contrast, as of October 1, 2013, no agencies had received full Fiscal Year 2014 annual appropriations.

One way to quantify the cost of furloughs is in terms of the amount the Federal government had to pay for work not performed. *We estimate that the total cost of pay due to federal employees furloughed during the shutdown is roughly \$2.0 billion; total compensation costs are about 30 percent larger (about \$2.5 billion).* This exceeds the comparable payroll costs of \$430 million (about \$650 million in today's dollars) for the November 1995 shutdown and \$630 million (about \$1 billion in today's dollars) for the December 1995 – January 1996 shutdown.¹⁰

Appendix Table 1 shows the breakdown of furlough days by agency. Overall, Federal agencies furloughed roughly 850,000 employees per day in the immediate aftermath of the lapse in appropriations, or roughly 40 percent of the entire civilian Federal workforce. Those employees that were not furloughed were retained either because they were performing activities that are “excepted” under the applicable legal requirements (such as activities necessary to maintain the safety of life or the protection of property), or because funding remained available to pay their salaries and expenses during the lapse from sources other than annual appropriations.

Because circumstances evolved over the course of the shutdown, there were instances in which agencies modified the number of employees on furlough, both recalling employees and furloughing additional employees. Most notably, after Congress passed and the President signed the Pay Our Military Act, the Department of Defense recalled the majority of the roughly 400,000 civilian employees that were furloughed for the first week of the lapse. (The Pay Our Military Act provided appropriations for the pay and allowances of

¹⁰ Following the two shutdowns in Fiscal Year 1996, OMB calculated a combined cost to the Federal government of \$1.4 billion (\$430 million in payroll costs from the November shutdown, \$630 million in payroll costs from the December-January shutdown, and \$300 million in other Federal costs.)

Impacts and Costs of the October 2013 Federal Government Shutdown

those civilian personnel that that the Secretary of Defense determined provide support to members of the Armed Forces.)

Changes at other agencies over the course of the shutdown were smaller in magnitude and went in both directions. For example, during the second week of the shutdown, the Social Security Administration recalled over 8,000 workers to process claims appeals and conduct other critical work necessary to ensure the timely payment of benefits. In addition, some employees who were initially working were subsequently furloughed. For instance, over 7,800 employees at the Veterans' Benefits Administration that were working for the first week of the shutdown were furloughed following the exhaustion of remaining carryover balances from the previous fiscal year. The Federal Emergency Management Agency (FEMA) recalled a select number of employees to prepare for Tropical Storm Karen, but the agency subsequently placed these employees back on furlough after the storm dissipated. These changes to the number of furloughed employees reflect the dynamic nature of the shutdown, as agencies responded to changing circumstances over the two and a half weeks.

Impacts on Programs and Services

Another way to quantify the costs of Federal employee furloughs is by examining the shutdown's impact on programs and services. The shutdown impacted millions of Americans, due to furloughs of Federal employees, reduced services for the public, and delays in payments to Federal grantees, States, localities, contractors, and individuals. Employees not on the job could not conduct many food, product, and workplace safety inspections, prepare for flu season or monitor other public health issues, or provide numerous other services important to the general public and the economy. Meanwhile, many grantees and contractors not receiving Federal payments during the shutdown furloughed their own employees and delayed or terminated services. The shutdown also affected direct services for veterans, seniors, and other vulnerable groups; public health and basic research; product safety and environmental protection; worker rights and safety; international trade and relations; and other basic government services.

Direct Services for Veterans, Seniors, and Other Vulnerable Groups

- **Stalled weekly progress in reducing the veterans' disability claims backlog, which had previously been progressing at a rate of almost 20,000 claims per week.** In the six months before the shutdown, the Department of Veterans Affairs (VA) reduced the disability claims backlog by about 30 percent, and, in the week before the shutdown, VA processed enough applications to reduce the backlog by about 18,000 claims. In contrast, during the two- and a half weeks of the shutdown, the backlog remained roughly flat (at about 418,000 claims).
- **Halted or curtailed important veterans' services.** Services that help veterans understand their benefits – including the education call center, hotlines, and all regional offices outreach activities – were closed to the public during the shutdown, and many veterans lost access to vocational rehabilitation and education counseling services.
- **Delayed access for 1,400 military service members to workshops designed to help them transition to civilian life and employment.** The shutdown forced the postponement of some Transition Assistance Program (TAP) workshops, which help transitioning military service members find civilian jobs and access benefits. *40 TAP employment workshops were cancelled and had to be rescheduled, which delayed transition support to 1,400 service members.*
- **Temporarily closed six Head Start grantees, serving nearly 6,300 children.** *Head start grantees operating in Alabama, Connecticut, Florida, Georgia, Mis-*

Impacts and Costs of the October 2013 Federal Government Shutdown

issippi, and South Carolina closed for up to nine days before reopening with funds provided by philanthropists through the National Head Start Association or their state.

- **Delayed home loan decisions for 8,000 low-income working families in rural communities.** The Department of Agriculture’s single-family loan guarantee program was unable to process loan applications during the shutdown, preventing eligible families from receiving loans.
- **Kept home more than 600 young people who had committed a year of their lives to serve local communities through AmeriCorps.** AmeriCorps National Civilian Community Corps is a residential program that engages 18- to 24-year-olds in national service, including responding to natural and other disasters such as floods, fires, and tornadoes. More than 600 Corps members who were prepared to begin their service the week of October 6 were told to stay home.

Public Health and Research

- **Cut back flu season surveillance and monitoring, as well as other public health monitoring.** CDC cut back its annual flu vaccination campaign for a period of time and suspended its weekly “Flu View” report, leaving local public health authorities without access to complete national flu season data for two weeks. CDC staff also discontinued analysis of surveillance and molecular epidemiologic data to identify clusters of linked Hepatitis and Tuberculosis cases that cross State or local jurisdictional boundaries.
- **Put on hold most Federal government support for new basic research, due to furloughs of 98 percent of NSF employees, nearly three quarters of the NIH, and two thirds of the CDC.** For example, no new NSF grants or grant continuations were issued during the shutdown; *on average, NSF issues about 765 grants and continuations in a two-week period.*
- **Furloughed four out of five Nobel Prize-winning researchers currently employed by the Federal government.** Three of the Laureates who were furloughed work at NIST, performing cutting edge research in physics that could have broad commercial applicability in areas such as advanced communications, cyber security, and computing. The fourth furloughed Laureate works at NASA on the new, much more capable, successor to the Hubble Space Telescope. Across agencies, many of the Federal researchers who may contribute to the *next* Nobel Prize-winning discovery in science or medicine were furloughed, with their work delayed or disrupted.

- **Prevented the enrollment of patients in NIH Clinical Center studies.** Although the hospital remained open for patients already enrolled in studies, NIH could not enroll new patients into current studies or start new studies during the shutdown, except for patients with life-threatening or urgent medical problems. During the shutdown, NIH admitted 25 patients, who had a life threatening or urgent medical problem, but seven clinical protocols that were scheduled to begin during the period of the shutdown were delayed.
- **Forced the transition of the NSF's U.S. Antarctic Program (USAP) into caretaker status, resulting in the cancellation of some research activities for the entire 2013-2014 season.** The NSF is responsible for maintaining the United States' presence in the Antarctic, including an active research program and logistical support for that research. With available funds exhausted after two weeks of the shutdown, NSF began placing USAP research stations, ships and other assets into caretaker status, including redeploying scientific and contracted operations personnel. Caretaker status for the research stations entails minimum human occupancy to ensure protection of government property and safeguarding of human lives. The stations could not be completely shut down because extreme environmental conditions would quickly destroy them. When the government reopened, NSF worked to restore normal operations, but some research and operational activities will have to be cancelled altogether this year. For example, NASA and NSF had to cancel their Antarctic-launched long-duration space science research missions for the year because NSF cannot reopen facilities in time to get research balloons off on schedule. The balloons are used as a platform for space science research into phenomenon such as cosmic rays and the Big Bang.
- **Prevented access to state of the art instruments at NIST that researchers from the private sector and academia rely on.** For example, access was denied to the NIST Center for Neutron Research (NCNR), impacting researchers from academia and industry who had scheduled experiments months in advance. Approximately 70 experiments scheduled at the NCNR months in advance could not be performed. The financial loss due to lost beamtime was approximately \$2 million.
- **Stopped the National Radio Astronomy Observatory's operations at its facilities in Charlottesville, VA, Greenbank, WV, and Socorro, New Mexico, as well as 10 Very Long Baseline Array sites across the United States.** During the shutdown, no new observations were made at these facilities, jeopardizing ongoing projects, especially research requiring continuous data. Approximately 500 hours of observing time was lost at Green Bank Observatory; almost half of

which was high frequency observing time that is seasonal and cannot be rescheduled. Over 600 hours of observing time were lost at the Very Large Array and Very Long Baseline Array. In addition, observatories ceased support for approximately 2,700 users who were processing existing data or planning new observations. This affected a range of projects that detect radio waves emitted by astronomical objects and also advance state-of-the-art signal processing. The loss of time and user support will affect not only researchers, but also undergraduate projects, graduate students seeking data for their thesis projects, and public and school groups whose visits were cancelled.

Product Safety and Environmental Protection

- **Sharply curtailed routine FDA inspections of domestic and international food facilities, delaying nearly 500 food and feed domestic inspections and roughly 355 food safety inspections performed by States under contract.** While the agency continued to conduct “for cause” inspections where there was an imminent threat to health or life, nearly 500 food and feed domestic inspections and roughly 355 state inspections that are normally performed during this period each year did not occur during the shutdown. These routine inspections enable FDA to determine compliance with the law and ensure that unsanitary conditions and practices which may result in foodborne illness are addressed. The FDA also cut back on examination, sampling, and laboratory analysis of imported products during the shutdown.
- **Discontinued FDA oversight of certain non-food products and left consumer questions unanswered.** During the shutdown, the FDA discontinued almost all activities related to the regulation of cosmetics, review of information from manufacturers of medical products (including allergenic extracts, whole blood, and blood components for transfusion), and many user-fee supported human and animal drug, device, or biological product applications. The FDA was also unable to answer routine consumer questions regarding food safety, medical devices, blood products and vaccines, and veterinary products.
- **Prevented the timely and full investigation of 59 airplane accidents by the NTSB.** With the large majority of its workforce furloughed, the NTSB was only able to launch investigations into two aviation accidents during the shutdown, putting it behind schedule for these and other ongoing investigations. The NTSB was also forced to reschedule two important public investigative hearings.

Impacts and Costs of the October 2013 Federal Government Shutdown

- **Halted the EPA’s non-emergency inspections at about 1200 hazardous waste facilities, chemical facilities, and drinking water systems; discontinued evaluations of potential health impacts of new industrial chemicals; and stopped reviews of pesticides for adverse impacts to health and the environment.** While the majority of these inspections will be rescheduled, they are unlikely to fully be made up during this fiscal year.
- **Stopped Consumer Product Safety Commission (CPSC) work related to recalls of products that could cause injuries.** CPSC was only able to continue work related to products that present an imminent threat to consumer safety, and therefore normal work related to recalls was halted. CPSC’s port inspectors were furloughed, preventing the agency from screening thousands of products, including children's merchandise that could contain excessive lead and sleepwear that may violate flammability standards.
- **Prevented the USGS from gathering and processing data on natural disasters.** The USGS lost an opportunity to gather information on damage caused by the Colorado floods, including landslides, debris flows, and other activities. The loss of these data significantly reduces the ability of scientists and disaster response professionals to learn from these extreme events. The shutdown also impacted the capacity of the USGS to deliver information to states on potential pollution caused by record flooding in the South Platte River Basin.

Worker Rights and Safety

- **Suspended almost 1,400 Federal inspections to prevent workplace fatalities and injuries, which will not be fully made up.** The Occupational Safety and Health Administration (OSHA) protects the safety and health of the nation’s workers, in part by conducting workplace inspections in high-hazard industries. During the lapse in appropriations, OSHA could only respond to workplace fatalities, catastrophes and imminent danger situations when there was a high risk of death or serious physical harm. *OSHA opened only 283 total inspections during the shutdown – just 16 percent of the number it opened during same time period last year – and put approximately 1,370 inspections on hold.*
- **Denied assistance to almost 500 small businesses across the country seeking to keep their workplaces safe.** The government shutdown impacted OSHA’s Consultation Program, through which States provide free on-site safety and health assistance to small businesses. *One-third of Consultation Programs stopped doing employer visits during the shutdown, impacting almost 500 small businesses.*

Impacts and Costs of the October 2013 Federal Government Shutdown

- **Stopped nearly all investigations to enforce minimum wage, overtime, child labor bans, and other workplace protections.** The Wage and Hour Division (WHD) at the Department of Labor is responsible for enforcing a variety of laws that establish minimum standards for wages and working conditions. In a typical week, WHD concludes more than 600 investigations and compliance actions. However, during the shutdown, WHD was only able to respond to incidents involving imminent serious injury or death of a child or farmworker; as a result, it opened only one new investigation during the two and a half week shutdown and put more than 6,000 ongoing investigations on hold. Over the course of the shutdown, because Wage and Hour investigators were unable to perform their jobs, back wage payments of approximately \$8.8 million for an estimated 12,100 workers went uncollected.
- **Delayed ongoing investigation activities surrounding recent workplace safety or casualty events.** Chemical Safety Board investigators were furloughed, halting their analysis of the West, Texas fertilizer plant explosion from April during the shutdown period.
- **Denied a venue for legal relief to thousands of workers experiencing discrimination.** The Equal Employment Opportunity Commission (EEOC) is the primary agency charged with the enforcement of Federal employment discrimination laws. Americans who believe they have experienced discrimination in the workplace must first file charges with the EEOC and await a response before they can file suit in Federal court, and so timely disposition of these charges is critical to EEOC's mission. During the shutdown, EEOC received nearly 3,150 charges of employment discrimination that it was unable to investigate, creating a backlog that it will take about one month to work through.

International Trade and Relations

- **Furloughed nearly all of the Treasury Department's Office of Foreign Asset Control (OFAC), which implements the U.S. government's financial sanctions against countries such as Iran and Syria.** With only a very small share of employees excepted, the office was unable to fully sustain many of its core functions of: (1) issuing new sanctions designations against those enabling the governments of Iran and Syria as well as terrorist organizations, Weapons of Mass Destruction proliferators, narcotics cartels, and transnational organized crime groups; (2) investigating and penalizing sanctions violations; (3) issuing licenses to authorize humanitarian and other important activities that might otherwise be barred by sanctions; and (4) issuing new sanctions prohibitions and guidance. The majority of staff at Treasury Department's Office of Terrorist Financing and Fi-

Impacts and Costs of the October 2013 Federal Government Shutdown

nancial Crimes, Office of Intelligence and Analysis, and Financial Crimes Enforcement Network were also furloughed.

- **Cancelled travel by the President and other Administration officials that would have advanced U.S. trade goals and promoted job creation.** The President was forced to cancel a trip to the Asia-Pacific Economic Cooperation (APEC), a trip that could have been a key step in negotiating the Trans-Pacific Partnership regional trade agreement that will link the United States to economies throughout the Asia-Pacific region. U.S. Trade Representative Michael Froman had to postpone a round of negotiations in Brussels on the Transatlantic Trade and Investment Partnership, a trade and investment agreement being negotiated between the European Union and the United States. These trade agreements are critical to opening up markets for U.S. businesses to export goods and services abroad and create jobs at home.

Other Basic Government Services

- **Delayed tax filing assistance and almost \$4 billion in refunds to taxpayers.** While continuing to file returns and making estimated payments during the shutdown, taxpayers could not receive assistance from IRS walk-in sites or telephone services, and taxpayer correspondence went unaddressed. Meanwhile, roughly \$3.7 billion in refunds (including \$2.2 billion in refunds to individuals and \$1.5 billion in refunds to businesses) were delayed.
- **Delayed the start of the 2014 tax filing season up to two weeks.** With most IRS operations halted during the shutdown, the IRS could not engage in normal computer programming and testing in preparation for the 2014 tax filing season. As a result, some taxpayers who file early and are entitled to refunds may have their refunds delayed for up to two weeks due to the delay of the start of the originally planned 2014 tax filing season.
- **Suspended the issuance of Social Security cards and closed down the E-Verify system for employers to check worker eligibility.** On a typical day, approximately 60,000 Americans apply for Social Security cards, which they may need to be able to start a job, take out a loan, open a bank account, or conduct other financial transactions. During the shutdown, SSA could not issue new Social Security cards. Employers were also unable to access the E-Verify system to check prospective employees' immigration status.

Other Direct Budgetary Costs

On top of furloughs, shutdown implementation costs, and reductions to key programs and services, the Federal government also incurred other direct budgetary costs as a result of the shutdown. These included:

- **Uncollected fees.** The National Park Service estimates that it was unable to collect about *\$450,000 per day* in revenue from entrance fees, campgrounds, tours, and special uses, for a total cost of roughly *\$7 million in lost revenue*. In addition, the closure of the Smithsonian resulted in an additional *\$4 million in lost revenue*. This is from lost museum-based revenue from stores and theaters, lost revenue from the National Zoo shops/concessions, and lost special events revenue.
- **Program Integrity Activities.** Program integrity activities generally had to be suspended during the shutdown, despite the fact that these measures save money over the long run. The shutdown halted most IRS enforcement activities, which collect \$1 billion per week on average. In addition, SSA was delayed in completing over 1,600 medical disability reviews and over 10,000 Supplemental Security Income (SSI) redeterminations each day. Medical disability reviews assess whether individuals are still medically eligible for disability benefits, while SSI redeterminations review whether beneficiaries meet SSI's non-medical eligibility factors, such as income and asset limits, and ensure that beneficiaries are paid the correct amounts.
- **Interest due on late payments.** Under the Prompt Payment Act and the Cash Management Improvement Act, the federal government is required to pay interest on payments due to third parties when it fails to pay these bills on time. The government will owe interest on billions of dollars of payments not made on time during the shutdown, ranging from IRS refunds to contractor payments.
- **Contract Workforce.** The shutdown resulted in over 10,000 stop work orders for contracts and numerous temporary layoffs among the federal contractor community. Federal acquisition regulations allow contractors to request equitable adjustments for certain cost impacts associated with having to put operations on hold (e.g., costs of maintaining idle facilities, unabsorbed overhead). There could be thousands of requests from contractors seeking to be reimbursed for costs incurred as a result of these suspensions.

In addition, simply implementing the government shutdown and re-start activities imposed significant costs, diverting employee hours and agency resources from mission-

Impacts and Costs of the October 2013 Federal Government Shutdown

critical functions. While a comprehensive estimate of these costs is not available, examples include:

- At the Department of Defense, civilian and military employees at hundreds of installations across the United States and around the world spent thousands of hours developing and implementing plans for managing a lapse in appropriations, implementing the Pay Our Military Act, and restarting full operations.
- The Department of Energy and its contractors devoted significant resources to placing labs and project sites into safe standby condition and then returning them to operational status. For example:
 - Restoring normal operations at the National Nuclear Security Administration can take more than a week and labs and plants are likely to have lost at least three weeks of mission work, or about 6 percent of the year's productivity, due to the shutdown.
 - Similarly, disruptions at nuclear cleanup sites associated with the shutdown will cost two to three weeks of productivity, and may cause the Department of Energy to miss cleanup milestones agreed to with the states where cleanup is under way.
- The NSF and its contractors incurred significant costs to begin placing assets that are part of the U.S. Antarctic Program and other major research facilities into caretaker status, to safeguard them in the absence of funds to conduct planned research. NSF is now incurring additional costs to reopen these facilities and restart research to the extent possible.
- The Department of Transportation (DOT) has estimated that it will incur additional costs of around \$325,000 associated with closing and reopening the US Merchant Marine Academy. Because of the shutdown, the US Merchant Marine Academy had to shut down classes for nearly three weeks. This will have a ripple effect throughout the school year, as midshipmen make up lost sea and class time. DOT will incur costs for staff overtime and to transport Midshipmen back to campus.

Impacts on the Federal Workforce

The shutdown jeopardized both the income stability of Federal employees and their ability to focus on important agency missions that citizens rely upon each day.

During the shutdown, hundreds of thousands of Federal employees did not receive their full paychecks, including many who were legally required to work during the lapse. Also, due to expiration of a statutory provision that was in effect during the shutdown in 1995-1996, excepted employees (who were legally required to work during the lapse) were not eligible to apply for unemployment benefits to help meet any immediate cash flow needs. While all Federal employees have now been compensated for the period of the shutdown, the burden this placed on families was significant and avoidable.

It is also important to note that the shutdown came on top of an unprecedented three-year pay freeze for Federal employees as well as furloughs and other reductions that resulted from sequestration earlier this year.

The shutdown and sequestration-related furloughs risk undermining the competitive advantage government agencies have traditionally used in recruiting and retaining a talented workforce – income stability provided by civil service jobs, and a calling to the important work of public service. Notably, surveys have shown that compensation and the nature of the work are the top two considerations of students as they weigh job options.¹¹ This allows the government to be competitive for many high skill jobs where the private sector enjoys other advantages.

Reports from news outlets highlighted the challenges shutdown presents for both retaining current employees and the recruiting top talent for the future. For example, as one EPA employee told the Washington Post “We love public service. We’re very committed to our jobs and the mission of our agency. But it’s just too unstable.”¹² Federal contractors are also worried about hiring in an environment of heightened uncertainty. Gregory Bloom, the president of a small business that works on design and engineering for NASA, told the Washington Post, “Trying to get the best and the brightest to come join a company that specializes in national defense or NASA-supported activities and not being able to tell them that they’re going to have a job in six months is a real tricky challenge

¹¹ National Association of Colleges and Employers’ 2012 Student Survey Report, accessed October 18, 2013 at

¹² Hendrix, Steve. *Halved Paychecks Force the Furloughed to Slash Expenses and Take Loans, Second Jobs*; The Washington Post. October 10, 2013. Accessed on October 18, 2013 at http://articles.washingtonpost.com/2013-10-10/local/42902098_1_second-jobs-retirement-savings-paychecks

Impacts and Costs of the October 2013 Federal Government Shutdown

for us. What keeps coming back to us is ‘why go work in national defense or aerospace when we can go to Google and know that we’re going to have a job?’”¹³

Studies have shown that – above all else – employees of all stripes value an ability to make progress each day in their job. The Federal government is fortunate to have such a high percent of its employees willing to put in extra effort to get a job done (96 percent in the latest survey). However, at the end of the day, the government shutdown risks seriously damaging the ability to attract and retain the kind of driven, patriotic Americans to public service that our citizens deserve and that our system of self-government demands.

¹³ Yeager, Holly. *Federal Shutdown Starts Affecting America Beyond Government Workers*; The Standard Examiner. October 11, 2013. Accessed on October 18, 2013 at <http://www.standard.net/stories/2013/10/11/federal-shutdown-starts-affecting-america-beyond-government-workers>

Impacts and Costs of the October 2013 Federal Government Shutdown

Appendix Table 1: Estimated Employee Furlough Days by Agency

Major Agencies	Total Employee Furlough Days (Thousands)
Department of Defense	1,600
Department of the Treasury	985
Department of Agriculture	737
Department of the Interior	646
Department of Health and Human Services	449
Department of Commerce	312
Department of Homeland Security	303
Department of Justice	200
Department of Transportation	198
National Aeronautics and Space Administration	192
Environmental Protection Agency	167
Social Security Administration	150
Department of Labor	147
Department of Housing and Urban Development	91
General Services Administration	85
Department of Veterans' Affairs	77
Smithsonian	62
Department of Education	44
Small Business Administration	24
Equal Employment Opportunity Commission	23
National Archives and Records Administration	21
Federal Communications Commission	19

Impacts and Costs of the October 2013 Federal Government Shutdown

National Labor Relations Board	18
Nuclear Regulatory Commission	18
National Science Foundation	16
Executive Office of the President	14
Broadcasting Board of Governors	7
Commodity Futures Trading Corporation	7
Office of Personnel Management	7
Corporation for National and Community Service	6
Railroad Retirement Board	5
Export-Import Bank	4
Department of State	4
Federal Deposit Insurance Corporation	1
Department of Energy	1
Government-Wide Total	roughly 6.6 million