Environmental and Energy Study Institute

# Issue Brief

# Trump FY2018 'Skinny' Budget Proposal: An Overview of the Sustainable Energy, Buildings, Transportation and Climate Implications

**April 2017**

In reviewing the documents released as the Trump Administration's 'skinny budget,' one cannot help but feel that many of the cuts and proposed program eliminations have been made without regard to the depth of the bipartisan support behind them. Indeed, many in Congress, both Republican and Democratic, have said that the proposed cuts will not stand. Regardless, it is important to know what has been put forward by the Administration, because it will have an impact. In numerous agencies, large cuts have been proposed but without providing specifics; in other cases, there are stark eliminations proposed. More information will be forthcoming in the fuller, more fleshed-out version of the budget to be submitted to Congress, presumably sometime in May.

But, it is striking that there are many highly specific proposed cuts that would eliminate programs that have enjoyed strong bipartisan support and that have been integral to providing assistance to low-income households and to rural areas. Just a few of the examples are the proposed eliminations of the Low-Income House Energy Assistance Program, the Weatherization Assistance Program, the State Energy Program (which leverages so many initiatives by every state energy office), the Appalachian Regional Council, the Economic Development Administration, the Power Africa Initiative (to double access to energy in sub-Saharan Africa), and the Community Development Block Grant. Clean up and restoration funding for the Chesapeake Bay and the Great Lakes would also be eliminated.

Despite the talk about the need to address infrastructure across the country—which is critical to every sector of the economy—significant cuts are proposed in transportation. Surprisingly, these include specific proposals to eliminate the Essential Air Service Program (critical for 169 rural communities across 35 states) as well as all of Amtrak's 15 long-distance train routes, which serve 390 communities across 40 states; many of these are rural communities without other transportation choices.

The State Department, Environmental Protection Agency and the U.S. Department of Agriculture received the largest percentage of proposed cuts, axing a number of development assistance programs—including the Climate Investment Funds launched under George W. Bush with bipartisan support—which help build greater resilience to weather-inflicted catastrophes in developing countries and thus help improve their stability. EPA's budget would be cut 31 percent, steeply reducing enforcement and clean-up programs, and targeting any climate-related programs. The extremely popular, effective, and voluntary Energy Star program would be eliminated. NASA and NOAA would also see significant cuts to their science programs.

Below is a summary of the 'skinny budget' proposals across several of the federal agencies, with an emphasis on sustainable energy, building, transportation, and climate programs. While not comprehensive, the summary does provide a valuable overview of proposed cuts and some perspective. EESI intends to do a fuller budget analysis when the complete budget is issued later this spring.

## DEPARTMENT OF AGRICULTURE (USDA)

### Overall

- The proposed budget cuts total USDA funding by $4.7 billion (a 21 percent decrease from $22.6 billion for Fiscal Year 2017).
- There are no cuts to mandatory programs (crop insurance, Supplemental Nutrition Assistance Program—formerly known as food stamps, and programs for growers of commodity crops—corn, soy, wheat, cotton).
- Therefore, cuts to discretionary programs are deep (some estimates put discretionary cuts at 50 percent).
- The only agencies receiving a higher percentage cut than USDA are State (28 percent) and EPA (31 percent).

### Fully Funds

- **Mandatory programs**, primarily SNAP (Supplemental Nutrition Assistance Program), Commodities and Insurance, are fully funded.
- A **supplemental nutrition program for Women, Infants, and Children** (WIC) is fully funded at $6.2 billion, though some estimates say that it will still fall short given enrollment numbers.
- **Wildfire preparedness and suppression** is funded at $2.4 billion (this is based on a 10-year average, so it may also fall short of what will actually be needed).
- **Food safety** is fully funded (many have called for this funding to be expanded).

### Eliminates

- **Water & Wastewater Loan & Grant Program** ($498 million for FY17), which funds drinking water, sewage, and stormwater projects in rural areas.
- **Rural Business and Cooperative Service** ($95 million), which funds job training and business development efforts.
- **McGovern-Dole International Food for Education Program** ($202 million), which pays for food in schools located in low-income and food-deficit nations, versus shipping U.S. agricultural products abroad as general food aid.

### Reduces

- The budget proposal reduces funding for "lower priority activities" in the **National Forest System**, such as land acquisition efforts ($1.5 billion, FY17).
- "Reduces staffing in USDA Service Center Agencies," which would impact:
    - **Farm Service Agency** (FSA) ($1.7 billion, discretionary in FY17 budget proposal). The FSA provides a broad array of services to farmers, including loans, sustainability efforts, energy investment, and disaster relief

- Reduces “farmer-focused research and extension partnerships at land grant universities," while consolidating "in-house research funding" within the Agricultural Research Service (ARS). The budget proposes around $350 million for USDA's competitive research program. Major research programs within USDA currently include:
    - **Agricultural Reserve Service** (ARS) ($1.4 billion, FY17)
    - **National Institute of Food and Agriculture** (NIFA) ($1.5 billion, FY17)
    - **Agriculture and Food Research Initiative** (AFRI) ($350 million, FY17)
- “Reduces funding for USDA statistical capabilities, while maintaining core departmental analytical functions,” which would impact:
    - **Economic Research Service** (ERS) ($85 million, FY17)
    - **National Agricultural Statistical Survey** (NASS) ($168 million, FY17). The NASS generates data and original analysis on the agricultural sector
- “Reduces duplicative and underperforming programs by eliminating discretionary activities of the **Rural Business and Cooperative Service**” ($1 billion in lending and grant authority, FY17). This would cut all discretionary programs in the Rural Business and Cooperative Service, which includes:
    - Business & industry guaranteed loans/grants
    - Rural child poverty
    - Rural economic development
    - Microentrepreneur assistance program
    - Business Investment program
    - Healthy Food financing
    - Rural Cooperative development grants
    - Small, socially disadvantaged producers grants
    - Appropriate technology transfer to rural areas
    - Value added producer grants

## Conclusion

It is still unclear how the Administration would put together enough cuts to total $4.7 billion; the provided lists of known cuts are several billion short. However, it is clear that research, rural programs, conservation and other extension programs will be the hardest hit.

# DEPARTMENT OF COMMERCE

## Overall

- The proposed budget cuts total Department of Commerce funding by $1.5 billion (a 16 percent decrease from $9.3 billion for FY17).
- The cuts have the potential to cause some of the most significant cross-agency disruptions, due to the value of the National Oceanic and Atmospheric Administration's (NOAA) data collection programs to other government offices.

## Fully Funds/Increases

- Provides a $100 million increase to the **U.S. Census Bureau** (for a total budget of $1.5 billion).
- Maintains the development of NOAA's "current generation" of polar orbiting and geostationary weather satellites, including the **Joint Polar Satellite System** and **Geostationary Operational Environmental Satellite** programs. The budget proposal's language leaves an opening to allow the programs to stagnate or to cut future iterations.

- Maintains **National Weather Service** (NWS) forecasting. Its funding will likely remain stable (at $1.1 billion) despite being characterized as new investment in the budget. NWS services are essential to a wide range of sectors, including agriculture, fisheries, and daily weather forecasting at the regional level.

### Eliminates

- **Economic Development Administration** ($221 million, FY17), which contains a "disaster recovery" program that delivers economic development aid to local governments for long-term community recovery, reconstruction, and resilience planning. It serves as the Department of Commerce's coordinating agency under the National Disaster Recovery Framework (NDRF).
- Federal funding for the **Manufacturing Extension Partnership** (MEP) program ($131 million, proposed in FY17). According to the budget proposal, "MEP centers would transition solely to non-Federal revenue sources."
- **Multiple NOAA programs** ($250 million in cuts, equivalent to less than 3 percent of Commerce's overall budget in FY17).
  - The cuts would include **Sea Grant** ($73 million), a university-affiliated program that assists coastal communities with climate adaptation, among many other services.
  - **Additional unnamed programs** covering "coastal and marine management, research, and education" and serving state and local level entities would be cut.

### Reduces

- NOAA's **Polar Follow On** satellite program (the amount of cuts is not specified), which serves as a key source of data for NOAA's numerical weather prediction models. The budget proposal states "commercially provided data" may be used more in the future (the Administration may attempt to privatize NOAA's data and satellite services in the future).

### Conclusion

Surprisingly, the cuts to NOAA affect programs that the budget clearly seeks to defend. The future maintenance, uninterrupted collection, and public availability of NOAA's polar, atmospheric, ocean, and climate data would have broad implications for a range of scientific disciplines and government programs.

## DEPARTMENT OF ENERGY (DOE)

### Overall

- The proposed budget cuts total DOE funding by $1.7 billion (equivalent to a 5.6 percent decrease from $29.7 billion for FY17).
- DOE's programs related to nuclear weapons and nuclear waste management will either see stable or increased funding.
- DOE's advanced technology research and financing programs are being threatened with elimination.

### Fully Funds/Increases

- **National Nuclear Security Administration** (11 percent increase to $13.9 billion overall, due to the elimination of defense sequestration).

- **Yucca Mountain licensing** ($120 million allocated), which involves a controversial long-term storage site for nuclear waste in Nevada.

## Eliminates

- **Advanced Research Projects Agency – Energy** (ARPA-E) ($291 million, enacted FY16), which develops high-impact, cutting edge energy technologies that are not yet ready for commercialization.
- **Title 17 Innovative Technology Loan Guarantee Program** ($17 million, enacted FY16), which provides loans to clean energy technology projects.
- **Advanced Technology Vehicle Manufacturing Program** ($6 million, enacted FY16), which has $16 billion in remaining loan authority from the *Energy Independence and Security Act* of 2007 to support investment in U.S. manufacturing facilities for fuel-efficient, advanced technology vehicles and components. The program loaned the capital needed by the U.S. auto manufacturing industry to become globally competitive and leaders in advanced technology electric vehicles.
- **Low-Income Weatherization Assistance Program** ($215 million enacted for FY16, or about 0.7 percent of DOE's overall budget), which allows low-income households to upgrade their home's energy efficiency.
- **State Energy Program** ($50 million enacted for FY16, or about 0.1 percent of DOE's overall budget), which provides grants for states to pursue renewable energy and energy efficiency projects, directly benefitting their residents and communities.

## Reduces

- **Office of Science** ($900 million, or 17 percent, cut). It is unclear where the specific cuts will fall, but the proposed budget states investments will continue for the "highest priority basic science and energy research." The Office of Science manages 10 of the 17 national labs and research programs at 300 universities.
- Key offices see aggregated cuts of about $1.7 billion, including:
  - **Energy Efficiency and Renewable Energy** ($2 billion enacted, FY16)
  - **Nuclear Energy** ($986 million enacted, FY16)
  - **Fossil Energy Research and Development** ($632 million enacted, FY16)
  - **Electricity Delivery and Energy Reliability** ($206 million enacted, FY16). The budget proposal nevertheless expresses support for "grid resiliency activities"

## Conclusion

Despite assurances from Energy Secretary Rick Perry that he would defend DOE's research capabilities, the White House is proposing steep cuts to the agency's advanced R&D and basic science programs. It is unclear how the Office of Science may be impacted, but the Administration's priorities will likely hew towards fossil fuel technologies. The nearly $2 billion cut across the EERE, Nuclear, Fossil, and Electricity offices would essentially slash the FY16 enacted budgets for those programs by half.

## DEPARTMENT OF HOMELAND SECURITY (DHS)

### Overall

- The proposed budget increases the Department of Homeland Security's total budget by $2.8 billion (a 6.8 percent increase from $41.3 billion for FY17).
- It restructures or increases "user fees" that fund certain services within the Transportation Security Administration (TSA) and National Flood Insurance Program (NFIP) in an attempt to reduce the government's fiscal contributions to these programs.

### Establishes

- A requirement that **Federal Emergency Management Agency** (FEMA) preparedness grant awards include at least 25 percent cost-sharing from non-federal sources. FEMA grants assist state and local governments with disaster preparedness.

### Eliminates

- The budget proposal eliminates funding for the National Flood Insurance Program's **Flood Hazard Mapping Program** ($190 million, FY17) because it was not deemed an "effective" use of funds. The mapping program helps identify flood risks to communities across the country and is a key source of data for the NFIP.

### Reduces

- The budget proposal eliminates or reduces state and local grant funding under FEMA that are "either unauthorized by the Congress… or must provide more measurable results." It seeks to ensure federal efforts are not duplicative of those undertaken by other stakeholders ($667 million decrease).
    - The proposal specifically names FEMA's **Pre-Disaster Mitigation Grant Program** as a candidate for cuts. This program, authorized under the Stafford Act for federal disaster assistance, seeks to "reduce overall risk to the population and structures from future hazard events, while also reducing reliance on Federal funding in future disasters."

### Conclusion

The Department of Homeland Security's proposed budget has a greater focus on border and physical security, rather than safeguarding communities through emergency preparedness and resilience. It remains unclear how attuned the Administration may be to the value of defending against projected severe weather and flooding.

## HOUSING AND URBAN DEVELOPMENT (HUD)

### Overall

- The budget proposal's cuts to Housing and Urban Development total $6.2 billion (a 13.2 percent decrease from $46.9 billion for FY17).
- The budget shifts more responsibility to "state and local governments and the private sector to address community and economic development needs."

## Fully Funds/Increases

- **Lead-based paint mitigation** "and other hazards in low-income homes, especially those in which children reside" ($20 million increase). The budget also "funds enforcement, education, and research activities to further support this goal."
- **Rental Assistance** would be fully funded (at $35 billion).

## Eliminates

- The budget proposal eliminates the **Community Development Block Grant Program** ($3 billion enacted, FY16); **HOME Investment Partnerships Program**; **Choice Neighborhoods**; and the **Self-help Homeownership Opportunity Program** ($1.1 billion enacted, FY16). These programs issue loans and grants to improve a neighborhood's housing pool and stability, with an emphasis on affordable housing and job growth in vulnerable communities.
- **Section 4 Capacity Building for Community Development and Affordable Housing** ($35 million enacted, FY16). The budget claims this program is "duplicative of efforts funded by philanthropy and other more flexible private sector investments."

## Conclusion

The status of funding for energy efficiency and green building programs was conspicuously absent from the budget outline; EESI will be monitoring it going forward. Additional programs may also see changes in the full budget, including impacts on HUD block grants.

# DEPARTMENT OF STATE AND U.S. TREASURY (INTERNATIONAL PROGRAMS)

## Overall

- The Department of State and the United States Agency for International Development's (USAID) combined budget was reduced by $10.1 billion (a 28 percent decrease from $35.7 billion for FY17).
- State/USAID had one of the deepest agency cuts by percentage, second only to EPA (which had a 31 percent decrease).
- The Treasury Department's international programs were cut by $803 million (a 35 percent decrease from $2.3 billion for FY17).
- These agencies fund much of the federal government's climate and resilience-related activities in developing countries.
- This vast reduction in funding for foreign aid embodies the Administration's "America First" philosophy.

## Increases

- Consistent with the budget overall, security programs and embassy infrastructure received funding increases.

## Eliminates

- **Two Climate Investment Funds (CIFs)**. The State Department did not request additional funding for the CIFs in FY17. These funds were implemented with bipartisan support under the Bush Administration and are housed at the World Bank; the CIFs were the predecessors to the Green Climate Fund and are being gradually sunset as the Green Climate Fund ramps up.

- The proposed budget eliminates the **Global Climate Change Initiative** (about $984 million requested in FY17), which houses bilateral climate efforts (e.g., with China and India) and U.S. contributions to the United Nations Framework Convention on Climate Change (UNFCCC) that oversees the international climate treaty process. These programs include assistance for less developed countries to reduce emissions and increase capacity for renewable energy (such as the Power Africa Initiative, enacted during the previous administration to help reduce extreme poverty and codified into law in the bipartisan *Electrifying Africa Act* of 2016. The nonpartisan Congressional Budget Office found the Act would result in a positive return for taxpayers of $86 million over a five-year period).
- **Green Climate Fund** (GCF) support. The United States committed $3 billion for the GCF and has paid out $1 billion to date (the most recent payment of $500 million was made in January 2017 by the Obama Administration). The U.S. pledge of $3 billion made up about 30 percent of the total pledged to the Green Climate Fund by all nations to date.

## Reduces

- The proposed budget **reduces** "**funding to the United Nations and affiliated agencies**" (the specific agencies that are to receive less funding are not named).
- The budget "refocuses economic and development assistance to countries of greatest strategic importance to the U.S." It is unclear where any cuts will land or how this may affect climate-vulnerable nations.
- The Administration expects "efficiency" and "consolidation" at USAID to reduce funding and overall capacity.
- Funding for multilateral banks would be cut by $650 million over three years. This funding is housed within the Department of State's Multilateral Assistance Program, and includes two of the **World Bank**'s institutions: the **International Development Association** ($1.2 billion) and the **International Bank for Reconstruction & Development** ($187 million), which manages the Green Bonds program. This funding also supports the **Global Environment Facility** (GEF), **Strategic Climate Fund**, **Clean Technology Fund**, and the **Global Infrastructure Facility.**

## Conclusion

Given the budget's theme of "America First," the State Department's mission and foreign aid can be expected to have a diminished role in the new Administration. Funding for a wide range of climate, environment, and development programs are in danger of being lost, which could be devastating for internationally-based programs and the nations that rely on them, as well as the United States and other developed countries, which may be called on to deal with the consequences of lack of investment in climate-smart and resilient development.

Climate aid is part of the overall foreign aid program, which currently makes up about one percent of the U.S. budget, but is consistently thought to be a much larger percentage of the budget by most Americans.

Unorthodox allies for diplomacy and aid programs may be found in the national security community. Current Defense Secretary James Mattis told the Senate Armed Services Committee in 2013, "If you don't fund the State Department fully, then I need to buy more ammunition ultimately. So I think it's a cost benefit ratio. The more that we put into the State Department's diplomacy, hopefully the less we have to put into a military budget as we deal with the outcome of an apparent American withdrawal from the international scene."

# DEPARTMENT OF TRANSPORTATION (DOT)

## Overall

- The proposed budget reduces the Department of Transportation's total budget by $2.4 billion (a 13 percent decrease from $16.2B for FY17).
- The budget suggests that these cuts would eliminate inefficient/duplicative programs, and that other programs should be handled by state/local governments and the private sector.
- Proposes a "multi-year reauthorization" to move the air traffic control function of the Federal Aviation Administration (FAA) to a non-governmental organization.
- Cuts major transportation infrastructure programs (rail, transit, rail, air, multimodal).
- Isolates residents of many small, rural communities who face the loss of aviation and rail service.

## Eliminates

- The budget proposal eliminates all of **Amtrak's 15 long distance** (LD) train routes, which serve stations in 390 communities across 40 states. Most of these communities are small, rural communities whose residents would lose their only public transportation access.
    - Since 1998, long distance rail ridership has grown by approximately 20 percent, without the introduction of any new services, frequencies, or equipment.
    - Long-distance routes would no longer feed the Northeast Corridor and State-supported routes.
    - Many operating costs that are shared and allocated across the entire Amtrak system would continue, placing a larger financial burden on the remaining services. Excluding these shared costs, long-distance routes cover 78 percent of direct operating costs.
    - The rail fleet is mostly from the 1980s and requires overhaul and replacement.
    - Overseas, 18,000 miles of high-speed rail service are in operation across Europe, China, Japan, South Korea, Taiwan, Uzbekistan, Turkey and others. Morocco and Saudi Arabia will be added next year. **The United States only operates 28 miles of high-speed rail service**. International economic competitiveness is degraded when employees, tourists, and goods move more slowly in the United States than they do overseas.

- **Essential Air Service Program** (EAS) (a $175 million cut, representing one percent of DOT's FY17 budget), which provides scheduled air service to 169 rural communities across Puerto Rico and 35 states (AK, MI, MT, NE, PA, NY, IA, KS, MN, WV, AR, CA, ME, MO, MS, AZ, CO, IL, ND, NM, SD, UT, HI, KY, WI, WY, AL, GA, MD, NH, OR, TN, TX, VA, VT). The budget states that "…communities that have EAS could be served by other existing modes of transportation…," but 13 of these communities (in IA, KS, MS, MT, NE, NM, VA, WV) would lose both Amtrak Long Distance and Essential Air Service under the proposed budget.

- The **Transit Capital Investment Program** (Federal Transit Administration's New Starts, Small Starts, Core Capacity Improvement programs) would be eliminated, which would mean no new federal investment in bus rapid transit, streetcars, heavy rail, commuter rail or light rail. But growing areas need to increase the efficiency of their transportation networks with transit investment to avoid increased road congestion and transportation costs, otherwise employers, jobs and economic growth are discouraged. The proposed budget eliminates all projects in **FAST Act** authorized programs ($2.3 billion per year) unless there is an existing full funding grant agreement already in place. The House passed the FAST Act in December 2015 by a vote of 359 to 65.

- **Competitive National Infrastructure Investments Program**, aka **TIGER** (Transportation Investment Generating Economic Recovery) grants, which uniquely support multi-modal, multi-jurisdictional infrastructure development projects that are more difficult to support through traditional DOT programs (TIGER grants are currently funded by a continuing resolution at $499 million a year). Over the past 8 years, TIGER grants have totaled $5.1 billion, and the program has received 7,900 applications requesting $152 billion in all. The budget proposal suggests TIGER can be replaced by DOT's Nationally Significant Freight and Highway Projects grant program (aka FASTLANE), which the FAST Act authorized at an average of $900 million annually. However, no less than 90 percent of competitive freight funds must go to highways, far exceeding the proportion, by any measure, of freight carried by highway relative to rail, water and pipeline. The breakdown for TIGER grants, on the other hand, has been 33 percent for projects that were primarily highways, 21 percent for freight and passenger rail, 28 percent for transit, 12 percent for ports, and 6 percent for pedestrian and bike projects.

## Conclusion

The transportation system is an interconnected, interdependent network of modal systems. Intercity rail service releases pressure on air and road service. Transit service is the most efficient "road" in areas of densely used space: its degradation or elimination would reduce access, cause road congestion and failure, and increase the cost of moving goods—ultimately resulting in the loss of jobs and economic growth. Reducing transit would also increase gasoline consumption. The elimination of rail and air service would further exacerbate rural communities' economic hardship.

# ENVIRONMENTAL PROTECTION AGENCY (EPA)

## Overall

- The proposed budget cuts EPA's total budget by $2.6 billion (a 31 percent decrease from $8.3 billion for FY17).
- EPA suffers the largest percentage cut of any major agency.
- Climate change programs are specifically targeted for elimination.
- Enforcement and clean-up programs also see steep funding reductions.

## Fully Funds/Increases

- **State Revolving Funds** are increased by $4 million to $2.3 billion total. The Administration is seeking to return authority and funding to states to design and enforce environmental laws as they see fit.
- Maintains funding for the **Water Infrastructure Finance and Innovation Act** ($20 million), and claims "this credit subsidy could potentially support $1 billion in direct federal loans."

## Eliminates

- The budget proposal essentially **eliminates all climate-related programs** (over $100 million in cuts, accounting for around one percent of EPA's FY17 budget), including the **Clean Power Plan**, **international climate change programs**, **climate research, climate partnerships**, and additional unnamed programs. The budget is lacking in specifics, but the cuts will be drawn from EPA's Environmental Program & Management and Science & Technology Divisions.

- **Restoration Initiatives** across nine distinct geographical regions ($427 million), including the Great Lakes, Chesapeake Bay, and Gulf of Mexico. The Administration argues that state and local authorities should be responsible for these initiatives.
- **Zeroes out over 50 additional EPA programs** ($347 million), including **Energy Star**, Targeted Airshed Grants, Endocrine Disruptor Screening Program, infrastructure assistance to Alaskan Native villages and the Mexican border.

## Reduces

- The **Office of Enforcement & Compliance Assurance** would be cut by over 30 percent (a $129 million cut). The Administration argues these programs are redundant with state enforcement activities, and that power would be better returned to the state level.
- **Hazardous Substance Superfund Account** (a $330 million cut)
- The more detailed budget proposal is expected to loosen and/or cut the clean air program in favor of industrial emitters.

## Conclusion

Dismantling and shrinking EPA remains a clear priority for the Administration and is likely to gain significant traction with the Republicans' conservative base. While slashing geographically diverse and bipartisan programs like Superfund and the Restoration Initiatives may prove a non-starter with some Congressional blocs, EPA's climate and enforcement programs are in real danger of elimination. The core justifications put forth by the Administration will be around economic gains for American businesses, streamlining "redundant" government programs, and returning environmental regulatory authority to the states (despite pollution being transboundary in nature).

# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)

## Overall

- The budget proposal cuts NASA's total budget by $100 million (a 0.8 percent reduction from $19.2 billion for FY17).
- It expresses support for space exploration and related technologies and research.
- It eliminates or reduces NASA's Earth science, climate, and education programs.

## Eliminates

- The budget proposal eliminates four Earth science missions, **PACE** (Pre-Aerosol, Clouds, and Ocean Ecosystem), **OCO-3** (Orbiting Carbon Observatory), **DSCOVR** (Deep Space Climate Observatory), and **CLARREO Pathfinder** (Climate Absolute Radiance and Refractivity Observatory). According to NASA, these missions are important for measuring weather and climate systems on Earth, particularly the carbon cycle and the distribution of carbon dioxide on Earth.
- **Office of Education** ($115 million, representing about 0.5 percent of NASA's FY17 budget). The Administration argues the program is duplicative and can be handled by the Science Mission Directorate.

## Reduces

- The budget proposal reduces the **Earth Science Program** by $102 million (from $1.8 billion enacted in FY15) and specifically cites Earth Science research grants.

## Conclusion

NASA's cuts are arranged to make them an easier sell to the general public. Space exploration and other "charismatic" efforts continue to get support and positive press from the Administration. This overshadows the fact that while the overall budget decrease may appear small at first glance, there is a significant realignment of funds occurring under the surface. Funding would shift away from critical Earth science, observation, modeling, and climate science toward expensive programs for space exploration and hardware engineering.

# ADDITIONAL AGENCY NOTES

## Department of the Interior

- Based on the proposed budget's language, we can expect a decline in funding for the U.S. Geological Survey (USGS) from about $1.06 billion (FY 16, enacted) to about $900 million. The Administration claims it will "focus investments in essential science programs" at USGS. USGS does extremely important research on water quality, which other federal, state, and local agencies rely on.

## Department of Defense

- The Administration cites "deferred maintenance and modernization…and degraded facilities" as a problem for the military.

## Department of Health and Human Services

- The **Low Income Home Energy Assistance Program** (LIHEAP) and **Community Services Block Grant** (CSBG), which provides federal funds to revitalize low-income communities, would be eliminated ($4.2 billion). The Administration labels them as "low-impact" and "duplicative."

## U.S. Small Business Administration (SBA)

- The Administration proposes over $1 billion for disaster relief lending to "businesses, homeowners, renters, and property owners" for recovery from "declared disasters." This appears to be a significant increase, since SBA's disaster loan program only had $187 million enacted for FY16.

This issue brief is available electronically at *www.eesi.org/papers*.

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**Authors: Carol Werner, Brian La Shier, Ellen Vaughan, Jessie Stolark, Paul Haven, and Susan Williams**
**Editors: Carol Werner and Amaury Laporte**

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